

**KENYA NATIONAL OCCUPATIONAL CLASSIFICATION  
STANDARD (KNOCS)-2000**

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## FOREWORD

The Kenya Government has always recognised the importance of Labour Market Information (LMI) in regard to employment planning, policy development and facilitation of mobility within the country and across borders.

The Kenya National Occupational Classification Standard (KNOCS) is the Ministry of Labour and Human Resource Development's response to a perennial need for a document that defines and/or classifies all the occupations found within the country. **KNOCS – 2000** is making history as the first published document that defines occupations as they are found in Kenya today.

In this era of globalization, changing technology and business practices, shifts in the demand for our goods and services will continue to shape Kenya's labour market. This will in turn call for comprehensive, up-to-date and reliable information on the labour market. Specifically, occupational information will: -

1. Sort jobs and persons into occupations to produce statistics on the occupational description of employed and unemployed persons, wages, working conditions and occupational injuries, etc;
2. Avail Policy makers and administrators occupational definitions which will enable them understand, implement and monitor the effect of economic and social policies;
3. Give researchers and the general public occupational classifications to enable them analyse, describe and gain knowledge on what is happening in their country;
4. Provide immigration authorities with information to facilitate decision making on issuance of work permits;
5. Enable employment services to sort persons and jobs to match job seekers and vacancies;
6. Facilitate managers of enterprises/organisations to sort jobs and persons and manage wage and other personnel policies, as well as monitor working conditions;
7. Provide school-leavers and job seekers with information on various types of work, training requirements, career prospects and working conditions;
8. Provide career masters and vocational counsellors with information to appropriately advise school-leavers and job seekers on the job market;
9. Give vocational training specialists a basis for planning and designing vocational training programmes;
10. Provide Kenyans with information on labour activities classified by occupations.

In 2002, this Ministry launched the Productivity Centre of Kenya as one way of stimulating economic growth. The Centre would be rendered ineffective in the absence of information on the various economic activities that Kenyans are involved in.

It is therefore my conviction, that **KNOCS – 2000** Edition and subsequent versions will go a long way in bridging observed gaps in labour market information.

Finally, it is my earnest hope that this uniquely compiled document, the first of its kind for the Kenyan labour market, will answer the quest for information on careers and jobs in the Labour Market.

**HON. AMB. CHIRAU ALI MWAKWERE, MP**  
**MINISTER FOR LABOUR AND HUMAN RESOURCE DEVELOPMENT**

## ACKNOWLEDGEMENT

This edition of the Kenya National Occupational Classification Standard (KNOCS) replaces earlier versions prepared by the Ministry of Labour and Human Resource Development.

The initial attempt by the Kenya Government to establish a National Occupational Classification System (NOCS) was made in 1976 through the Kenyanisation of Personnel Bureau (KPB). Over the years the classification has had to be revised several times for use in manpower studies, including the 1982/83 and 1986/88 national manpower surveys. These revisions have normally been carried out jointly with the Ministry of Labour, the Central Bureau of Statistics (CBS) and the National Manpower Development Committee (NMDC) members.

**KNOCS – 2000** has been developed with the aim of providing a system for classifying and aggregating occupational information obtained from manpower surveys, employment services, other statistical surveys as well as available administrative records.

The compilation of **KNOCS-2000** was made possible through the effort, devotion and dedication of several staff of the Department of Human Resource Management and Employment; in particular Messrs **Y.O. Audo (retired), J.M. Kavuludi, F.K.Chege, J.K. Manyara, R.U.Yara, E.O. Ogutu and T.A. Nyamita**. The exercise would have been impossible without the expert advice of members of the National Manpower Development Committee and other stakeholders. The International Labour Organisation (ILO), specifically Messrs **E. Hoffmann and R. Knop** provided invaluable technical support as well as equipment and facilities for the KNOCS work. I extend special appreciation to each and all.

Last but not least, I thank all the staff of the Ministry who contributed in one way or the other to the successful completion of the task.

**Deborah A. Ongewe**  
**PERMANENT SECRETARY**  
**MINISTRY OF LABOUR AND HUMAN RESOURCE DEVELOPMENT**

## INTRODUCTION

The development of a Kenya National Occupational Classification Standard (KNOCS) provides among other things an essential tool for assessing the current levels of manpower in the economy.

The first attempt by the Kenya Government to establish a national occupational classification system was made in 1976 through the defunct Kenyanisation of Personnel Bureau (KPB) as a tool for carrying out manpower inventory. It was largely used for collection of labour market information at the employment exchanges. Since then the classification has been revised several times for use in various studies including the 1982/83 and 1986/88 National Manpower Surveys. These revisions have been carried out as joint efforts of the Ministry of Labour, the Central Bureau of Statistics (CBS) and the National Manpower Development Committee Secretariat currently in the Ministry of Labour and Human Resource Development .

The Kenya National Occupational Classification Standard provides a system for classifying and aggregating occupational information obtained from manpower surveys, employment services and other statistical surveys as well as administrative records.

This version of the Kenya National Occupational Classification Standard (KNOCS) is the culmination of an exercise which was started immediately after publication of the report of the National Manpower Survey 1986/88. The survey report recommended that improvements be carried out on the KNOCS used during the exercise, after it was observed that it had a number of noticeable shortcomings. KNOCS - 2000 is therefore a restructured and up-dated/improved version of KNOCS - 86 which in turn was an expanded version of the one used during the 1982 Manpower Survey.

Throughout the compilation of KNOCS - 2000 there was conscious effort to make the document to conform as closely as possible to the International Standard Classification of Occupations (ISCO) -1988 for purposes of international comparisons.

### THE KNOCS MISSION

The primary mission of the KNOCS has been to establish a comprehensive system for classifying occupational information for effective human resource management in the country.

### OBJECTIVES OF THE KNOCS

KNOCS - 2000 has five main objectives, namely:

- (a) to facilitate the collection of comprehensive occupational information for statistical purposes.
- (b) to facilitate the assessment of the Kenyan manpower structure and labour market information as well as for the planning of human resource development in the country. This includes providing a rational basis for

manpower inventory and efforts to match the skills output from the training/education system with jobs so that institutional planners can ensure that training programmes become responsive to labour market demands.

- (c) to assist those organisations involved in job placement and other employment services (manpower utilisation).
- (d) to assist those Kenyans wishing to make career choices.
- (e) to facilitate cross-border occupational comparisons brought about by the need by countries to export labour and to form various regional economic associations which have made the labour market to become international in outlook.

## CONCEPTUAL FRAMEWORK

The conceptual framework adopted during the design and construction of KNOCS - 2000, was largely the same one used for ISCO - 88.

Thus the kind of work performed or job and skill have been the two concepts followed during the work on KNOCS - 2000.

An occupation has been defined as a set of jobs which have the same main tasks and duties.

A job has been defined as a set of tasks or duties executed or meant to be executed (in the case of unfilled jobs), by one person.

Skill is defined as the ability to carry out the tasks and duties of a given job. It has two dimensions for purposes of KNOCS - 2000.

- (a) Skill level which is a function of the complexity and range of the tasks and duties involved; and
- (b) Skill specialisation which is defined by the field of knowledge required, the tools and machinery used, the materials worked on or with, as well as the kinds of goods and services produced.

Occupational groups classified by KNOCS - 2000 were delineated and aggregated on the basis of this skill concept.

For purposes of KNOCS - 2000 five skill levels have been defined based on the Kenyan education/training system. The use of these educational categories to define the KNOCS skill levels does not imply the skills necessary to perform the tasks and duties of a given job can be acquired only through formal education. The skills may be, and often are, acquired through informal training and experience. Furthermore, the emphasis in KNOCS - 2000 is on skills required to carry out the tasks and duties of an occupation and not on whether a worker is more or less skilled than another worker in the same occupation.

As a rule, therefore, the operational definitions of the five KNOCS - 2000 skill levels listed below apply where the necessary occupational skills are acquired

through formal education or vocational training.

- (a) The first KNOCS skill level has been defined as primary education. This is education which generally begins at the age of about 6 years and lasts 8 years in the present 8-4-4 education system or 7/8 years in the previous 7/8-4-2-3 system leading to a certificate of primary education. This may be followed by a period of on-the-job training.
- (b) The second KNOCS skill level has been defined as post-primary education (except secondary and tertiary education) which starts after primary education and lasts about 2 years leading to artisan level certificates. Emphasis at this skill level is on vocational training.
- (c) The third KNOCS skill level has been defined as secondary education which begins at the age of about 14 years and lasts 4 years leading to a certificate of secondary education. This may be followed by a period of on-the-job training.
- (d) The fourth KNOCS skill level has been defined as post-secondary education (excluding university). This is education which begins after secondary education and lasts about 3 years and leads to an award of Certificate or Diploma but not equivalent to a first university degree.
- (e) The fifth KNOCS skill level has been defined as education which begins after secondary education, last about 4, 5 or more years and leads to a university or postgraduate university degree or the equivalent.

## DESIGN AND STRUCTURE

The design and structure of KNOCS - 2000 has mostly been adopted or modified from ISCO - 88. The main departure from ISCO - 88 is in the level of aggregation of the occupational groups. Thus while KNOCS - 2000 has the same 10 major groups at the top level of aggregation as ISCO -88, they are sub-divided into 54 sub-major groups, 225 minor groups and 1192 occupational titles. The following is a tabular presentation of the classification including the KNOCS skill level.

**Table 1: KENYA NATIONAL OCCUPATIONAL CLASSIFICATION STRUCTURE**

Major Groups	Sub-major groups	Minor groups	Occupational Titles	KNOCS Skill Level
1. Legislators, administrators and managers	4	7	83	-
2. Professionals	9	40	183	5 <sup>th</sup>
3. Technicians and associate professionals	9	50	178	4 <sup>th</sup>
4. Secretarial, clerical services and related workers	2	10	35	3 <sup>rd</sup>
5. Service workers & shop & market sales workers	4	11	26	3 <sup>rd</sup>
6. Skilled farm, fishery, wildlife & related workers	5	7	28	2 <sup>nd</sup> & 3 <sup>rd</sup>
7. Craft and related trades workers	8	34	206	2 <sup>nd</sup> & 4 <sup>th</sup>
8. Plant & machine operators & assemblers	9	51	412	2 <sup>nd</sup> & 3 <sup>rd</sup>
9. Elementary occupations	3	14	40	1 <sup>st</sup>
10. Armed forces	1	1	1	-
<b>Totals</b>	<b>54</b>	<b>225</b>	<b>1192</b>	<b>-</b>

**Major groups 1 - Legislators, administrators and managers and 0 - Armed forces** have not been linked to any skill level. This is because occupations in these two major groups require skills which are diverse to an extent that it was not possible to link them with any of the five broad KNOCS - 2000 skill levels stated above. The armed forces have not been included in the coverage during manpower surveys for security reasons.

The first minor group under the major group of Legislators, Administrators and Managers i.e. Legislative and Constitutional Officials (KNOCS 111) has some features which made it to be treated a bit differently from the rest. It is of special interest to Kenyans as it describes workers whose duties have been incorporated into the constitution of the country. They hold constitutional offices.

One possibility we cannot rule out is the presence in KNOCS-2000, of a few occupations which appear unlikely to be found within the country. Over the years many people have worked on KNOCS and it was found safer to retain most of the information while further studies are carried out. For example, one may not be aware of glass lens moulding (KNOCS 732-15) in the country but one cannot also rule out people taking up the occupation in the near future.

Each of the four levels of aggregation of KNOCS - 2000 has been allocated a code number. Brief descriptions have also been given to all the four levels.

## CLASSIFICATION STRUCTURE

The structure of the Kenya National Occupational Classification Standard (KNOCS) is designed mainly to facilitate statistical description and analysis of labour market information and other socio-economic activities. It also helps in the formulation of government policies, including manpower planning, utilization and vocational training policies. The current version, which is in line with the ILO-International Standard Classification of Occupations ISCO-1988 version, concentrates mainly on the definition and description of occupational titles. The definitions in the 1986 version of KNOCS were quite limited and therefore needed further refinement. In the current version of KNOCS, attempt has been made to give clear descriptions of the work usually performed by those who belong to the occupation. Precise explanations of how and why the work is done and what is involved in the process, have also been given in most cases. The general functions of some occupations are followed by an enumeration of the main tasks performed, wherever possible.

The document (KNOCS) is structured on a 5-digit coding system. The 5-digit coding system is such that the first and second digits of the code refer to the major and sub-major occupational groups, respectively. The third digit refers to the minor group, while the fourth and fifth digits refer to the occupational titles. The document is categorized into 10 major groups, 54 sub-major groups, 225 minor groups and reflects 1192 occupational titles.

Given below are brief outlines of KNOCS major groups which are meant to facilitate the interpretation of the classification.

## SUMMARY OF MAJOR GROUPS

### MAJOR GROUP 1: LEGISLATORS, ADMINISTRATORS AND MANAGERS

This group consists of occupations that are basically concerned with planning, formulation and interpretation of policy in the public and private sectors. The main tasks include responsibility for decision-making and in directing the management of their respective organizations or enterprises to ensure that the established objectives are realized. It has 4 sub-major groups which are divided into 7 minor groups and the latter are disaggregated further into 83 occupational titles.

## **MAJOR GROUP 2: PROFESSIONALS**

Professionals covers occupations whose main tasks require a high level of professional knowledge and experience in the fields of physical and life sciences, or social sciences and humanities. The main tasks consist of increasing the existing stock of knowledge, applying scientific and artistic concepts and theories to the solution of problems and teaching the foregoing in a systematic manner.

## **MAJOR GROUP 3: TECHNICIANS AND ASSOCIATE PROFESSIONALS**

Technicians and Associate Professionals group covers those occupations whose main tasks require sound educational background and proper training, and whose main tasks require the experience and knowledge of principles and practices necessary to assume operational responsibility and to give technical support to professionals. It has 9 sub-major groups which are sub-divided into 50 minor groups. These are sub-divided further into 178 occupational titles.

## **MAJOR GROUP 4: SECRETARIES, CLERICAL SERVICES AND RELATED WORKERS**

Occupations covered in this group have main tasks that require the knowledge and experience necessary to record, organize, store and retrieve information. It further involves the computation of numerical, financial and statistical data and a number of client-oriented clerical duties. It has also connection with money-handling operations, travel management, business information and appointments. It also involves performing secretarial tasks. It has 2 sub-major groups and 10 minor groups which are further disaggregated into 35 occupational titles.

## **MAJOR GROUP 5: SERVICE WORKERS AND SHOP AND MARKET SALES WORKERS.**

This group covers occupations mainly concerned with performing services related to and experience necessary to provide the everyday needs of families and other the knowledge groups of individuals. The tasks require protective service, personal services related to travel, housekeeping, catering and personal care. It also includes those tasks which involve selling goods in shops, demonstration of goods and modelling. It has 4 sub-major groups, 11 minor groups and 26 occupational titles.

## **MAJOR GROUP 6: SKILLED FARM, FISHERY, WILDLIFE AND RELATED WORKERS**

The group covers occupations related to agriculture, animal husbandry and fishing. The main tasks therefore require the knowledge and experience necessary to grow and harvest crops, breed, feed or hunt animals, gather wild fruit and plants, catch or breed fish, cultivate or gather other forms of aquatic life. This group includes those functions which are meant for both domestic and commercial purposes. It is divided into 5 sub-major groups, 7 minor groups and 28 occupational titles.

## **MAJOR GROUP 7: CRAFT AND RELATED TRADES WORKERS**

The group covers those occupations concerned with extracting of raw materials, manufacture and repair of goods. It also covers the tasks of construction, maintenance and repair of roads, structures and machinery. The main tasks involved in this group require experience with, and understanding of the work situation, the materials worked with, the requirements of the structures, machinery and other items produced. It also comprises printing works, processing of food stuffs, textiles,

wooden or metal handicrafts. It has 8 sub-major groups, 34 minor groups and 206 occupational titles.

#### **MAJOR GROUP 8: PLANT AND MACHINE OPERATORS AND ASSEMBLERS**

This group covers occupations whose main tasks require the knowledge and experience that will enable one to operate vehicles and other mobile equipment. It also requires the knowledge and skills to tend, control and monitor the operation of industrial plant and machinery. This may also be on the spot or by remote control. The skills needed may enable one to assemble products from component parts according to strict rules and procedures. These occupations require experience with and an understanding of the machinery worked with. The tasks involved may call for understanding of all stages and the nature and purpose for specifications and procedures. It is divided into 9 sub-major groups, 51 minor groups and 412 occupational titles.

#### **MAJOR GROUP 9: ELEMENTARY OCCUPATIONS**

This major group covers occupations which require the knowledge and experience necessary to perform mostly simple and routine tasks, involving the use of simple hand-held tools and in some cases certain physical effort. With few exceptions they may require only limited personal initiative or judgement. The occupations have been divided into 3 sub-major groups, which have been sub-divided into 14 minor groups with the latter (minor groups) being sub-divided further into 40 occupational titles.

#### **MAJOR GROUP O: ARMED FORCES**

This is a group of occupations whose main tasks consist of carrying out military operations undertaken as collective defence measures. It also requires skills which enable the process of preparing and training to deter military aggression; surveillance and protection of national territory, airspace and coastal waters. It also involves the art of providing aid to civilian authorities as requested in the event of civil disorder, natural disaster and other. It excludes such groups like police (except military police), customs, border or armed civilian services. This major group is disaggregated to only three (3) occupational units. One Sub-major group, one Minor group and one occupational title.

## MISCELLANEOUS NOTES

### 1. Occupations with a broad range of tasks and duties.

Depending on the size of an establishment, differences in the range of tasks and duties for the 'same occupation' are likely to be observed. For example, one visiting a small establishment is likely to find that typing, filing, telephone and reception work are performed by the same worker. In bigger establishments those are likely to be two, three or four separate jobs. Since an occupation classification depends on the most common combination of tasks and duties, there will be a problem when in the case of some occupations, the range of tasks and duties does not correspond to those specified in the classification. The following rules are suggested in such cases:

- (a) If the tasks and duties performed require skills usually obtained through different levels of training and experience, the jobs have been classified in accordance with those tasks and duties which require the highest level of skills. For example, if the job involves driving a van,(KNOCS 882-13) and delivering mail (KNOCS 915-11 ),it has been classified under KNOCS 882-13. This is not similar to jobs like Driver Mechanic where the employer is essentially looking for a driver who is capable of performing certain maintenance tasks on the vehicle.
- (b) If the tasks and duties require different skills acquired through similar levels of skills, the jobs have been classified in accordance with the minimum requirements for one to perform the job. For example the job of Finance and Administration Manager has been classified under Finance Manager (KNOCS 132-13) as financial management skills are normally the minimum requirement for the job.
- (c) If the tasks and duties are connected with different stages of the production and distribution of goods process, tasks and duties related to the production stage have taken priority over associated ones - unless one of the tasks and duties predominates. For example a baker who bakes bread, makes pastries and sells these products has been classified as a baker(KNOCS 752-11) and not as a shop sales person (KNOCS 512-11).

### 2. Market oriented versus subsistence farming.

Economic development within the country has not been uniform and this has led to the coexistence of two agricultural sectors. One is characterized by low-skilled subsistence farming (including pastoralists) while the other is market oriented and is highly mechanized. Under Major Group 6 - Skilled Farm, Fishery, Wildlife and Related Workers, KNOCS has made a distinction between the two sectors i.e 61 and 62 for market oriented agricultural workers and 63 for subsistence agricultural and fishery workers.

### 3. Occupations in the informal sector.

The informal sector has become a major employer in the country. Occupations in this sector were therefore considered when compiling KNOCS. Most of the

occupations in the informal sector are to be found in the two KNOCS major groups of 7-Craft and Related Trades Workers and 9-Elementary Occupations. For example, since handicraft making is an important activity in the country, it has been given prominence in KNOCS under minor group 733-Handicraft Workers. Other examples of occupations in the informal sector are; Street Vendors and Related Workers (KNOCS-911) and Shoe Cleaning and Other Street Services Elementary Occupations (KNOCS-912).

**4. Working proprietor**

KNOCS does not classify the status of employment. It considers the occupation based on tasks performed.

**5. Quality inspecting occupations**

Quality inspecting occupations, whose main tasks are to ensure compliance with the quality standards and specifications of manufacturers have been classified under Minor group 398- Safety, Health and Quality Inspectors/Controllers. Testers and checkers, whose main tasks consist of a mechanical inspection of the goods produced which, in most cases, amounts to simple visual checking have been classified with workers producing these goods.

**6. Supervising occupations**

Supervising occupations (including those of foreman/woman, overseer, charge-hand and headman) which are mainly concerned with the control of the quality of the work done have been classified together with the jobs whose tasks they supervise. However, if the main tasks and duties of a job consist of planning, organizing, controlling and directing the daily work activities of a group of subordinate workers, the occupation should be considered as a managerial occupation and classified in the appropriate group under Sub-major Group 14, Non-departmental Managers.

**7. Coaching occupations**

Coaching occupations primarily concerned with on-the-job training by continuous observation, assessment and guidance are classified with the occupations for which instruction is carried out in particular trade, craft or machine-operating tasks,

**8. Apprentices and trainees**

Apprentices and trainees are classified according to the tasks and duties actually performed and not according to their future occupation.

# **MAJOR GROUP 1**

## **LEGISLATORS, ADMINISTRATORS AND MANAGERS**

Legislators, administrators and managers plan, formulate and interpret policy in the public and private sectors. The main tasks include responsibility for decision-making and in directing the management of their respective organizations or enterprises to ensure that the established objectives are realized. Supervision of other workers may be included.

Occupations in this major group are classified into five sub-major groups namely :-

- 11 Legislators and Constitutional Officials**
- 12 Administrators and Senior officials of Special Interest Organizations**
- 13 Corporate managers**
- 14 Non-departmental Managers**
- 15 Administrators and Managers n.e.c.**

### **SUB-MAJOR GROUP 11: LEGISLATORS AND CONSTITUTIONAL OFFICIALS**

Legislators and constitutional officials determine, formulate and direct policies of the central or local governments and make, rectify, amend or repeal laws, public rules and regulations. The tasks usually performed include: presiding over or participating in the proceedings of parliament and administrative councils of local governments; determining, formulating and directing policies of the central or local governments, making, ratifying, amending or repealing laws, public rules and regulations. Supervision of other workers may be included.

Occupations in this sub-major group are classified into two minor groups, namely:-

- 111 Legislative and Constitutional Officials**
- 112 Local Authority Officials**

### **MINOR GROUP 111: LEGISLATIVE AND CONSTITUTIONAL OFFICIALS**

Legislative and constitutional officials determine, formulate and direct policies of the national government, as members of parliament or as set out in the constitution of the country.

#### **111-11 President**

Head of State, Government and Commander-in-Chief of the armed forces. Must be an elected member of Parliament. Nominates some members of the public to Parliament and appoints the Vice President, Ministers and Assistant Ministers from among members of Parliament. Chairs cabinet meetings and appoints officials whose duties have been incorporated into the country's constitution. Opens, closes and prorogues Parliament.

Example of occupational title classified here is:-

- President

#### **111-12 Vice President**

Appointed by the President; is the principal assistant to the President; attends Cabinet meetings chaired by the President; takes part in moulding of government policy. The Vice-President may head a Ministry and take responsibility for Government Administration and Policy. He acts as the leader of Government Business in parliament.

Example of occupational title classified here is:-

- Vice President

**111-13 Cabinet Minister**

Appointed by the President; may head a ministry in the government; may be responsible for Government administration. Attends Cabinet meetings chaired by the President and takes part in the moulding and formulation of Government policy.

Example of occupational title classified here is:-

- Cabinet Minister

**111-14 Assistant Minister**

Appointed by the President; may work in a ministry in the government; may be responsible for Government administration. Attends meetings of assistant ministers and takes part in the moulding and formulation of Government policy

Example of occupational title classified here is:-

- Cabinet Minister

**111-15 Speaker of the National Assembly**

Elected by members of Parliament; presides over the proceedings in Parliament and ensures that debates are conducted according to established standing orders, rules and regulations. Presides over the Speaker's Committee, and may serve on relevant official committees.

Example of occupational title classified here is:-

- Speaker, National Assembly

**111-16 Deputy Speaker of the National Assembly**

Elected by members of Parliament; presides over the proceedings in Parliament when the Speaker is absent; is a member of Parliament and serves on relevant official committees.

Example of occupational title classified here is:-

- Deputy speaker, National Assembly

**111-17 Member of Parliament/ Chief Whip**

Participates in the activities in Parliament as an elected member or as a nominated member; participates in Parliamentary debates and parliamentary committees which helps to shape the laws of the country. The Chief Whip is a member of parliament and serves the interests of his party in parliamentary debates.

Examples of occupational titles classified here are:-

- Chief Whip
- Member of Parliament

**111-18 Attorney General**

Principal legal adviser to the government, heads the legal affairs department of Government and drafts legislation and prepares government regulations based on the existing laws. Gives consent and prosecutes on behalf of the Government in criminal cases and participates in parliamentary debates as an ex-officio member.

Example of occupational title classified here is:-

- Attorney General

**111-21 Secretary to the Cabinet**

Head of the Public Service; directs, controls and co-ordinates the implementation of Government policies and programmes. Acts as the secretary to the Cabinet in cabinet meetings and all cabinet affairs.

Example of occupational title classified here is:-

- Secretary to Cabinet

**111-22 Chief Justice**

Heads the Judiciary Department; directs and controls the affairs of the Judiciary. Chairs the Judicial Service Commission and presides over the swearing-in ceremony and during the installation of the President and admission of lawyers as officers of the High Court.

Example of occupational title classified here is:-

- Chief Justice

**111-23 Solicitor General**

Accounting Officer of the Office of the Attorney General; administers, directs and co-ordinates the policy and programmes of the department.

Example of occupational title classified here is:-

- Solicitor General

**111-24 Controller and Auditor General/ Auditor General Corporations**

Audits all government ministries' or parastatal organizations' accounts and prepares Controller and Auditor General's reports on their financial state for presentation to the relevant parliamentary committee.

Examples of occupational titles classified here are:-

- Auditor General Corporations
- Controller and Auditor General

**MINOR GROUP 112: LOCAL AUTHORITY OFFICIALS**

Local authority officials determine, formulate by laws and direct policies of local authorities.

**112-11 Mayor/County Chairman**

Elected by Councilors; presides over the proceedings of legislative bodies and administrative councils of a city, municipality or county administration. Formulates and directs pertinent policies; represents the interests of rate payers.

Examples of occupational titles classified here are:-

- Mayor
- Chairman, county council
- Chairman, town/urban council

**112-12 Councilor**

An elected or nominated official; represents the interests of rate payers in a ward of city, municipality, town or county council. participates in the formulation of rules and regulations of the council.

Example of occupational title classified here is:-

- Councilor

## **SUB-MAJOR GROUP 12: ADMINISTRATORS AND SENIOR OFFICIALS OF SPECIAL-INTEREST ORGANIZATIONS**

This group includes senior government officials and senior officials of special interest groups. Senior government officials advise the government on policy matters, oversee the interpretation and implementation of policies and legislation.

Occupations in this sub-major group are classified into two minor groups, namely:-

### **121 Government Administrators**

### **122 Senior Officials of Special Interest Organizations**

## **MINOR GROUP 121: GOVERNMENT ADMINISTRATORS**

Government administrators advise the government on policy matters, oversee the interpretation and implementation of government policies and legislation.

### **121-11 Chairman and Members of the Electoral Commission**

Participate in advising on policy matters; preparation of laws and regulations governing the functions of the Electoral Commission; prescribe boundaries, numbers and names of constituencies in the country in accordance with the constitution; direct and control Presidential, National Assembly and Local Government elections in the country according to constitutional requirements. Direct and control registration of voters, maintenance and revision of voters' register.

Examples of occupational titles classified here are:-

- Chairman, electoral commission
- Commissioner, electoral commission
- Deputy chairman, electoral commission

### **121-12 Chairman and Members of the Public Service Commission**

Participate in advising on policy matters; preparation of laws and regulations governing the Public Service Commission; direct and make appointments and promotions; prescribe disciplinary measures to public service officers or those serving in a local authority; conducts and administers interviews, examinations and occupational tests in respect of civil servants. Direct and control of the functions the PSC.

Examples of occupational titles classified here are:-

- Chairman, public service commission
- Commissioner, public service commission
- Deputy chairman, public service commission

### **121-13 Chairman and Members of the Teachers Service Commission**

Participate in advising on policy matters, preparation of laws and regulations governing the teaching service established under the Teachers Service Commission Act. Compile and publish, and amend code of regulations applicable to teachers employed by the TSC.

Examples of occupational titles classified here are:-

- Chairman, Teachers Service Commission
- Commissioner, Teachers Service Commission

- Deputy Chairman, Teachers Service Commission

**121-14 Permanent Secretary/Financial Secretary**

Directs, administers and co-ordinates policies, programmes and activities of a government ministry/ department. Advises on policy formulation. Interprets and implements government directives and policies. Advises ministers on Government policies. Accounting officer of a ministry; exercises control through financial administration by accounting for any service in respect of moneys which have been appropriated by the Parliament.

Examples of occupational titles classified here are:-

- Financial Secretary
- Permanent Secretary

**121-15 Public Service Commission Secretary**

Acts as the chief executive of the Public Service Commission; Accounting Officer of the Public Service Commission; directs and co-ordinates the implementation of policies, decisions and programmes of the public service commission.

Example of occupational title classified here is:-

- Secretary, Public Service Commission

**121-16 Teachers Service Commission Secretary**

Acts as the chief executive of the Teachers Service Commission, advising on policy matters. Directs, and co-ordinates the implementation of TSC policies, decisions and programmes.

Example of occupational title classified here is:-

- Secretary, Teachers Service Commission

**121-17 Deputy Secretary**

Deputies the Permanent Secretary; participates in administering the policy and programmes of a government ministry/department.

Example of occupational title classified here is:-

- Deputy Secretary

**121-18 Paymaster General**

The principal paying agent and banker for all government departments by maintaining the paymaster general account. Oversees the transactions in the paymaster general account to ensure the payment, and transfer of monies from the exchequer account to the paymaster general account. Ensures the maintenance of records and issues of monthly bank statements for bank reconciliation purposes with accounting officers.

Example of occupational title classified here is:-

- Paymaster General

**121-21 Clerk to the National Assembly**

Chief Administrator of the National Assembly; takes charge of records in the National Assembly and is responsible for the smooth running of the work done in parliament buildings. Takes part in swearing-in of members of parliament.

Example of occupational title classified here is:-

- Clerk, National Assembly

**121-22            Comptroller of State House**

Personal Private Secretary to the President; oversees State House affairs. Makes arrangements of official functions of the President and is responsible for keeping official private records.

Example of occupational title classified here is:-

- Comptroller, State House

**121-23            Provincial Commissioner**

Chief administrative head in a province; administers the policy and programme activities of the Government in a province; interprets and implements government directives and policies in a province.

Example of occupational title classified here is:-

- Provincial Commissioner

**121-24            Director/Commissioner/Head of Government Department**

Principal administrator of a Government department; plans and directs the policy and operations of a department.

Example of occupational title classified here are:-

- Head, Government department

**121-25            Principal Immigration Officer**

Oversees the interpretation and implementation of government policies and regulations on immigration matters such as issuing of passports and other travel documents. Determines the conditions to be attached to these documents and their length of validity.

Example of occupational title classified here is:-

- Principal Immigration Officer

**121-26            Ambassador/High Commissioner**

Represents the government as the principal diplomatic representative accredited to one or more foreign governments. Manages the operation and staff of embassies, consulates or high commissions. Handles official communication between governments including signing of treaties and agreements. Administers the provision of services to Kenyan citizens overseas and offers advice to Kenyan Government on relations with other countries.

Examples of occupational titles classified here are:-

- Ambassador
- High Commissioner

**121-27            Under Secretary/Assistant Secretary**

Assists in overseeing the interpretation and implementation of government policies and regulations in a ministry.

Examples of occupational titles classified here are:-

- Assistant Secretary,
- Senior Assistant Secretary
- Under secretary

**121-28 Town/ County Clerk**

Chief executive officer and secretary to the council.

Examples of occupational titles classified here are:-

- Clerk, town
- Clerk, county council

**121-31 Town/ County Treasurer**

Financial manager and adviser in a council. Prepares and implements the council budgets.

Examples of occupational titles classified here are:-

- Treasurer, city council
- Treasurer, county council
- Treasurer, municipal council

**121-32 District Commissioner**

Chief administrative head of a district; administers government policies and directives.

Example of occupational title classified here is:-

- District Commissioner

**121-33 District Officer**

Takes charge of the administration of a division in a district; implements government policies and directives.

Example of occupational title classified here is:-

- District Officer

**121-34 Chief/Assistant Chief**

Performs administrative duties in a given location. Settles disputes between members of the community.

Examples of occupational titles classified here are:-

- Assistant Chief
- Chief

**121-35 Other Government Administrators**

Included here are those who represent the government in regional or inter-governmental organisations.

Example of occupational title classified here is:-

- Government representative in the East African Community.

## **MINOR GROUP 122: SENIOR OFFICIALS OF SPECIAL INTEREST ORGANIZATIONS**

Senior officials of special-interest organisations determine, formulate and direct the implementation of policies of special-interest organisations, such as political-party organisations, trade unions, employers' organisations, trade and industry associations, humanitarian or charity organisations, or sports associations, and represent their organisations and act on their behalf.

### **122-11 Senior Official of Political Party Organization**

Determines and regulates the political party's policies, rules and regulations; promotes the interests of the party and its members. Plans and organizes elections and political campaigns for the political party's members. Plans, organizes and implements party's policies, rules and regulations.

Examples of occupational titles classified here are:-

- Chairman, political party
- Director, elections/political party
- Secretary, political party
- Treasurer, political party

### **122-12 Senior Official of Employers' Organization**

Determines and formulates the organization's policies, rules and regulations; caters for employers' organization in industrial courts and tribunals, international bodies and other agencies; represents the employers' organization and its members in the Labour Advisory Board, joint negotiation councils, investigation and conciliation cases. Plans and organizes campaigns on behalf of employers' organization for the election of its officials, to recruit and educate members.

Examples of occupational titles classified here are:-

- Chairman, employers' organization
- Director, executive/employers' organization
- Director, regional/employers' organization
- Secretary, general/employers' organization

### **122-13 Senior Official of Jua Kali Employers Association**

Formulates the Jua Kali Employers Association's rules and regulations and negotiates on behalf of its members; promotes and protects the interests of the association. Plans, organizes and directs campaigns for elections on behalf of the association or members.

Examples of occupational titles classified here are:-

- Chairman, jua kali employers association
- Member, committee/jua kali employers association
- Patron, jua kali employers association
- Secretary-general, jua kali employers association
- Treasurer, Jua kali employers association

### **122-14 Senior Official of Workers' / Trade Union /Organization**

Formulates and implements the trade union rules and regulations; negotiates on behalf of the trade union organization and its members; represents trade union organization in the Labour Advisory Board, Industrial Court, Joint Negotiation Councils, investigations and conciliation cases and Central Organization of Trade Unions Boards.

Examples of occupational titles classified here are:-

- Chairman, trade union
- Director of education, trade union
- Secretary-general, trade union
- Treasurer, trade union

**122-15 Senior Official of Sports Club/ Association**

Formulates and oversees the implementation of sports club's/association's policies, rules and regulations. Plans and organizes elections and campaigns of candidates for elective offices. Promotes the interests of the association on economic, social and welfare issues through for example fundraising and acquisition of sporting facilities among others.

Examples of occupational titles classified here are:-

- Chairman, sports association
- Patron, sports club
- Secretary-general, sports association
- Treasurer, sports association

**122-16 Senior Official of Religious Organization**

Formulates and supervises implementation of religion organization's policies, rules and regulations. Promotes interests of the religion association; plans and organizes campaigns on behalf of the religion organization for evangelical purposes, education and welfare of the organization and its members.

Examples of occupational titles classified here are:-

- Chairman, religion organization
- Secretary, general/religion organization
- Treasurer, religion organization

**122-17 Senior Official of Social and Welfare Society**

Formulates and implements the organization's policies, rules and regulations; Plans and organizes campaigns on behalf of social and welfare society; recruits, educates and promotes interests of its members.

Examples of occupational titles classified here are:-

- Chairman, welfare society
- Secretary, welfare society
- Treasurer, welfare society
- Vice-chairman, welfare society

**122-18 Senior Official of Humanitarian and Other Special Interest Organization**

Formulates and implements the organization's policies; rules and regulations; negotiates on behalf of the organization; promotes interests of the organization and its members. Plans and organizes campaigns to recruit and educate members.

Examples of occupational titles classified here are:-

- Chairman, consumer organization
- Co-ordinator, environmental protection organization
- Co-ordinator, humanitarian and special interests organization
- Co-ordinator, wildlife protection organization

**SUB-MAJOR GROUP 13: CORPORATE MANAGERS**

Corporate managers/directors determine and formulate policies; plan and co-ordinate the activities of enterprises and organizations.

Occupations in this sub-major group are classified into three minor groups, namely:-

**131 Directors and Chief Executives**

**132 Specialised Departmental Managers**

**133 Other Departmental Managers**

**MINOR GROUP 131: DIRECTORS AND CHIEF EXECUTIVES**

Directors and chief executives head enterprises or organisations (except special-interest organisations) and, with the help of other managers, determine and formulate policies; plan, direct and co-ordinate the activities of enterprises or organisations, usually within the guidelines set up by a board of directors or a governing body to whom they are answerable for the operations undertaken and results obtained.

**131-11 Managing Director**

Presides over and/or participates in the determination and formulation of policies of enterprise or organization; plans by analysing economic, social, technical and legal trends; directs and co-ordinates the general functioning and management of enterprise including technological resources, personnel and personnel selection. Ensures security of assets and investments; reviews the operations and the results of the enterprise and reports the findings to governing bodies at conventions, designated forums of the corporation, seminars and official occasions and liaises with other organizations.

Examples of occupational titles classified here are:-

- Chairman, company
- Director-general, corporation
- Director, managing/company
- Managing director
- Company chief executive

**131-12 Executive Secretary**

Plans, directs and co-ordinates the general functions of the enterprise or organization; directs the implementation of the internal administration or financial operation of the enterprise; reviews the operations and results of the enterprise and reports to the governing body; represents the enterprise in its dealings with the outside bodies.

Examples of occupational title classified here is:-

- Secretary, executive /company

**131-13 University Vice Chancellor**

Plans, directs and co-ordinates the educational and administrative affairs of a university in accordance with the University Act, statutes and regulations; oversees principal policy implementation; promotes the interests of the university including those of staff and students in conjunction with senior administrators and officials of university faculties and departments. Interprets and implements university policies.

Examples of occupational titles classified here are:-

- University president
- University Rector
- Vice Chancellor

### **131-14 Other School/Institutional Principal**

Directs and co-ordinates the educational and administrative affairs of training college/school and may prepare and/or direct the implementation of curricula and extra-curricula programmes. Appraises the activities of the school; oversees the day to day management of the institution.

Examples of occupational titles classified here are:-

- Director, educational institution
- Principal, training college/ educational institution

### **MINOR GROUP 132: SPECIALISED DEPARTMENTAL MANAGERS**

Specialized departmental managers plan, direct and co-ordinate activities concerning the production of goods or the provision of services in enterprises and/or organisations, under the broad guidance of management in consultation with other departmental heads.

### **132-11 Company Secretary**

Advices management on legislative proceedings; interpretation of laws, rules and regulations within the framework of the constitution; advices management in the interpretation of law; may plan, direct and co-ordinate the internal administration of financial operations of the enterprise; takes part in formulating company policy.

Example of occupational title classified here is:-

- Secretary, Company

### **131-12 University College Principal**

Co-ordinates, directs and controls the educational and administrative affairs of the campus/college as a constituent college of a university. In conjunction with senior administrators and officials of college faculties and departments, interprets, promotes and implements existing college policies.

Example of occupational title classified here is:-

- Principal, University College

### **132-13 Finance Manager**

Administers and controls the financial, that is, taxation, credit policy, cash flow and investments of an industrial and/or other enterprise/organization; participates in formulating the financial policies of the organization; assesses the financial situation of the organization; prepares budgets, reports, forecasts and other financial information and interpretations to other managements; controls expenditure, preparation of tenders and administration of contracts and ensures the efficient use of resources; directs the collection of financial and accounting information; co-ordinates the design, implementation and monitoring of computerized accounting systems; Gives assessment of proposals involving financial expenditure; prepares the financial status reports of projects; oversees the selection, training and performance of finance staff; represents the department in its dealings with other parts of the organization or with outside bodies.

Examples of occupational titles classified here are:-

- Controller, accounts
- Controller, financial
- Finance officer
- Manager, accounting
- Manager, budget

- Manager, finance
- Manager, finance and administration
- Purser, ship

**132-14 Administration Manager**

Plans, organizes and controls the general administration of an industrial, commercial or other organization and participates in formulating the administrative policy of the organization; assesses the organization's needs for records, information, communication and other common services. Answerable to general manager, consults and co-ordinates with departmental managers; devises procedures for ensuring the adequacy of information and communication services for departments.

Example of occupational title classified here is:-

- Manager, administration

**132-15 Human Resource/Personnel and Industrial Relations Manager**

Answerable to the chief executive; plans, directs and co-ordinates the industrial relations activities of an industrial, commercial or other organization. Participates in human resource management, planning, formulating and organizing procedures for the recruitment, training, promotion or discharge from employment of staff, determination of wages structure and negotiations about wages and employment benefits. Oversees safety, health and related programmes and activities.

Examples of occupational titles classified here are:

- Manager, human resource development and management
- Manager, industrial relations
- Manager, personnel
- Manager, personnel and industrial relations

**132-16 Organization and Methods Manager**

Plans, directs and co-ordinates consulting service activities aimed at achieving improved efficiency and making savings in the operations of an organization or undertaking; may perform general management tasks.

Example of occupational title classified here is:-

- Manager, organization and methods

**132-17 Sales and Marketing Manager**

Plans, directs, advertises and co-ordinates sales and marketing activities of an enterprise or industrial undertaking, wholesale or retail business; participates in planning, formulating and organizing sales and marketing programmes and strategies based on sales records and market assessments. Answerable to general manager, consults with departmental managers to determine price schedules, discount and delivery terms, sales promotion, budgets, sales methods, incentives and special campaigns, advertising and staff training. Monitors customer service, invoicing, payments and administration costs and credit arrangements.

Examples of occupational titles classified here are:-

- Manager, marketing
- Manager, sales
- Manager, sales and marketing

- Manager, sales promotion

**132-18 Export - Import Manager**

Plans and co-ordinates the activities of an export and import trade establishment; identifies local demand for goods produced in foreign countries or for foreign demand of goods produced locally. Processes and handles documentation; negotiates with producers, customers and suppliers, for sale of goods and shipping of goods. Receives and checks orders to ensure that goods being exported or imported are legal, meet standard specifications and are properly authorized.

Examples of occupational titles classified here are:-

- Manager, export
- Manager, import
- Manager, import-export

**132-21 Public Relations Manager and Advertising Manager**

Plans and co-ordinates the advertising and public relations activities of the enterprise or organization. Participates in the policy formulation of the organization's advertising and public relations. Undertakes negotiations on advertising contracts with officials of newspapers, radio and television media, sports and cultural organizations and advertising agencies. Plans and co-ordinates information programmes to inform legislators, the mass media and the general public about plans, accomplishments and points of views of the enterprise or organization. Plans and manages welfare activities for the organization for education, humanitarian and non-profit making organizations. Represents the organization in advertising and public relations in its dealings with other organizations.

Examples of occupational titles classified here are:-

- Manager, advertising
- Manager, public relations

**132-22 Supplies and Distribution Manager**

Plans, directs and co-ordinates the supply, storage and distribution activities of the enterprise or organization. Undertakes negotiations of purchase contracts and agreements of suitable pricing with suppliers and ensures the quality of the goods purchased; plans and installs systems inventory control; monitors inventory levels and service standards; represents the organization in its dealings with other organizations.

Examples of occupational titles classified here are:

- Manager computing services
- Manager, distribution
- Manager, procurement
- Manager, purchasing
- Manager, supplies
- Manager, warehouse

**132-23 Information Technology Manager**

Plans data processing policy in consultation with other managers and users and directs data processing operations and produces information for policy makers. Directs the selection, installation and use of computing equipment and software. Directs maintenance work and quality control and controls security of data processing systems.

Examples of occupational titles classified here are:-

- Manager, computing services
- Manager, data processing operations
- Manager, data processing systems
- Manager, information systems

**132-24 Research, Planning and Development Manager**

Plans, co-ordinates and directs the research activities and formulates research programmes to develop new or improved technical processes, production or utilization of materials. Monitors the cost and effectiveness of research activities to optimize resources and maintain professional standards. Provides advice on the recording and reporting of research activities and results. Provides advice on research to other managers. Assesses research results and procedures and recommends research initiatives.

Examples of occupational titles classified here are:-

- Manager, planing and development
- Manager, research
- Manager, research and development

**132-25 Production and Operations Manager**

Plans, organizes and controls the production activities of an establishment to ensure the achievement of planned production targets, methods and products, efficient use of equipment, materials and human resource. Participates in formulating the production policy of the undertaking, production methods and products; assesses production requirements, plans, capacity and performance. Consults departmental managers on matters concerning production planning, quality control and safety standards, financial limits, human resource available, material supply, marketing and distribution. Controls the preparation of production records and reports. Formulates the production programme including quality of production, time and cost estimates, material and personnel requirements. Makes decisions and recommendations regarding plant maintenance, replacement techniques of production and changes in staff levels. Gives advice and information on production to other managers and customers/clients.

Examples of occupational titles classified here are:-

- Manager, plant operations
- Manager, quality control
- Manager, workshop

**MINOR GROUP 133: OTHER DEPARTMENTAL MANAGERS**

This group covers departmental managers not classified in the minor group 132- Specialised Departmental Managers. For instance, here should be classified those who supervise routines in their jurisdiction/scope and usually supervise staff below them and report to the management.

**133-11 Railway Station Master**

Directs, controls and co-ordinates passenger and related services at railway station; organizes and controls railway passenger services at a station including sale and collection of tickets, handling of baggage, parcels and mailbags and providing information to clients. Liaises with maintenance staff to ensure the maintenance of railway trucks and facilities; exercises surveillance or application of security measures; attends to complaints regarding the services and reports periodically to divisional or

regional manager; co-ordinates the arrival, departure, loading and unloading of trains.

Example of occupational title classified here is:-

- Master, railway station

**133-12 Transport Operations Manager (Roads)**

Plans, directs and co-ordinates those activities of the enterprise which are concerned with providing road transport services including daily service operations; ensures the fulfilment of quotas; controls expenditure; establishes operational and administrative procedures. Oversees the application of work safety and related procedures, training and performance of staff and represents the transport department in its dealings with other parts of the enterprise.

Examples of occupational titles classified here are:-

- Manager, passenger traffic (roads)
- Manager, road transport

**133-13 Postmaster**

Controls, co-ordinates and implements daily operations of postal and related services in a given geographical area through processing and delivery of mail and conduct of other post office services such as the sale of stamps, sending and receipt of telegrams, transfer of money, payment of pensions and banking. Exercises surveillance or application security procedures; attends to customer complaints and reports to higher management.

Example of occupational title classified here is:-

- Postmaster

**133-14 Bank Manager**

Implements and organizes banking procedures and staffing and advises clients on investments. Assesses applications for loans and approves or rejects them and advises clients about loan policy and rates. Authorizes summaries of transactions. Ensures availability of staff at peak periods, and that funds balance at the close of business. Promotes branch functions and business development and ensures security procedures are implemented for safe-guarding cash and documents.

Examples of occupational titles classified here are:-

- Manager, bank
- Manager, branch/bank

**133-15 University Registrar**

Oversees the interpretation and implementation of university policy, rules and regulations and is responsible for keeping documents and records of all university actions. Supervises the registration of students into the various faculties or departments of a university.

Example of occupational title classified here is:-

- Registrar, university

**133-16 Dean of Students**

Plans, implements and co-ordinates activities concerning the welfare of students in a university or college and enforces discipline.

Example of occupational title classified here is:-

- Dean of students

**133-17 Head Teacher**

Plans, co-ordinates and implements educational and administrative activities of a public or private school. Implements curricula and extra-curricula programmes and outlines and may teach one or more subjects; arranges for procurement of supplies and examinations; interviews parents and pupils and enforces school discipline; controls expenditure of school funds to meet budgets; presides over staff meetings and supervises teaching, clerical and other support staff; represents school at community and administrative meetings.

Examples of occupational titles classified here are:-

- Headmaster
- Headmistress
- Teacher, head

**133-18 Sports Centre Manager**

Plans and controls the activities, facilities and resources of a sports centre; ensures that all sporting facilities are maintained and conform to safety standards; organizes publicity to promote facilities; checks and keeps custody of cash receipts. Plans and organizes catering facilities.

Examples of occupational titles classified here are:-

- Manager, sports centre
- Manager, stadium

**133-21 Media Producer**

Plans in consultation with technical experts, details of production activities in terms of output, quality and quantity, cost, time and other resources available and material requirement. Prepares work programmes to achieve planned production and directs production control activities. Controls the use of facilities such as studios and editing equipment, stage equipment and rehearsal time. Controls and directs production staff; organizes staff selection, training, development and utilization. Controls the quality of production and implements initiatives such as changes in personnel, facilities and objectives.

Examples of occupational titles classified here are:-

- Manager, studio
- Producer, executive/media
- Producer, radio
- Producer, television

**133-22 Theatre Producer**

Plans, organizes and co-ordinates the production of plays and other theatrical presentations, motion pictures and radio and TV programmes; considers established material; reads manuscripts of new works and selects those for presentation; arranges financing of production; selects stage directors and technical personnel, conducts audition and selects cast in consultation with stage directors.

Examples of occupational titles classified here are:

- Director, music

- Impresario
- Manager, floor
- Manager, stage
- Producer, motion picture
- Producer, theatre

## **SUB-MAJOR GROUP 14: NON-DEPARTMENTAL MANAGERS**

Non-Departmental Managers head various business undertakings which they manage on their own behalf, or on behalf of proprietors with the assistance of non-managerial staff.

The tasks usually include: planning, formulating and implementing policies; managing daily operations and reviewing their results; negotiating with suppliers, customers and other enterprises; planning and controlling the use of resources and the selection of staff; reporting to owners if any.

Occupations in this sub-major group are classified into one minor group, namely:-

### **141 Non-departmental Managers**

#### **MINOR GROUP 141: NON-DEPARTMENTAL MANAGERS**

Non-Departmental managers head various business undertakings which they manage on their own behalf or on behalf of the proprietors, with the assistance of non-managerial staff.

##### **141-11 Farm /Hunting/Forestry/Wildlife/Fishing Manager**

Plans, organizes controls and co-ordinates the operations of a farming, hunting, forestry, wildlife or fishing business on their own behalf or on behalf of the management; plans scope and objectives of programmes and activities. Plans and schedules nature and sequence of activities according to programme objectives and estimates quantity and quality of products to be produced, stored and sold. Makes budgetary estimates and makes reports.

Examples of occupational titles classified here are:-

- Manager, environment
- Manager, farming
- Manager, fisheries
- Manager, forestry
- Manager, wildlife services

##### **141-12 Mining Manager**

Plans, directs and co-ordinates on proprietor's or own behalf the activities of the enterprise which is concerned with the extraction of minerals from underground or surface mines and quarries; formulates and determines within the powers delegated to him by a board of directors or similar governing body or by official decree, the general policy direction and programme of operation of the enterprise or organization; determines the method by which the programme should be carried out, controlling and co-ordinating the activities of the different functional sections of the enterprise or organization.

Examples of occupational titles classified here are:-

- Manager, mining
- Manager, quarrying

**141-13 Manufacturing Manager**

Plans, directs and co-ordinates, on proprietor's or own behalf the activities of a manufacturing concern; formulates, determines and implements within the powers delegated to him by a board of directors or similar governing body or by official decree, the general policy direction and programme of the enterprise or organization; determines method by which the programme should be carried out; controls and co-ordinates the activities of the different functional sections of the enterprise or organization.

Examples of occupational titles classified here are:

- Manager, manufacturing
- Manager, steel rolling

**141-14 Construction Utilities Manager**

Plans, directs and co-ordinates on proprietor's or own behalf the activities and operations of construction work, production and distribution of electricity, gas and water. Formulates and determines within the powers delegated to him by a board of directors or similar body or by official decree, the general policy direction and programme of the enterprise or organization, determining the method by which the programme should be carried out.

Examples of occupational titles classified here are:-

- Manager, construction
- Manager, power generation
- Manager, waterworks

**141-15 Wholesale Trade Manager**

On own behalf or on behalf of the proprietor performs a combination of any of the following tasks:-

Plans, and co-ordinates the operations of a wholesale trading activity; makes budgetary estimates; liaises with manufacturers, retailers, and suppliers to negotiate and arrange contracts for orders; sale of products and promotional activities; plans and controls the use of resources and hiring of workers; reports to owners; provides information about merchandise to staff and customers.

Examples of occupational titles classified here are:-

- Merchant, wholesale trade
- Wholesale trader
- Wholesaler

**141-16 Retail Trade Manager**

On own behalf or on behalf of the proprietor performs a combination of any of the following tasks:-

Plans and controls the operations of a retail trading establishment; ensures the display and sale of merchandise; makes budgetary estimates; negotiates with suppliers and customers including credit, quality and discount terms; authorises the purchase of goods; provides information about merchandise to staff and customers; plans and controls the use of resources.

Examples of occupational titles classified here are:-

- Manager, chain store

- Manager, shop
- Manager, supermarket
- Merchant, retail trade
- Shopkeeper/Retailer/Stationer/Green grocer

**141-17 Hotel/Hospitality Manager**

Plans and co-ordinates the operations of a hotel on own account, partnership or on behalf of the proprietor to provide accommodation and related services. Directs and controls staff to ensure efficiency. Plans, directs and controls the administration and operations of reception, accounting, housekeeping, catering, purchasing and maintenance by determining room rates, credit policy and type of patronage to be solicited.

Examples of occupational titles classified here are:-

- Innkeeper
- Manager, bar
- Manager, Cafe/Snack Bar/Canteen
- Manager, hotel
- Restaurateur

**141-18 Transport/ Storage/Communications Business Manager**

Plans and co-ordinates on proprietor's or own behalf, the activities of the enterprise which is concerned with transport, storage and warehousing or communications business. Formulates, determines and implements within the powers delegated to him by a board of directors or similar governing body or by official decree the general policy direction and programme of the enterprise; makes budgetary estimates to meet operating costs; ensures maintenance of facilities, service and health standards.

Examples of occupational titles classified here are:-

- Manager, communications
- Manager, storage
- Manager, transport

**141-21 Manager in Personal Care, Cleaning and Related Services**

Plans, and co-ordinates on own or proprietor's behalf, the activities which are concerned with providing personal care, cleaning and related services including making budgetary estimates; implements the general policy and programme of the enterprise. Co-ordinates and directs operations to ensure that legal practices and requirements are observed and customers' needs are met. Ensures maintenance of of facilities, equipment, service and health standards.

Examples of occupational titles classified here are:-

- Manager, cleaning
- Manager, laundry
- Manager, personal care

**141-22 Manager in Health Care Services**

Plans and co-ordinates on proprietor's or own behalf, the activities of the enterprise which is concerned with health care services; formulates and determines within the

existing regulations of the organization the general policy and programme of the enterprise; makes budgetary estimates to meet operating costs. Ensures compliance with legal practices and requirements including health and safety standards and co-ordinates the optimization of utilization of resources. Negotiates with suppliers and other organizations.

Examples of occupational titles classified here are:-

- Administrator, hospital
- Manager, health care services
- Medical officer

**141-23 Recreational/Cultural/Sporting Establishment Manager**

Plans, directs and co-ordinates on proprietor's or own behalf the activities of the establishment. Formulates and determines within the powers delegated by the board of directors or similar governing body or by official decree, the general policy direction and programme of the establishment. Makes budgetary estimates to meet the operating costs and co-ordinates and directs operations to ensure that legal practices and requirements are observed; ensures maintenance of facilities and equipment including service, health and safety standards. Arranges for cultural and sporting events.

Examples of occupational titles classified here are:-

- Manager, recreational organization
- Manager, service
- Manager, sports club

**141-24 Manager of Travel Agency**

Plans and co-ordinates on proprietor's or own behalf, the activities of the enterprise. Formulates and determines within the powers delegated to him by the board of directors or similar governing body or by official decree, the general policy direction and programme of the enterprise. Makes budgetary estimates; co-ordinates operations to ensure that legal practices and requirements are observed; establishes standards and targets to ensure market controls.

Examples of occupational titles classified here are:-

- Manager, travel agency
- Travel agent

**141-25 Manager of Business Services**

Plans and co-ordinates on proprietor's or own behalf the activities of the enterprise which is concerned with business services. Formulates, determines and implements within the powers delegated to him by a board of directors or a similar body or official decree, the general policy and programme of the enterprise. Makes budgetary estimates to meet operating costs; co-ordinates and directs operations to ensure that legal practices and requirements are observed; authorizes listing of properties for sale; ensures maintenance of facilities, equipment and service standards. Negotiates with suppliers and customers and other organizations.

Examples of occupational titles classified here are:-

- Manager, business services
- Manager, real estate agency

**SUB-MAJOR GROUP 15: OTHER ADMINISTRATORS AND MANAGERS**

This group covers administrators and managers not elsewhere classified.

**151 Other Administrators and Managers**

**MINOR GROUP 151: OTHER ADMINISTRATORS AND MANAGERS**

**151-11 Other administrators and managers not elsewhere classified**

## **MAJOR GROUP 2 PROFESSIONALS**

Professionals consist of highly educated and/or trained personnel who advise on, or apply existing knowledge related to physical sciences, life sciences as well as social sciences and humanities. The main tasks consist of increasing the existing stock of knowledge, applying and teaching of the scientific or artistic concepts and theories in a systematic manner. Most occupations in this major group require skills at the 5<sup>th</sup> KNOCS skill level. Supervision of other workers may be included.

Occupations in this major group are classified into nine sub-major groups; namely:-

- 21 Physical Science Professionals**
- 22 Mathematicians, Statisticians and Computing Professionals**
- 23 Engineering Science Professionals**
- 24 Health and Life Science Professionals**
- 25 Teaching Professionals**
- 26 Legal Professionals**
- 27 Social Science and Related Professionals**
- 28 Business Professionals**
- 29 Other Professionals**

#### **SUB-MAJOR GROUP 21: PHYSICAL SCIENCE PROFESSIONALS.**

Physical science professionals conduct research, improve or develop concepts, theories and operational methods, and/or apply scientific knowledge and skills relating to their fields of specialization. The tasks usually include: research and analysis of natural phenomena; advising or applying scientific knowledge and skills obtained for the production of specialised products and services.

Occupations in this sub-major group are classified into three minor groups, namely:-

- 211 Physicists and Related Professionals**
- 212 Chemists**

#### **MINOR GROUP 211: PHYSICISTS AND RELATED PROFESSIONALS**

Physicists and related professionals conduct research, improve or develop concepts, theories and operational methods or apply scientific knowledge relating to their fields of specialization.

##### **211-11 Physicist**

Conducts research into physical phenomena to increase scientific knowledge and to develop and/or improve materials, products and industrial and other processes; performs experiments, tests and analyses.

Examples of occupational titles classified here are:-

- Astronomer
- Chief Physicist
- Physicist, electronics
- Physicist, medical

##### **211-12 Geologist**

Conducts research into the nature and history of earth's crust to increase scientific knowledge and develop practical applications in such fields as mineral exploitation and civil engineering; studies composition and structure of earth's crust, examining rocks, minerals and fossil remains of plants and animals.

Examples of the occupational titles classified here are:-

- Geochemist
- Geologist

##### **211-13 Hydrologist**

Conducts research into nature of earth including its atmosphere and hydrosphere, to increase scientific knowledge and to develop practical applications in such fields as radio communications, water cycles including surface and sub-surface water systems;

investigates and measures seismic, gravitational, electrical, thermal and magnetic forces affecting earth. Conducts research into nature and history of earth's crust to increase scientific knowledge and develop practical applications in such fields like mineral exploitation and civil engineering; studies composition and structure of earth's crust; conducts research into the nature of soil mechanics and hydraulics, ground water research and prospects.

Example of occupational title classified here is:-

- Hydrologist

#### **211-14 Geophysicist**

Studies physical aspects of the earth and other planetary bodies to determine their structure and composition; assists in locating and determining the nature and extent of oil, gas, and mineral deposits and ground water resources; determines flow patterns of ocean tides and currents, and detects and forecasts seismic, magnetic, electrical and thermal activity.

Example of occupational title classified here is:-

- Geophysicist

#### **211-15 Meteorologist**

Conducts research and improves or develops concepts, theories and operational methods related to the composition, structure and dynamics of the atmosphere. Investigates direction and speed of air movements, atmospheric pressures, temperatures, humidity and other phenomena such as cloud formation and precipitation, electrical disturbances or solar radiation. Analyses data collected from weather stations, prepares detailed weather maps and forecasts for aviation, shipping, agriculture and other areas for information to the general public.

Examples of occupational titles classified here are:-

- Climatologist
- Forecaster, weather
- Meteorologist

### **MINOR GROUP 212: CHEMISTS**

Chemists conduct research, improve and/or develop concepts, theories and/or operational methods or apply scientific knowledge relating to chemistry, mainly to test, develop and improve materials, and industrial products and processes.

#### **212-10 Chemist**

Conducts chemical experiments to determine composition, properties and interactions of substances and their reactions to changes in heat, light, pressure and other physical factors. Performs chemical tests, and analyses for process and quality control.

Examples of occupational titles classified here are:

- Analyst, chemical
- Chemist, food
- Chemist, pharmaceutical
- Chemist, physical
- Chemist, textile

## **SUB-MAJOR GROUP 22: MATHEMATICIANS, STATISTICIANS AND COMPUTING PROFESSIONALS**

Mathematicians, statisticians and computing professionals conduct research, improve and/or develop mathematical and statistical, computer-based information systems, software and related concepts, theories and operational methods and techniques; maintain management systems and or databases to ensure integrity and security of data, and apply their skills to a wide range of tasks.

The tasks usually include: conducting research in fundamental mathematics and advising on or applying mathematical, actuarial and statistical principles and techniques and also conducting research into the theoretical aspects of operational methods for use in computing.

Occupations in this sub-major group are classified into three minor groups, namely:-

### **221 Mathematicians and Related Professionals**

#### **222 Statisticians**

#### **223 Computing Professionals**

## **MINOR GROUP 221: MATHEMATICIANS AND RELATED PROFESSIONALS**

Mathematicians and related professionals conduct research, improve and/or develop mathematical concepts, theories and operational methods and techniques, and apply this knowledge and skills acquired to a wide range of tasks in various fields.

### **221-11 Mathematician**

Conducts research to advance mathematical knowledge and/or develop and improve mathematical techniques; studies fundamental theories of algebra, geometry, number theory, logic and other branches of mathematics and tests hypotheses and alternative mathematical theories with a view to increasing knowledge including its application.

Examples of occupational titles classified here are:-

- Mathematician (Applied mathematics)
- Mathematician (Pure mathematics)

### **221-12 Actuary**

Applies knowledge of mathematics, statistics and financial affairs to design the operation of pension schemes and the life, health, social and casualty insurance systems; analyses relevant statistics and other related data; applies statistical and mathematical principles to construct probability tables for contingencies such as mortality, fire, accident, sickness, disability, unemployment and retirement.

Example of occupational title classified here is:-

- Actuary

### **221-13 Operations Research Analyst**

Conducts logical analysis of management problems, especially in terms of input-output effectiveness and formulates mathematical models of each problem usually for programming and solution by computer.

Example of occupational title classified here is:-

- Analyst, operations research

### **221-14 Mathematical Statistician**

Conducts research into mathematical basis of science of statistics; develops new and improved statistical methodology and advises on practical applications of statistical methods and techniques; studies theories of probability, inference, variance and other mathematical theories and proofs to discover mathematical bases for new and improved methods of obtaining and evaluating numerical data.

Example of occupational title classified here is:-

- Mathematical, statistician

## **MINOR GROUP 222: STATISTICIANS**

Statisticians conduct research to improve and/or develop mathematical and other aspects of statistical concepts, theories and operational methods and techniques; studies theories of probability, inference, variance and other mathematical theories and proofs to discover mathematical bases for new and improved methods of obtaining and evaluating numerical data.

### **222-11 Statistician**

Designs and/or develops methods of obtaining statistical data by extraction from existing records, specific enquiry, survey or experiment. Determines the nature and extent of surveys and plans, organizes and designs questionnaires; statistical compilations, statistical tools and processing systems, and uses these to produce statistical information and analyses. Conducts research into phenomena of statistics, develops statistical methodology and advises on its practical application.

Examples of occupational titles classified here are:-

- Biometrician
- Biostatistician
- Statistician, applied
- Statistician, economic

### **222-12 Demographer**

Studies human population dynamics; improves and develops statistical theories and methodologies; plans and organizes surveys and other statistical collections; designs relevant questionnaires; evaluates, processes, analyses and interprets statistical data on population censuses and other variables such as births, deaths and diseases.

Example of occupational title classified here is:-

- Demographer

## **MINOR GROUP 223: COMPUTING PROFESSIONALS**

Computing professionals conduct research, plan, develop and improve computer-based informations systems, software and related concepts; develop principles and operational methods; maintain data dictionaries and management systems of databases to ensure integrity and security of data.

### **223-11 Systems Analyst**

Analyses data-processing needs and problems of clients; advises on feasibility of automatic data-processing and develops appropriate systems and procedures; consults with clients or management to ascertain specific output requirements from data-processing.

Examples of occupational titles classified here are:-

- Analyst, communications

- Analyst, database
- Analyst, systems
- Analyst, telecommunications
- Designer, systems

**223-12 Computer Programmer**

Prepares programmes to control automatic processing of data by computer; studies programme input, output requirement, nature and sources of raw input data, internal checks and other controls required, or where available, uses specifications and instructions prepared by system analyst.

Examples of occupational titles classified here are:-

- Controller, systems
- Programmer, communications
- Programmer, computer

**223-13 Database Administrator**

Controls computer database by maintaining data dictionaries and data management systems, and ensuring the integrity and security of data.

Example of occupational title classified here is:-

- Administrator, database

**223-14 Computer Scientist**

Conducts research into computers and the development of the software and hardware; computer-based systems and develops techniques for their effective application and use. Conducts maintenance and repairs of computers.

Example of occupational title classified here is:-

- Scientist, computer

**MINOR GROUP 223: COMPUTING PROFESSIONALS**

Computing professionals conduct research, plan, develop and improve computer-based information systems, software and related concepts; develop principles and operational methods; maintain data dictionaries and management systems of databases to ensure integrity and security of data.

**223-11 Systems Analyst**

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Examples of occupational titles classified here are:-

- Analyst, communications
- Analyst, database
- Analyst, systems
- Analyst, telecommunications
- Designer, systems

### **223-12 Computer Programmer**

Prepares programmes to control automatic processing of data by computer; studies programme input, output requirement, nature and sources of raw input data, internal checks and other controls required, or where available, uses specifications and instructions prepared by system analyst.

Examples of occupational titles classified here are:-

- Controller, systems
- Programmer, communications
- Programmer, computer

### **223-13 Database Administrator**

Controls computer database by maintaining data dictionaries and data management systems, and ensuring the integrity and security of data.

Example of occupational title classified here is:-

- Administrator, database

### **223-14 Computer Scientist**

Conducts research into computers and the development of the software and hardware; computer-based systems and develops techniques for their effective application and use. Conducts maintenance and repairs of computers.

Example of occupational title classified here is:-

- Scientist, computer

### **223-15 Web and multimedia developers**

Web and multimedia developers combine design and technical knowledge to research, analyze, evaluate, design programme and modify websites, and applications that draw together text, graphics, animations, imaging, audio and video displays, and other interactive media.

Examples of occupation classified here:

- Animator programmer
- Computer games programmer
- Internet developer
- Multimedia programmer
- Website architect
- Website developer

### **223-16 Application programmers**

Application programmers write and maintain programmable code outlined in technical

Instructions and specifications for software applications and operating systems.

Examples of occupations classified here:

- Applications programmer

### **223-17 Information and communications technology service managers**

Information and communications technology service managers plan, direct, and coordinate the acquisition, development, maintenance and use of computer and telecommunication systems.

Examples of the occupations classified here:

- Application development manager
- Chief information officer
- Data operations manager
- Data processing manager
- ICT development manager
- Information systems director
- Information technology manager (IT Manager)
- Internet service provider
- Network manager

### **223-18 Information and communication technology sales professionals**

Information and communications (ICT) professionals sell, at wholesale level, a range of computer hardware, software and other information and communication technology goods and services including installations and provide specialized information as required.

Examples of occupation titles here:

- Information technology sales persons

### **223-19 Software and applications developers and analysts not elsewhere Classified (nec)**

This unit group covers software and applications developers and analysts nec in minor group 223 Computing professional.

### **MINOR GROUP 224: DATA BASE AND NETWORK PROFESSIONALS**

Data base and network professionals design, develop, control, maintain and support the optimal performance and security of information technology systems and infrastructure, including data bases, hardware and software, networks and operating systems.

#### **224-11: Database designers and administrators**

Database designers and administrators design, develop, control, maintain and support the optimal performance and security of databases.

Examples of the occupations classified here:

- Data administrator
- Database administrator
- Database analyst
- Database architect

#### **224-12 Systems administrators**

Systems administrators develop, control, maintain and support the optimal

performance and security of  
information technology systems

Examples of the occupations classified here:

- Systems administrator
- Network administrator

### **224-13 Computer network professionals**

Computer network professionals research, analyze and recommend strategies for network architecture and development, implement, manage, maintain and configure network hardware and software, and monitor,

troubleshoot and optimise performance.

Examples of occupations classified here:

- Communications analyst (computers)
- Network analyst

### **224-19 Database and network professionals not elsewhere classified**

This unit group covers database and network professionals not elsewhere in Minor group 242, Database and network professionals. For instance, the group includes information and communications technology security specialists.

Examples of the occupations classified here:

- Digital forensic specialist
- Security specialist (ICT)

## **SUB-MAJOR GROUP 23: ENGINEERING SCIENCE PROFESSIONALS**

Engineering science professionals conduct research, improve and/or develop concepts, theories and operational methods; apply practical specialised scientific and technical expertise to the knowledge relating to operation and development of production systems and the design, construction, installation and maintenance of civil and industrial structures, plant and mechanical or electrical equipment.

The tasks usually include: advising on, designing and direct construction of buildings, towns and traffic systems; civil engineering and industrial structures, as well as machines and other equipment; ensuring their optimum use; preparing and analysing plans, maps or designs of buildings and landscapes; studying and advising on technological aspects of particular materials, products and processes, and on efficiency of production and work organization; preparing scientific papers and reports.

Occupations in this sub-major group are classified into eight minor groups, namely:-

**231 Architects and Town Planners**

**232 Surveyors and Cartographers**

**233 Civil Engineers**

**234 Mechanical Engineers**

**235 Chemical Engineers and Technologists**

**236 Mining Engineers, Metallurgists and Related Technologists**

**237 Electrical, Electronics and Telecommunications Engineers**

**238 Production Engineers and Production Related Engineers**

## **MINOR GROUP 231: ARCHITECTS AND TOWN PLANNERS**

Architects and town planners conduct research and advise on and design residential, commercial and industrial buildings, layout of towns, landscapes, drainage and traffic systems; plan and monitor their construction, maintenance and rehabilitation.

Registration with professional body may be required.

### **231-11 Architect**

Designs buildings, dams, bridges and related structures and exercises general supervision over their construction; consults with clients to ascertain type and style of building required and advises on costs, design, materials, building time and other relevant considerations.

Example of occupational title classified here is:-

- Architect

### **231-12 Quantity Surveyor**

Prepares and monitors cost estimates and bills of quantities for architectural and construction projects.

Example of occupational title classified here is:-

- Surveyor, quantity

### **231-13 Town Planner**

Plans layout and co-ordinates development of urban areas; plans and designs the development of land areas for parks, schools, institutions, airports, roadways and related projects, and for commercial, industrial and residential sites. Arranges and supervises collection of data on economic, social, physical and other factors relative to development of urban/town areas; analyses data to ascertain nature, extent and rate of the area's growth and development.

Examples of occupational titles classified here are:-

- Planner, town
- Planner, urban

### **231-14 Traffic Planner**

Plans and advises on routing and control of road and other traffic for efficiency and safety. Maintains technical liaison and consultancy with other relevant specialists.

Example of occupational title classified here is:-

- Planner, traffic

### **231-15 Building Inspector**

Inspects building work to ensure compliance with plans, specifications and regulations and that proper techniques and materials are used. Maintains records of building progress and of departures from design drawings or specifications. Assesses building plans submitted for approval. Inspects existing buildings and structures to determine whether lack of proper maintenance, housing violations or hazardous conditions exist.

Example of occupational title classified here is:-

- Inspector, building

## **MINOR GROUP 232: SURVEYORS AND CARTOGRAPHERS**

Surveyors and cartographers apply surveying methods and techniques to determine the exact position of natural and constructed features and boundaries of land, seas, underground areas and celestial bodies, and prepare or revise digital, graphic and pictorial representations.

Registration with professional body may be required.

### **232-11 Surveyor**

Studies available maps, plans, deeds, rates and other records; calculates survey requirements and plans surveys accordingly; conducts surveys to determine exact locations and measurement of points.

Example of occupational title classified here is:-

- Surveyor, general

### **232-12 Land Surveyor**

Surveys, measures, delineates and describes land surfaces for various purposes, including map making, construction work or/and establishment of property boundaries.

Example of occupational title classified here is:-

- Surveyor, land

### **232-13 Photogrammetrist**

Carries out photographic surveys and analyses aerial and other photographs, remote sensing including geographic information systems and surveying data to prepare and revise topographic maps and charts, utility and other thematic maps.

Example of occupational title classified here is:-

- Photogrammetrist

### **232-14 Hydrographic Surveyor**

Surveys sea, river and lake beds, delineating underwater surfaces, noting exact position of various features and making charts and maps to be used particularly in determining navigable waters and channels and in planning construction of marine structures.

Example of occupational title classified here is:-

- Surveyor, hydrographic

### **232-15 Cartographer**

Develops design concepts of maps and draws representative models of physical and other features. Defines production specifications such as projection, scale, size and colours. Provides guidelines for source material to be used, such as maps, automated mapping products, photographs, survey data and place names.

Example of occupational title classified here is:-

- Cartographer

## **MINOR GROUP 233: CIVIL ENGINEERS**

Civil engineers conduct research and advise on, design, and direct construction, and manage the operation and maintenance of civil engineering structures, or study and/or advise on technological aspects of particular materials.

Registration with professional body may be required.

**233-11 Civil Engineer**

Carries out research, designs, advises and supervises on structures such as bridges, dams, docks, roads, airports, railways, waste disposal and flood control systems and industrial and other large structures; and plans, organizes and supervises construction, maintenance and repairs of structures.

Example of occupational title classified here is:-

- Engineer, civil/general

**233-12 Structural Engineer**

Determines and specifies construction methods, materials and quality standards and directs construction work. Establishes control systems to ensure strength of materials, efficient functioning of structures as well as safety and environmental protection. Locates and corrects malfunctions which may occur, organizes and directs the repairs of existing structures.

Examples of occupational titles classified here are:-

- Engineer, construction
- Engineer, structural

**233-13 Highway, Road and Street Construction Engineer**

Advises on, supervises and designs the construction of highways, roads and pavements. Organizes and directs their maintenance and repair.

Examples of occupational titles classified here are:-

- Engineer, highways
- Engineer, pavement
- Engineer, roads

**233-14 Railway Construction Engineer**

Advises on, designs and supervises the construction of railways. Organizes and directs their maintenance and repairs.

Example of occupational title classified here is:-

- Engineer, railway construction

**233-15 Bridge Construction Engineer**

Advises on, designs and supervises the construction of various types of bridges. Organizes and directs their maintenance and repairs.

Example of occupational title classified here is:-

- Engineer, bridge construction

**233-16 Sanitary Engineer**

Advises on, designs and supervises the construction of various types of sanitary and waste-disposal systems as well as ensuring safety and environmental protection. Organizes and directs their maintenance and repairs.

Examples of occupational titles classified here are:-

- Engineer, sanitary

- Engineer, waste water treatment

**233-17 Hydraulic Engineer**

Advises on, designs and supervises the construction of various types of dams, docks, canals and pipelines. Organizes and directs their maintenance and repairs.

Examples of occupational titles classified here are:-

- Engineer, dams
- Engineer, hydraulic
- Engineer, pipeline
- Engineer, waterways

**233-18 Soil Mechanics Engineer**

Examines soils and ascertains their effect on construction work and suitability as building materials: Takes samples on surface and subsurface soils for analysis; calculates and advises on foundations and bearing capacities required for construction projects, required slopes of cuttings and thickness of soil dams and retaining walls, and other applications of soil mechanics to construction work; prepares specifications of soil mixtures to be used for roads, embankments and other constructions.

Example of occupational title classified here is:-

- Engineer, soil mechanics

**MINOR GROUP 234: MECHANICAL ENGINEERS**

Mechanical engineers conduct research, design, and supervise production and installation of machines, machinery and industrial plants, equipment and systems; develop guidelines on their functioning, maintenance and repairs, as well as study and advise on technological aspects of particular materials, products or processes.

Registration with professional body may be required.

**234-11 Mechanical Engineer**

Carries out research and designs and advises on mechanical functioning of plant and machinery, and plans and supervises their development, manufacture, construction, installation, operation, maintenance and repairs.

Example of occupational title classified here is:-

- Engineer, mechanical

**234-12 Mechanical Engineer (Motors & Engines)**

Designs, directs and supervises maintenance and repair of existing machines, machinery, tools, motors, engines, industrial plant, equipment or systems.

Examples of occupational titles classified here are:-

- Engineer, mechanical/motors
- Engineer, mechanical/engines

**234-13 Agricultural Engineer**

Specifies, designs and checks production or installation and operation of agricultural and other machines, machinery, tools, motors, engines, industrial plant, equipment and/or systems. Organizes and directs their maintenance and repairs.

Examples of occupational titles classified here are:-

- Engineer, agricultural machinery
- Engineer, drainage and irrigation

**234-14 Heating, Ventilation and Refrigeration Engineer.**

Studies, designs and advises on heating, ventilation and refrigeration systems and equipment, and plans and supervises their development, manufacture, installation, maintenance and repairs.

Examples of occupational titles classified here are:-

- Engineer, heating, ventilation and refrigeration
- Engineer, refrigeration

**234-15 Marine Engineer**

Designs ships' propulsion systems, power plant, heating and ventilation systems, steering gear, pumps and other mechanical equipment. Organizes and supervises their assembling, maintenance and repairs.

Example of occupational title classified here is:-

- Engineer, marine

**234-16 Ship Construction Engineer**

Designs, advises on and supervises the construction of hulls and superstructures of ships and other vessels.

Example of occupational title classified here is:-

- Engineer, ship construction

**234-17 Automotive Engineer**

Advises on and designs road vehicle bodies, engines, suspension systems, brakes and other components. Assembles and provides maintenance plans.

Example of occupational title classified here is:-

- Engineer, automotive

**234-18 Industrial Machinery & Tools Engineer**

Designs industrial machinery and tools and establishes control standards and procedures to ensure efficient functioning and safety of machines, machinery, tools, motors, engines, industrial plant, equipment or systems. Diagnoses and corrects malfunctions.

Examples of occupational titles classified here are:-

- Engineer, machinery /industrial
- Engineer, machinery and tools/industrial

**MINOR GROUP 235: CHEMICAL ENGINEERS AND TECHNOLOGISTS**

Chemical engineers and technologists conduct research and develop, advise on and direct commercial-scale chemical processes and production of various substances and items such as crude oil, petroleum derivatives, food and drink products, medicaments, or synthetic materials, and undertake maintenance and repair of industrial plants; study and advise on technological aspects of particular materials, products and processes; develop quality assurance standards as well as safety regulations in the production process.

**235-11 Chemical Engineer (General)**

Carries out research on chemical engineering problems and develops and advise on processes for producing on a commercial scale, chemical or physical transformation of substances, as in the manufacture of chemicals, petroleum derivatives, metals, food products and synthetic materials as well as developing safety and quality standards.

Example of occupational title classified here is:-

- Engineer, chemical/general

**235-12 Chemical Engineer (Petroleum)**

Conducts research and advises on, and develops commercial scale chemical processes to refine crude oil and fuel liquids and gases to produce substances and items such as petroleum derivatives, explosives, medicaments or synthetic materials and; ensures safety regulations in the process as well as safety standards.

Example of occupational title classified here is:-

- Engineer, chemical/petroleum

**235-13 Food and Drink Technologist**

Conducts research and advises on, and develops commercial-scale chemical processes to refine food and drink products; sets health, quality and safety regulations and safety standards.

Examples of occupational titles classified here are:-

- Technologist, food
- Technologist, food and drink

**235-14 Laboratory Technologist**

Establishes, tests and analyses samples against known control standards and procedures to ensure accurate, safe and efficient data interpretation and utilization. Studies, tests and advises on technological aspects of particular materials, products or processes.

Examples of occupational titles classified here are:-

- Analyst, industrial production
- Technologist, laboratory

**MINOR GROUP 236: MINING ENGINEERS, METALLURGISTS AND RELATED TECHNOLOGISTS**

Mining engineers, metallurgists and related technologists design, research, develop and maintain commercial-scale methods of extracting metals from their ores, or minerals, water, oil or gas from the earth; advises on development of new alloys, ceramic and other materials.

**236-11 Mining Engineer**

Carries out research on mining; advises on the extraction of metallic, and solid non-metallic minerals from the earth or sea beds; supervises mineral prospecting and plans, organizes and supervises mining operations and carries out analyses on ores and preparations ready for use.

Example of occupational title classified here is:-

- Engineer, mining

**236-12 Ceramics Technologist**

Studies, designs and advises technological aspects of particular manufacturing processes

related to ceramics.

Example of occupational title classified here is:-

- Technologist, ceramics

### **236-13 Glass Technologist**

Researches, analyses, designs and supervises production of manufacturing processes related to glass.

Examples of occupational titles classified here are:-

- Technologist, glass
- Technologist, glazing

### **236-14 Metallurgist**

Designs, develops, and controls the application of processes for extraction of metals from their ores. Sets up and carries out experiments, tests and analyses.

Example of occupational title classified here is:-

- Metallurgist

### **236-15 Drilling Engineer**

Determines drilling sites and devises methods of controlling any intervening objects from wells; plans and directs initial treatment, storage and transportation. Oversees the operations of drilling to ensure optimum yield of the end product.

Examples of occupational titles classified here are:-

- Engineer, bore-hole
- Engineer, drilling

### **236-16 Materials Engineer**

Evaluates technical requirement and material specifications to develop materials that can be used for example to reduce the weight, but not the strength of an object; tests, evaluates and develops new materials.

Example of occupational title classified here is:-

- Engineer, materials

## **MINOR GROUP 237: ELECTRICAL, ELECTRONICS AND TELECOMMUNICATIONS ENGINEERS**

Electrical, electronics and telecommunications engineers conduct research and advise on, design and direct construction of appropriate equipment, and advise on and direct their functioning, maintenance and repairs, or study and advise on technological aspects of relevant materials, products and/or processes.

### **237-11 Electrical Engineer**

Carries out research on electrical engineering problems; designs and advises on electrical systems and equipment and plans and supervises their development, construction, installation, operation, maintenance and repairs.

Example of occupational title classified here is:-

- Engineer, electrical

**237-12 Electronics Engineer**

Carries out research, design and advises on electronics engineering problems; designs and advises on electronic devices and equipment and plans and supervises their production, development and repairs.

Example of occupational title classified here is:-

- Engineer, electronic

**237-13 Telecommunications Engineer**

Designs telecommunications equipment; supervises production and installation methods, materials, quality standards; directs installation work of telecommunications equipment and systems.

Examples of occupational titles classified here are:-

- Engineer, electronic
- Engineer, telecommunications
- Technologist, telecommunications

**237-14 Computer Systems Engineer (Software Engineer)**

Designs and modifies operating software systems.

Examples of occupational titles classified here are:-

- Designer, computer systems/software
- Engineer, computer systems
- Engineer, software

**237-15 Computer Systems Engineer (Hardware Engineer)**

Designs and modifies the operating hardware systems.

Examples of occupational titles classified here are:

- Designer, computer systems/hardware
- Engineer, computer systems
- Engineer, hardware

**237-16 Power Generating and Control Engineer**

Advises on and designs systems for electrical motors, electrical traction, electrical domestic appliances and other equipment; devices and installs control standards and procedures to ensure efficient functioning and safety of electrical generating systems, motors and equipment; controls power generation, transmission, output and distribution.

Examples of occupational titles classified here are:-

- Engineer, power control
- Engineer, power generating

**237-17 Power Distribution and Transmission Engineer**

Designs and devises systems for electric power transmission and distribution. Specifies necessary electrical installation and application in industrial and other installations.

Examples of occupational titles classified here are:-

- Engineer, power distribution
- Engineer, power distribution and transmission
- Engineer, power transmission

**237-18 Nuclear Engineer**

Conducts research on nuclear energy and radiation; designs, develops, monitors and operates nuclear power plants used to generate electricity and power navy ships; works on nuclear fuel cycle production, handling and use of nuclear fuel and the safe disposal of waste produced by nuclear energy or fusion energy; may specialize in the development of nuclear weapons, development of industrial and medical uses for radioactive materials such as equipment to diagnose and treat medical problems.

Example of occupational title classified here is:-

- Engineer, nuclear

**237-21 Other Engineers Not Elsewhere Classified**

Included here are engineers who conduct research and advise on engineering problems of service lines.

Examples of occupational title classified here is:

- Engineer, service lines

**MINOR GROUP 238: PRODUCTION AND RELATED ENGINEERS**

Production and related engineers conduct research and design construction of production systems and processes; and advise on their functioning, maintenance and repairs; study, supervise and guide on technological aspects of particular materials, products or processes.

**238-11 Production Engineer**

Consults with the management and supervisory personnel and advises on design and planning; supervises production system methods. Advises on methods to promote the efficient, safe and economic utilization of resources.

Examples of occupational titles classified here are:-

- Engineer, industrial efficiency
- Engineer, production

**238-12 Textile/Leather Technologist**

Studies and advises on technological aspects of particular manufacturing processes related to textiles and leather.

Examples of occupational titles classified here are:-

- Technologist, leather
- Technologist, textile

**238-13 Maintenance Engineer**

Advises on efficient layout of plants or establishments. Identifies potential hazards and introduces safety procedures and devices. Monitors, maintains and services physical plant and equipment.

Examples of occupational titles classified here are:-

- Engineer, maintenance
- Engineer, service

#### **SUB-MAJOR GROUP 24: HEALTH AND LIFE SCIENCE PROFESSIONALS**

Health and life science professionals conduct research, improve or develop concepts, theories and operational methods, and/or apply scientific knowledge relating to fields such as medicine, biology, botany, zoology, ecology, pharmacology, biochemistry and agronomy.

The tasks usually include: studying human, animal or plant illnesses, advising on and applying preventive, curative and nursing measures, or promoting health; conducting research, enlarging, advising on or applying scientific knowledge obtained through the study of all forms of human, animal and plant life, including specific organs, tissues, cells and micro-organisms and the effect of environmental factors, or drugs and other substances, on them; preparing scientific papers and reports.

Occupations in this sub-major group are classified into four minor groups, namely:-

- 241 Health Professionals**
- 242 Nursing and Mid-wifery Professionals**
- 243 Life Science Professionals**
- 244 Agriculturalists and Related Professionals**

#### **MINOR GROUP 241: HEALTH PROFESSIONALS**

Health professionals conduct research, improve and/or develop concepts, theories and operational methods; and apply scientific knowledge relating to medicine, dentistry, veterinary medicine, pharmacy and promotion of good health.

Registration with professional body may be required.

##### **241-11 Medical Doctor**

Conducts medical examinations, makes diagnosis, prescribes medicine, and gives other forms of treatment for various kinds of diseases, disorders and injuries of the human body; applies preventive medicine techniques to prevent diseases and promote good health.

Examples of occupational titles classified here are:-

- Cardiologist
- Dermatologist
- Gynaecologist
- Obstetrician
- Ophthalmologist
- Pediatrician
- Physician
- Psychiatrist
- Radiologist
- Surgeon

##### **241-12 Medical Research Officer**

Conducts research and compiles scientific knowledge through the study of human disorders and illnesses and ways of treating them. Prepares scientific papers, reports and makes recommendations for the improvement of human health.

Examples of occupational titles classified here are:-

- Researcher, medicine
- Research officer, medicine

**241-13 Dentist**

Performs diagnostic, preventive, and curative services for dental or oral diseases and disorders.

Examples of occupational titles classified here are:-

- Dentist
- Paedodontist
- Surgeon, oral/dental

**241-14 Veterinarian**

Diagnoses and gives and/or prescribes medical and surgical treatment of diseases, injuries or other medical conditions of animals and deals with their other aspects of health.

Example of occupational title classified here is:-

- Veterinarian

**241-15 Veterinary Research Officer**

Conducts research and compiles scientific knowledge through the study of animal disorders and illnesses and ways of treating them and makes necessary recommendations.

Examples of occupational titles classified here are:-

- Researcher, veterinary
- Research officer, veterinary

**241-16 Pharmacist**

Applies pharmaceutical concepts and theories by preparing and dispensing medicaments and related preparations according to prescriptions or formulae. Prepares or supervises preparation of medicaments according to doctor's prescriptions, dispensing or selling medicaments and drugs.

Example of occupational title classified here is:-

- Pharmacist

**MINOR GROUP 242: NURSING AND MID-WIFERY PROFESSIONALS**

Nursing and midwifery professionals apply medical concepts and principles relating to the delivery of babies and nursing of the sick, injured or disabled, and of mothers and their newborn babies.

Registration with professional body may be required.

**242-11 Hospital Matron**

Supervises and co-ordinates nursing and other related staff in hospitals and/or other medical institutions; assists medical specialists in carrying out their duties.

Examples of occupational titles classified here are:-

- Matron, hospital
- Supervisor, nursing

**242-12 Nurse**

Assists medical doctors in their tasks; deals with emergencies; and provides professional nursing care for the sick, injured, physically and mentally disabled and others in need of medical care.

Examples of Occupational titles classified here are:-

- Nurse, pediatric
- Nurse, professional
- Nurse, psychiatric

**242-14 Public Health Nurse**

Gives professional nursing services, care and advice in the community and patients in their own homes.

Example of occupational title classified here is:-

- Nurse, public health

**242-15 Occupational Health Nurse**

Specializes in consultancy services; provides guidance and advises on health standards at the workplace, school, industry and other organizations.

Example of occupational title classified here is:-

- Nurse, occupational health

**242-16 Midwife**

Checks on general health and progress of expectant mothers during pregnancy, and gives them professional advice and care. Delivers babies in normal births and assists doctors with difficult deliveries.

Example of occupational title classified here is:-

- Midwife, professional

**242-99 Other Nurses**

This group of nurses includes those who participate in providing nursing care to various groups of patients such as physically and mentally ill patients; provides care to individuals in need of rehabilitation services and social adjustment.

**MINOR GROUP 243: LIFE SCIENCE PROFESSIONALS**

Life science professionals conduct research, improve and/or develop concepts, theories and operational methods; apply scientific knowledge relating to their areas of specialization.

**243-11 Biologist**

Conducts research in all forms of life to increase scientific knowledge and develops practical applications in their areas of specialization.

Examples of occupational titles classified here are:-

- Biologist
- Naturalist
- Taxonomist

**243-12 Botanist**

Conducts research with the aim of improving or developing concepts, theories, and operational methods in the field of botany. Studies all forms of plant life and develops practical applications of the knowledge acquired in such areas as industry, agriculture and medicine.

Example of occupational title classified here is:-

- Botanist

**243-13 Zoologist**

Conducts research and improves on or develops concepts, theories and operational methods in the field of zoology. Studies all forms of animal life and develops practical applications of the knowledge acquired in areas as industry, agriculture and medicine.

Example of occupational title classified here is:-

- Zoologist

**243-14 Ecologist**

Studies inter-relationships of animal and plant life and the environmental factors involved, and gives professional advice to related disciplines.

Example of occupational title classified here is:-

- Ecologist

**243-15 Entomologist**

Studies all aspects of insect life and conducts research to develop practical applications of the knowledge acquired in fields such as agriculture, forestry and medicine.

Example of occupational title classified here is:-

- Entomologist

**243-16 Research Officer (Biology)**

Conducts research and carries out field and laboratory experiments concerning aspects of life forms. Prepares scientific papers and reports.

Examples of occupational titles classified here are:-

- Researcher, biology
- Research officer, biology

**243-17 Micro-Bacteriologist**

Studies and conducts experiments concerning the structure, development processes and characteristics of micro-organisms such as bacteria or viruses; and provides scientific advice on their economic importance.

Examples of occupational titles classified here are:-

- Bacteriologist
- Micro-biologist
- Virologist

**243-18 Pharmacologist**

Studies and conducts experiments concerning the effects of drugs and other substances on the tissues, organs and physiological processes of human beings and animals.

Improves on existing knowledge and develops new drugs; and provides scientific advice.

Example of occupational title classified here is:-

- Pharmacologist

**243-21 Anatomist**

Studies and conducts experiments concerning the form, structure and other anatomical characteristics of living organisms.

Example of occupational title classified here is:-

- Anatomist

**243-22 Biochemist**

Studies and conducts experiments concerning the chemical composition of living organisms for application in scientific areas such as medicine, food industry and agriculture.

Example of occupational title classified here is:-

- Biochemist

**243-23 Physiologist**

Studies and conducts experiments concerning the life processes and functions of human, animal, insect or plant organs, tissues, cells, glands and systems under normal and abnormal or exceptional conditions for application in such areas as human and veterinary medicine.

Example of occupational title classified here is:-

- Physiologist

**243-24 Medical Pathologist**

Studies and conducts experiments concerning the nature, causes and development of human diseases and disorders; conducts postmortems.

Example of occupational title classified here is:-

- Pathologist, medical

**243-25 Veterinary Pathologist**

Studies and conducts experiments concerning the nature, causes and development of animal diseases and disorders; conducts postmortems.

Example of occupational title classified here is:-

- Pathologist, veterinary

**243-26 Animal Scientist**

Conducts research into and advises on animal husbandry, animal production and develops new or improved animal breeding and production methods.

Example of occupational title classified here is:-

- Scientist, animal

## **MINOR GROUP 244: AGRICULTURALISTS AND RELATED PROFESSIONALS**

Agriculturalists and related professionals conduct research and improve or develop concepts, theories and operational methods; apply scientific knowledge relating to crop husbandry.

### **244-11            Agriculturalist**

Conducts research into field crops and develops new and improved production methods; performs experiments to improve crop yield, adaptability to geo-climatic conditions, resistance to diseases and insect pests, yields, quality of harvest and other characteristics of field crops.

Example of occupational title classified here is:-

- Agriculturalist

### **244-12            Horticulturist**

Researches on and grows horticultural crops namely; vegetables, flowers and ornamentals; develops new or improved cultivation methods of these crops.

Example of occupational title classified here is:-

- Horticulturist

### **244-13            Forestry Scientist**

Researches on, develops and improves methods for tree propagation, culture or planting; plans and supervises afforestation programmes and exploitation of forests.

Examples of occupational titles classified here are:-

- Conservator, forest
- Forester
- Scientist, forestry

### **244-14            Soil Scientist**

Researches on characteristics, uses, capability and productivity of soils and applies findings to the development of improved agricultural, horticultural and forestry practices.

Example of occupational title classified here is:-

- Scientist, soil

## **SUB-MAJOR GROUP 25: TEACHING PROFESSIONALS**

Teaching professionals teach the theory and practice of various disciplines at different educational levels; conduct research, improve or develop concepts, theories and operational methods pertaining to their disciplines and prepare scholarly papers and books.

The tasks usually include: conducting classes, courses or tutorials at specific educational levels, for educational or vocational purposes, including private lessons; designing and modifying curricula; inspecting and advising on teaching methods and teaching aids; participating in decisions on the organisation of teaching and related activities at schools and universities; conducting research to improve or develop concepts, theories or operational methods.

Occupations in this sub-major group are classified into five minor groups, namely:-

### **251    University and Post-secondary Teachers/ Lecturers**

- 252 Secondary and Technical Institute Teachers and Instructors**
- 253 Special Education Teaching Professionals**
- 254 Education Methods Advisers and Assessors**
- 259 Other Teaching Professionals**

**MINOR GROUP 251: UNIVERSITY AND POST-SECONDARY TEACHERS/LECTUTERS**

University and post-secondary teachers/lecturers teach/lecture their subjects at different levels after termination of secondary education; conduct research and improve or develop concepts, theories and operational methods pertaining to their particular discipline and prepare scholarly papers and books.

**251-10 University and College Lecturer**

Lectures students, conducts tutorials, stimulates and guides discussions on selected topics in their fields of specialisation; carries out research and studies based on documentary evidence and other sources to keep abreast with current development in a particular branch of learning. Prepares assignments, examinations or other course work to assess students. Participates in the setting of course requirements, curriculum revision and academic planning. May provide professional consultancy services to clients.

Examples of occupational titles classified here are:-

- Associate professor
- Lecturer, university
- Professor, university
- Tutor, college

**MINOR GROUP 252: SECONDARY AND TECHNICAL INSTITUTE TEACHERS AND INSTRUCTORS**

Secondary and technical institute teachers/instructors teach and/or give instruction on one or more subjects, for educational or vocational purposes, at secondary and tertiary levels.

**252-11 High School Teacher**

Teaches one or more subjects, for educational purposes, at secondary school levels; designs and modifies curricula and prepares educational courses of study in accordance with the requirements.

Examples of occupational titles classified here are:-

- Head teacher, secondary school
- Principal, high school
- Teacher, high school
- Teacher, secondary school

**252-12 Technical College Instructor**

Teaches one or more subjects, for vocational purposes, at the appropriate level or part; designs and modifies curricula and prepares vocational courses of study in accordance with the requirements; gives vocational training to apprentices and other trainees.

Examples of occupational titles classified here are:-

- Instructor, polytechnic
- Instructor, technical college

## **MINOR GROUP 253: SPECIAL EDUCATION TEACHING PROFESSIONALS**

Special education teaching professionals teach physically or mentally handicapped children, young persons or adults, or those with learning difficulties, at a given level of education. This group of professionals may combine two or more skills in handling disabilities.

### **253-11 Teacher of the Blind**

Teaches pupils and students diagnosed as blind or severely visually impaired, using teaching aids such as braille writers, typewriters and optacons, and assists with the enhancement of the other senses.

Examples of occupational titles classified here are:-

- Teacher, braille
- Teacher of the blind

### **253-12 Teacher of the Deaf**

Teaches pupils and students diagnosed as deaf or hearing-impaired, usually in integrated settings in regular classrooms or in special language classes; assists with the integration of hearing impaired students into regular classrooms.

Example of occupational title classified here is:-

- Teacher of the deaf

### **253-13 Teacher of the Mentally Handicapped**

Teaches children and adults with development disabilities (intellectual or behavioural), in basic skills including independent living and awareness, self-help and language skills, as well as academic skills in special classes in regular schools or in special schools; assesses children diagnostically and designs curriculum programmes while working with parents in a variety of training programmes.

Example of occupational title classified here is:-

- Teacher of the mentally handicapped

### **253-14 Teacher of the Physically Handicapped**

Specializes in teaching those with physical impairment so as to integrate them in normal school life and subsequently in social life.

Example of occupational title classified here is:-

- Teacher of the physically handicapped

### **253-15 Special Education Teacher**

Specializes in providing different types of special education disciplines and aims at rehabilitating the learners towards normal learning processes such as colour blindness and left handedness.

Example of occupational title classified here is:-

- Special education teacher

## **MINOR GROUP 254: EDUCATION METHODS ADVISERS AND ASSESSORS**

Education methods advisers and assessors conduct research and develop or advise on teaching methods and aids.

### **254-11 Education Methods Adviser**

Conducts educational research into current developments in curricula, teaching methods and other educational practices, and advises on necessary changes and possible improvements on contents of courses and methods of examination.

Examples of the occupational titles classified here are:

- Advisor, education methods
- Developer, curricula
- Educator, field

**254-12 Audio-visual and Other Teaching Aids Specialist**

Conducts research into audio-visual and other teaching aids and advises on, planning and organising the introduction of such teaching aids in educational establishments.

Examples of occupational titles classified here are:-

- Specialist, audio-visual teaching aid
- Specialist, teaching aid
- Technologist, audio-visual

**254-13 Education Assessor**

Participates in classroom activities; observes teaching techniques to assess teacher's performance, and scholastic results obtained. Prepares reports and makes recommendations to educational authorities concerning possible changes and improvements in curricula and teaching methods.

Examples of occupational titles classified here are:-

- Assessor, education
- School Inspector (Subject-specialist)
- Senior resident teacher

**MINOR GROUP 259: OTHER TEACHING PROFESSIONALS**

Other teaching professionals conduct research and develop or advise on instructing or teaching workers on practical execution of tasks, or instruct students on subjects like art and music.

**259-11 Technical/Job Instructor**

Conducts and engages in instructing or teaching other workers in the technical aspects and the practical execution of the tasks related to their occupation.

Examples of occupational titles classified here are:-

- Instructor, job
- Instructor, technical

**259-99 Teaching Professionals Not Elsewhere Classified**

This group includes those who teach subjects in para-professional, commercial and basic vocational courses to technical and other students or those who teach trade and post-trade courses. Included also are those who instruct students in practice, theory and history of art and instruct students in the fundamentals of various skills.

**SUB-MAJOR GROUP 26: LEGAL PROFESSIONALS**

Legal professionals conduct research on legal problems, draft laws and regulations, advise clients on legal aspects of problems, and plead cases or conduct prosecutions in courts of law, or preside over judicial proceedings and pronounce judgement in courts of law.

The tasks usually include: advising clients on legal matters, drawing up documents, drafting legislation and negotiating, preparing and conducting court cases on behalf of individuals, corporations or Government.

Occupations in this sub-major group are classified into two minor groups, namely:-

**261 Lawyers**

**262 Jurists/Judges**

**MINOR GROUP 261: LAWYERS**

Lawyers give clients legal advice on a wide variety of subjects and plead cases or conduct prosecutions in courts of law.

Registration with professional body is a requirement.

**261-11 Public Prosecutor**

Gives the government legal advice on a wide variety of subjects and undertakes legal business on behalf of Government. Drafts legislation and prepares government regulations and bills based on existing laws. Prosecutes on behalf of the government in all cases and draws up legal documents. Arranges property transfers, studies jurisprudence, writes comparative analyses and compiles law codes.

Examples of occupational titles classified here are:-

- Counsel, state
- Prosecutor, public

**261-12 Advocate**

Prepares and pleads cases and conducts prosecutions in courts of law; may administer oaths. Examines circumstances of civil disputes or charges, alleged criminal acts or other infringements of the law; interviews clients and witnesses and takes other measures to ascertain facts of cases. Represents clients in disputes in courts of law, negotiations and business transactions.

Examples of occupational titles classified here are:-

- Advocate
- Lawyer, mercantile

**261-13 Legal Officer**

Examines legal records and other relevant documents; checks validity of documents and advises clients and agents on legal or technical matters relating to their particular cases and business transactions; represents clients in court.

Example of occupational title classified here is:-

- Legal officer

**261-99 Other Lawyer/Legal Practitioner**

Performs legal functions (Other than pleading cases, prosecuting or presiding over proceedings in courts of law), advising clients on legal aspects of personal and business problems, representing clients in minor lawsuits and briefing lawyers. Supervises the documentation, listing and recording of court actions as judicial and administrative officer of a higher court.

Example of occupational title classified here is:-

- Registrar, high court

### **MINOR GROUP 262: JURISTS/JUDGES**

Judges preside over, hear and judge cases and make judgements in courts of law; instruct the jury on points of law and pronounce judgement.

Registration with professional body may be required

#### **262-11 Judge**

Presides over judicial proceedings and pronounces judgement in courts of law; listens to presentation of pleadings or cases for prosecution and rules on admissibility of evidence, methods of conducting testimony and other matters or procedures; establishes rules and precedence on questions for which no standard procedures already exist.

Examples of occupational titles classified here are:-

- Chief Justice
- Judge of High Court
- Judge, Court of Appeal

#### **262-12 Magistrate**

Presides over cases, hears and weighs arguments and evidence as presented in courts of law, determines the rights and obligations of the parties involved, rules on questions of procedure and pronounces judgement.

Example of occupational title classified here is:-

- Magistrate

#### **262-99 Other Jurists**

This group includes judges such as those in the industrial court who hear industrial disputes as a neutral party to help management and unions resolve differences, and arbitrates on issues and makes awards. Gives guidance on harmonious existence between employers and trade unions and to all parties in disputes.

Examples of occupational titles classified here are:-

- Arbitrator, legal
- Commissioner of assizes
- Judge, industrial court

### **SUB-MAJOR GROUP 27: SOCIAL SCIENCE AND RELATED PROFESSIONALS**

Social science and related professionals conduct research, improve and/or develop concepts, theories and operational methods, or apply knowledge relating to their diverse areas of specialization.

The tasks usually include: formulating and applying solutions to present or projected economic, political or social problems; conducting research and analyses of past events and activities and tracing the origin and evolution of the human race; studying the origin and development of languages, or translating or interpreting them; studying mental processes and behaviour of individuals and groups; providing social services; preparing scholarly papers and reports.

Occupations in this sub-major group are classified into six minor groups, namely:-

- 271 Economists**
- 272 Psychologists**
- 273 Sociologists, Anthropologists and Related Professionals**
- 274 Historians and Political Scientists**
- 275 Philologists, Translators and Interpreters**
- 279 Other Social Science and Related Professionals**

#### **MINOR GROUP 271: ECONOMISTS**

Economists conduct research to improve and/or develop economic concepts, theories and operational methods used to understand and describe the behaviour of national and international markets for goods, services and labour, and advise on or apply the knowledge to draw up economic policies and to formulate solutions to present or projected economic problems.

##### **271-11 Macro-economist**

Conducts research and applies the principles and theories of economics to formulate solutions to economic problems; studies organization of production, agriculture, labour, trade, transport, marketing methods, trade trends, pricing policies, credit structures, consumption, employment, productivity and other economic aspects of existing or postulated situations; compiles, analyses and interprets economic and statistical data; constructs mathematical models to represent economic phenomena and other econometric techniques.

Examples of occupational titles classified here are:-

- Planning Officer (Economic)
- Macro-economist

##### **271-12 Micro-economist**

Conducts research and advises on economic problems in a particular branch of economics: Specializes in a particular branch of economics such as finance, international trade, labour, prices, taxation or agricultural or industrial economics. May be designated according to subject area specialisation.

Examples of occupational titles classified here are:-

- Economist, agricultural
- Economist, international trade
- Economist, labour
- Economist, transport
- Micro-economist

#### **MINOR GROUP 272: PSYCHOLOGISTS**

Psychologists research into and study mental processes and behaviour of human beings as individuals or groups, and apply this knowledge to promote personal, social, educational or occupational adjustment and development.

##### **272-10 Psychologist**

Studies human behaviour and mental processes and investigates, and recommends treatment for, psychological problems in such fields as medicine, education and industry; plans and carries out experiments and observations on human beings and animals to measure mental and physical characteristics, analyses effect of heredity, environment and other factors on individual thought and behaviour.

Examples of occupational titles classified here are:-

- Psychologist, clinical
- Psychologist, occupational
- Psychologist, social

### **MINOR GROUP 273: SOCIOLOGISTS, ANTHROPOLOGISTS AND RELATED PROFESSIONALS**

Sociologists, anthropologists and related professionals investigate and describe the social structure of societies, the origin and evolution of humanity, and the inter-dependence between environmental conditions and human activities, and make the knowledge obtained available as a basis for policy decisions.

#### **273-11 Sociologist**

Studies origins, development, structure, social pattern and inter-relationships of human society; studies and investigates social phenomena such as the family and the community or sociological aspects like education or human behaviour in such fields as industrial relations; crime and politics, cultural and social institutions; and living conditions.

Example of occupational title classified here is:-

- Sociologist

#### **273-12 Anthropologist/Archeologist**

Studies and conducts research on the origin, development, structure, social patterns, customs, beliefs, organizations and inter-relationships of human society. Compares physical characteristics of fossilized human remains with those of existing racial groups, and classifies fossils according to period, origin and degree of development; preserves cultural artifacts and fossil findings and documentation.

Examples of occupational titles classified here are:-

- Anthropologist
- Archeologist

#### **273-13 Geographer**

Studies the earth's surface, physical features, divisions, climatic aspects of areas, products or population and correlates these findings with the economic, social and cultural activities.

Examples of occupational titles classified here are:-

- Geographer
- geomorphologists
- Geographer, human
- Geographer, physical

#### **273-99 Other Sociologists and Related Professionals**

Included in this group are those occupations for which the main tasks include: tracing the origin and evolution of humanity through the study of changing characteristics and social and cultural institutions; they also prepare scholarly papers and reports.

Example of occupational title classified is:-

- Ethnologist

## **MINOR GROUP 274: HISTORIANS AND POLITICAL SCIENTISTS**

Historians and political scientists work, in the field of epistemology or ethics. They conduct research and describe past events and activities, including the development of social and economic structures or cultural and political institutions and movements and make the knowledge obtained available as a basis for political, diplomatic and related policies.

### **274-11 Historian**

Extracts relevant material from historical records and checks its authenticity. Researches into and describes the history of a particular period, country or region or a particular aspect of its history for example political, social or economical development fields.

Example of occupational title classified here is:-

- Historian

### **274-12 Political Scientist**

Conducts research into political and philosophical fields, past and present theory and practice of political systems, institutions or behaviour. Observes present political institutions and collects data on them from various sources, including interviews with government and political party officials and other relevant persons. Presents findings and conclusions for publication.

Example of occupational title classified here is:-

- Scientist, political

### **274-99 Other Historians and Political Scientists**

This group includes those who carry out research into general causes, principles and meanings of the world, human actions, experience, existence, interpreting and developing philosophical concepts and theories. Consults and compares primary sources, such as original or contemporary records of past events and secondary sources such as archaeological or anthropological findings.

## **MINOR GROUP 275: PHILOLOGISTS, TRANSLATORS AND INTERPRETERS**

Philologists, translators and interpreters study the origin, development and structure of languages, and translate or interpret them.

### **275-11 Philologist**

Studies the relationships between ancient parent languages and modern language groups; traces the origin and evolution of words, grammar and language forms and presents findings. Advises on and prepares language classification systems, grammars, dictionaries and similar materials.

Example of occupational title classified here is:-

- Philologist

### **275-12 Translator**

Translates written material from one language into another and ensures that the correct meaning of the original is retained, that legal, technical or scientific works are correctly rendered, and that the phraseology, terminology, the spirit and style of literary works are conveyed as far as possible. Develops methods for the use of computers and other instruments to improve productivity and quality of translations.

Example of occupational title classified here is:-

- Translator

**275-13 Linguist**

Studies languages and the social and cultural aspects of language; and applies this knowledge and/or contributes to the development and evolution of languages.

Example of occupational title classified here is:-

- Linguist

**275-14 Interpreter**

Interprets the spoken word from one language into another; provides simultaneous spoken translations of speeches into the language of other participants in a discussion or other forum.

Example of occupational title classified here is:-

- Interpreter

**MINOR GROUP 279: OTHER SOCIAL SCIENCE AND RELATED PROFESSIONALS**

Social science and related professionals provide guidance to clients and workers in social and related matters to enable them to find and use resources to overcome difficulties and achieve particular goals.

**279-11 Social Planner**

Plans and implements social policy; administers and conducts research into social welfare programmes and their applications.

Example of occupational title classified here is:-

- Planner, social

**279-12 Community Social Worker**

Examines the social welfare needs of individuals and groups in the community and encourages the establishment and development of local services to meet those needs; makes reports and recommendations.

Examples of occupational titles classified here are:-

- Social worker, community
- Criminologist

**279-99 Other Social Workers**

This group includes social workers not elsewhere classified who specialize in the prevention of cruelty to children; helping the physically handicapped, the blind and deaf to adjust to their disabilities and cope with any associated personal or social problems.

Examples of occupational titles classified here are:-

- Children's officer
- Probation officer

**SUB-MAJOR GROUP 28: BUSINESS PROFESSIONALS**

Business professionals improve, advice and/or apply operational methods relating to organisation of business.

The tasks usually include: studying, planning, advising on and executing matters related to business such as marketing, advertising, public relations; application of rules concerning patents, or steps to be taken in setting up a business.

Occupations in this sub-major group are classified into three minor groups, namely:-

**281 Accountants, Auditors and Tax Assessors**

**282 Personnel and Occupational Professionals**

**289 Other Business Professionals**

#### **MINOR GROUP 281: ACCOUNTANTS, AUDITORS AND TAX ASSESSORS**

Accountants, auditors and tax assessors advise on accounting matters, perform accountancy services and/or audits and advise clients on matters relating to taxation.

Registration with professional body may be necessary.

##### **281-11 Accountant**

Plans and administers accounting services and advises on accountancy issues pertaining to private persons, enterprises, institutions and governmental organizations; plans, installs and advises on budgetary accounts, controlling and other accounting systems; assists in formulation of budgetary policies; prepares and certifies financial statements for presentation to management, board of directors, stock holders or statutory public bodies.

Examples of the occupational titles classified here are:-

- Accountant
- Controller, credit

##### **281-12 Auditor**

Prepares and certifies financial statements for presentation to management, shareholders and statutory or other bodies. Conducts financial investigations in such matters as suspected fraud, insolvency and bankruptcy. Audits accounting and book-keeping records. Advises on better financial management.

Examples of occupational titles classified here are:-

- Auditor
- Auditor, external
- Auditor, internal

##### **281-14 Tax Assessor**

Prepares tax returns, advises on taxation problems and contests disputed claims before tax officials.

Examples of occupational titles classified here are:-

- Assessor, tax
- Consultant, tax

#### **MINOR GROUP 282: PERSONNEL AND OCCUPATIONAL PROFESSIONALS**

Personnel and occupational professionals provide professional business services related to personnel policies such as employee recruitment, occupational analyses and vocational guidance.

**282-11 Personnel Officer**

Performs personnel functions relating to employee recruitment, placement, training, promotion, compensation, employee management relations or other areas of personnel work. Ascertains manpower requirements, undertakes job analysis; arranges staff transfers; advertises vacancies; interviews and tests applicants; selects most suitable candidates and settles terms of employment or submits proposals to management. Plans and organizes training of employees; organizes employee grievance procedures and negotiates settlement of complaints and disputes; constructs and reviews wage and salary scales; assists in planning and organizing welfare services.

Example of occupational title classified here is:-

- Personnel officer

**282-12 Vocational Guidance Counsellor**

Advises and provides guidance on aspects of job and occupational analyses in the fields of employment opportunities, career choices; education and training, personnel administration, manpower research and planning and vocational guidance.

Example of occupational title classified here is:-

- Counsellor, vocational guidance

**282-13 Occupational Analyst**

Studies and analyses jobs performed in an establishment by various means, including interviews with workers, supervisors and management, and writes detailed post, job and occupational descriptions from information and data obtained. Prepares occupational information booklets and works on occupational classification systems.

Example of occupational title classified here is:-

- Analyst, occupational

**282-14 Management Analyst**

Conducts studies of organizational structures, methods, systems and procedures used in industrial establishments and other institutions.

Example of occupational title classified here is:-

- Analyst, management

**282-15 Human Resources Specialist**

Plans, develops, implements and evaluates staff development, training and recruitment programmes; determines the magnitude and levels of staffing organizations such as commercial, industrial, or government.

Example of occupational title classified here is:-

- Specialist, human resources

**282-16 Counsellor**

Assesses clients needs and provides information and advice on educational; vocational, legal or social matters. Collects data relevant to clients' needs; conducts therapeutic interviews; analyses situations and presents alternative approaches; informs other authorities on aspects of clients cases as may be required.

Examples of occupational titles classified here are:-

- Counsellor, family
- Counsellor, marriage
- Counsellor, rehabilitation

**282-99 Other Personnel and Occupational Professionals**

This group includes those who specialise in organising and co-ordinating accident prevention programs and procedures within an industrial organization. This does not include workers who specialize in the engineering aspects of industrial accident prevention already elsewhere classified.

Example of occupational title classified here is:-

- Safety officer

**MINOR GROUP 289: OTHER BUSINESS PROFESSIONALS**

**289-11 Public Relations Officer**

Plans, organizes and carries out programmes of information dissemination to influence the public to view favorably an organization, products or services. Receives and provides hospitality services to clients of the organization.

Example of occupational title classified here is:-

- Public Relations Officer

**289-12 Market Research Analyst**

Conducts research, determines and advises on existing level of sales for particular products and/or services, and assesses potential markets and future trends.

Example of occupational title classified here is:-

- Analyst, market research

**289-13 Advertising Executive**

Devises and co-ordinates advertising campaigns.

Example of occupational title classified here is:-

- Executive, advertising

**289-14 Home Economist**

Studies, interprets and informs about and advises on principles of home economics and management with a view to promoting welfare of families, as well as the consumption of household goods, or the promotion of new products.

Example of occupational title classified here is:-

- Economist, home

**289-15 Postal Officer**

Helps to Control, co-ordinate and implement daily operations of postal and related services in a given geographical area through processing and delivery of mail and conduct of other post office services such as the sale of stamps, sending and receipt of telegrams, transfer of money, payment of pensions and banking. Exercises surveillance

or application security procedures; attends to customer complaints and reports to higher management.

### **SUB-MAJOR GROUP 29: OTHER PROFESSIONALS**

Other professionals include those who conduct research, improve or develop concepts, theories and operational methods and/or apply knowledge relating to information dissemination and religion, as well as art and entertainment.

The tasks usually include: information dissemination and operational methods relating to religious and other doctrines; conceiving and creating or performing works of art; preparing scholarly papers and reports.

Occupations in this sub-major group are classified into seven minor groups, namely:-

**291 Archivists, Librarians and Related Professionals**

**292 Religious Professionals**

**293 Authors, Journalists and Related Professionals**

**294 Sculptors, Painters and Related Professionals**

**295 Composers, Musicians and Singers**

**296 Choreographers**

### **MINOR GROUP 291: ARCHIVISTS, LIBRARIANS AND RELATED PROFESSIONALS**

Archivists, librarians and related information professionals develop and maintain the collection of archives, libraries, museums, art galleries and similar establishments.

#### **291-11 Archivist**

Carries out research, appraises, develops, organizes and preserves historically significant and valuable documents such as government papers, private papers, photographs, sound recordings and films. Prepares indexes, bibliographies, microfilm copies and other reference aids to the collected materials and makes them available to users.

Example of occupational title classified here is:-

- Archivist

#### **291-12 Art Gallery and Museum Curator**

Develops and maintains collections of artistic, cultural, scientific or historically significant items for art galleries and museums. Undertakes classification and cataloguing of art gallery and museum collections and organizes exhibitions.

Examples of occupational titles classified here are:-

- Curator, art gallery
- Curator, museum

#### **291-13 Librarian/ Documentalist**

Manages, organizes, develops and maintains systematic collections of books, periodicals, electronic databases and other recorded material and makes them available to library users and documentation centres; plans and supervises the acquisition, classification, cataloguing, shelving and circulation of library materials; maintains records concerning the use of library; publicizes library facilities by organizing book

displays and circulating book lists; recommends appropriate sources of information to inquirers; compiles reference lists and, in reference libraries, assembles the material required; supervises maintenance of books and other materials.

Examples of occupational titles classified here are:-

- Librarian
- Documentalist

### **291-99 Other Information Professionals**

This group includes those who conduct research into the origin, distribution and use of materials and objects of cultural and historical interest, and in preparing scholarly papers and reports on the subject including book publishers and book traders.

Examples of occupational titles classified here are:-

- Publisher, book
- Book trader

## **MINOR GROUP 292: RELIGIOUS PROFESSIONALS**

Religious professionals function as perpetrators of the sacred traditions, practices and beliefs and celebrate or administer rituals of initiation; preside over ritual re-enactments of creative, redemptive or salvatory events, and offer sacrifices to the gods or to God.

### **292-11 Minister of Religion**

Conducts religious worship, administers rites of faith or denomination and provides spiritual and moral guidance to members; leads congregation in worship and prepares and delivers sermons; interprets doctrines of faith and provides spiritual and moral guidance; administers rites of faith or denominations; and conducts marriage and funeral services.

Examples of the occupational titles classified here are:-

- Bishop
- Imam
- Priest
- Provost

### **292-13 Father-in-charge/Parish priest**

Heads a monastic house or is in-charge of the day-to-day running of a parish; undertakes various administrative and social duties; provides moral and spiritual guidance to members of the monastery or parish.

Examples of the occupational titles classified here are:

- Father-in-charge, monastery
- Monk/Abbot
- Nun/Mother superior
- Priest, parish

### **292-14 Chaplain**

Officiates over religious services in the army, navy or air-force; takes charge of services in chapels which may be located in private homes, schools, universities or prisons and provides guidance and counselling services.

Examples of occupational titles classified here are:-

- Chaplain, army
- Chaplain, prisons
- Chaplain, university

### **MINOR GROUP 293: AUTHORS, JOURNALISTS AND RELATED PROFESSIONALS**

Authors, journalists and related professionals write literary works for publication or presentation in dramatic form; appraise merits of artistic productions, or literary and other works of art, or write and edit news, stories and commentaries.

#### **293-11 Author**

Writes literary works for publication or dramatic presentation; creates subject-matter for novel, biography, poem, play or other literal composition; conducts research into subjects to establish factual content; assembles background material and obtains relevant data.

Examples of occupational titles classified here are:-

- Author/creative arts
- Writer, book

#### **293-12 Journalist**

Collects, reports and comments on news and current affairs for publication in bulletins, newspapers and periodicals or broadcasting through radio or television. Interviews persons; attends public functions and seeks information from other sources concerning the subject of interest.

Examples of occupational titles classified here are:-

- Journalist
- Information officer
- Press officers
- Reporter, newspaper

#### **293-13 Editor**

Writes editorials and selects, arranges, revises and edits submitted articles and other materials for publication in newspapers and periodicals; appraises manuscripts submitted for publication in book form; makes recommendations thereon and edits or supervises editing of the material.

Examples of occupational titles classified here are:-

- Editor, book
- Editor, journal
- Editor, newspaper

#### **293-14 Press/Information Officer**

Studies, advises and conducts public relations programs with a view to improving the public's knowledge and understanding of the enterprise or establishment of interest.

Examples of occupational title classified here are:-

- Information officer
- Press officer

#### **293-15 Radio and Television Announcer**

Reads news bulletins and makes other announcements on radio or television. Conducts interviews for radio and television programmes.

Examples of occupational titles classified here are:-

- Announcer, radio
- Announcer, television

#### **MINOR GROUP 294: SCULPTORS, PAINTERS AND RELATED PROFESSIONALS**

Sculptors, painters and related professionals create and execute works of art by sculpting, painting, drawing, creating cartoons, engraving or using related techniques including computer aided designs.

##### **294-11 Sculptor**

Creates representational or abstract three-dimensional or relief forms by shaping and/or combining materials such as wood, stone, clay or metal.

Example of occupational title classified here is:-

- Sculptor

##### **294-12 Artist**

Creates representational or abstract drawings and paintings using pencil and/or brush, ink, chalk, oil paints, water colours or through the application of other techniques.

Examples of occupational titles classified here are:-

- Artist
- Artist, fine

##### **294-13 Cartoonist**

Creates cartoons to depict persons and events often in caricature.

Example of occupational title classified here is:-

- Cartoonist

##### **294-14 Engraver and Etcher (Artistic)**

Creates drawings and engraves or etches them on metal, wood, glass or other materials.

Examples of occupational titles classified here are:-

- Engraver, artistic
- Etcher, artistic

##### **294-15 Graphic Artist**

Creates and executes designs and illustrations for books, magazines, advertising and similar purposes.

Example of occupational title classified here is:-

- Artist, graphic

##### **294-99 Other Artists**

This group includes those who paint miniatures from portraits, create original designs for jewelry; create art objects in glass or ceramic and repair art objects.

Examples of occupations classified here are:-

- Artist, miniature reproduction
- Repairer, artwork

### **MINOR GROUP 295: COMPOSERS, MUSICIANS AND SINGERS**

Composers, musicians and singers compose and adapt musical works and/or conduct or participate in performances.

#### **295-11 Music Composer**

Conceives and writes musical compositions.

Example of occupational title classified here is:-

- Composer, music

#### **295-12 Instrumentalist (Orchestra)**

Plays one or more musical instrument as a soloist or as a member of an orchestra.

Examples of occupational title classified here is:-

- Instrumentalist, orchestra

#### **295-13 Orchestrator**

Adapts and arranges music for particular instrumental groups, instruments or occasions.

Example of occupational title classified here is:-

- Orchestrator

#### **295-14 Orchestra Conductor**

Conducts instrumental groups in an orchestra.

Example of occupational title classified here is:-

- Conductor, orchestra

#### **295-15 Vocal Group Conductor**

Conducts a group of singers in a choir, performs in such occasions as church singing, musical festivals or singing competitions.

Examples of occupational titles classified here are:-

- Choirmaster
- Conductor, vocal group

#### **295-16 Concert and Opera Singer**

Sings classical or church music in musical programmes, or performs in stage presentations of opera.

Example of occupational title classified here is:-

- Singer, opera

### **MINOR GROUP 296: CHOREOGRAPHERS**

Choreographers conceive and create dances which often convey through a story, theme, idea or mood by a pattern of steps; and instruct dancers in their interpretation and performance.

#### **296-10 Choreographer**

Creates original dances for stage, television, motion picture or public performance productions and instructs dancers in their interpretation and performance.

Example of occupational title classified here is:-

- Choreographer

### **MAJOR GROUP 3 TECHNICIANS AND ASSOCIATE PROFESSIONALS**

Technicians and associate professionals cover those occupations whose main tasks require sound educational background and proper training, and also experience, principles and practices necessary to assume operational responsibility and to give technical support to professionals. Most occupations in this major group require skills at the 4th KNOCS skill level.

The tasks usually include: undertaking and carrying out technical work connected with research and the application of concepts and operational methods in specified areas of specialisation. Tasks also involve technical services related to law and order, trade, finance and administration.

Occupations in this major group are classified into nine sub-major groups namely:-

- 31 Engineering Technicians**
- 32 Medical and Health Science Associate Professionals**
- 33 Physical and Life Science Associate Professionals**
- 34 Ships and Aircraft Controllers**
- 35 Business and Social Services Associate Professionals**
- 36 Administration Middle Level Personnel**
- 37 Primary and Pre-primary Education Teachers**
- 39 Other Business, Social Services, Athletes/Sportsmen and Related Workers Not Elsewhere Classified.**

#### **SUB-MAJOR GROUP 31: ENGINEERING TECHNICIANS**

Engineering technicians perform technical tasks related to research and the practical application of concepts, principles and operational methods in the fields of engineering sciences as well as computing. They control and operate technical equipment, ships and aircrafts, investigate safety aspects of manufacturing and other processes.

The tasks usually include: preparing, interpreting, inspecting and revising drawings, maps, plans, diagrams, designs and charts; computing and performing field and laboratory test, giving results, repairing and modifying electrical and mechanical equipment and controlling and operating optical and telecommunications equipment. Estimating material costs and quantities required and inspecting application of safety standards relating to structures, equipment and processes.

Occupations in this sub-major group are classified into nine minor groups, namely:-

- 311 Technical Draughtsmen**
- 312 Civil Engineering and Related Technicians**
- 313 Mechanical Engineering Technicians**
- 314 Mining and Metallurgical Technicians**
- 315 Electrical Engineering Technicians**
- 316 Electronic and Telecommunication Engineering Technicians**
- 317 Chemical Engineering Technicians**
- 318 Photographers, Image and Sound Recording Equipment Controllers.**
- 319 Broadcasting and Telecommunications Equipment Controllers.**

#### **MINOR GROUP 311: TECHNICAL DRAUGHTSMEN**

Technical draughtsmen prepare technical drawings, maps and illustrations from sketches, measurements and other data; copy drawings and paints onto printing plates.

##### **311-11 Mechanical Draughtsman**

Prepares and revises working drawings, plans and designs from sketches and specifications prepared by engineers and designers for mechanical engineering work.

Examples of occupational titles classified here are:-

- Draughtsman, design/mechanical engineering
- Draughtsman, mechanical engineering

**311-12 Electrical Draughtsman**

Prepares drawings, plans and diagrams of electrical installations and circuitry.

Examples of occupational titles classified here are:-

- Draughtsman, design/electrical engineering
- Draughtsman, electrical engineering
- Draughtsman, relays

**311-13 Architectural Draughtsman**

Prepares architectural drawings showing internal, external and other features of structures. Prepares working drawings showing plans, elevations, sections, typical details, materials, finishes and other aspects of structures such as layouts, plumbing, drainage, car parking and landscaping.

Example of occupational title classified here is:-

- Draughtsman, architectural

**311-14 Civil Engineering Draughtsman**

Prepares and revises drawings, plans and designs from sketches and specifications prepared by engineers and designers for the construction, modification and maintenance of structures such as dams, bridges, roads and other civil engineering projects.

Examples of occupations classified here are:-

- Draughtsman, civil engineering
- Draughtsman, design/civil engineering
- Draughtsman, design/roads
- Draughtsman, design/structural
- Draughtsman, reticulation/sewage

**311-15 Cartographic Draughtsman**

Prepares maps and charts from survey and other data; compiles data from surveys, aerial photographs, reference maps, land titles, and other records concerning nature of topography and location of boundaries; determines suitable scales and reduces information selected for map or chart according to scales adopted.

Examples of occupational titles classified here are:-

- Draughtsman, Cartographic
- Draughtsman, topographic

**311-16 Technical Illustrator**

Prepares and revises illustrations for reference works such as brochures and technical manuals dealing with the manufacture, installation, operation, maintenance and repair of machinery and other equipment and goods. Determines style, technique and medium to produce desired effects and conform with reproduction requirements. Conceives and renders illustrations and details from models, sketches or imagination. Evaluates and amends illustrations at various stages of completion.

Examples of occupational titles classified here are:-

- Illustrator, technical

- Writer, technical

**311-17 Lithographic Artist**

Uses lithographic methods to produce art work by preparing printing substrate, inking surface, transferring image to printing material and co-ordinates printing processes.

Example of occupational title classified here is:-

- Artist, lithographic

**MINOR GROUP 312: CIVIL ENGINEERING AND RELATED TECHNICIANS**

Civil engineering technicians perform technical tasks connected with civil engineering research and design in various disciplines in their specialities.

**312-11 Civil Engineering Technician**

Tests or helps with field and laboratory tests of construction materials, prepares computation and tabulation for civil engineering work.

Example of occupational title classified here is:-

- Technician, civil engineering

**312-12 Building Engineering Technician**

Provides technical assistance connected with the construction of buildings and other structures, surveys and prepares of survey reports. Applies acquired technical knowledge of building principles and practices in order to identify and solve problems arising in the course of their work.

Examples of occupational titles classified here are:-

- Estimator, building
- Foreman, building
- Supervisor, building construction
- Technician, building engineering

**312-13 Clerk of works**

Interprets building plans, building regulations and codes of practice. Arranges supplies of materials and equipment. Negotiates with sub-contractors and others on commercial and technical matters. Calculates costs of building materials and estimates completion time to prepare tenders and to support contract bids and contract variations.

Examples of occupational titles classified here are:-

- Clerk of works
- Works officer

**312-14 Survey Technician**

Uses surveying instruments and photogrammetric equipment to obtain data for surveying purposes. Records data, performs routine computations and draws sketches and maps. Prepares, edits and revises plans, maps, charts and other drawings. Prepares finished material for reproduction and publication.

Examples of occupational titles classified here are:-

- Interpreter, photographic
- Technician, photogrammetric
- Technician, survey

**312-15 Soil Technician**

Makes observations, takes measurements and collects soil samples; performs routine analysis and classification of soils, and makes computations of measurements; prepares samples for testing. Records testing activities and results; plots data against specific tables or past results to establish patterns.

Examples of occupational titles classified here are:-

- Technician, geochemical
- Technician, geological
- Technician, mineral
- Technician, soil

**MINOR GROUP 313: MECHANICAL ENGINEERING AND RELATED TECHNICIANS**

Mechanical engineering technicians perform technical tasks connected with mechanical engineering research, as well as design, in various specialized areas.

**313-11 Mechanical Engineering Technician**

Performs technical tasks normally under direction and supervision of a mechanical engineer for design, development, maintenance, manufacture, installation, efficient operation and repair of mechanically functioning plant and equipment. Prepares engineering specifications for manufacture of machines, mechanical devices and related products. Gives support functions in mechanical engineering research.

Examples of occupational titles classified here are:-

- Technician, boiler
- Technician, design/tools
- Technician, hydraulic
- Technician, mechanical engineering
- Technician, pipe testing

**313-12 Heating, ventilation and Refrigeration Technician**

Performs technical tasks, normally under direction of an engineer in the relevant areas; helps in the design, development, manufacture, installation, maintenance and repair of systems and equipment for heating, ventilation and refrigeration.

Examples of occupational titles classified here are:-

- Technician, air conditioning
- Technician, refrigeration
- Technician, ventilation/heating appliances

**313-13 Armourer**

Examines weapon parts and sub-assemblies such as barrels, triggers, bolts, ejectors and magazines for condition and accuracy of fit. Dismantles and corrects weapons by chiselling, filing, scraping, grinding, boring and machining. Re-assembles firearms, tests and operates firearms to ensure smooth operation of moving parts, determine and correct sighting errors, and detect faulty parts and assembly.

Examples of occupational titles classified here are:-

- Armourer
- Technician, weapons

### **313-99 Other Mechanical Engineering Technicians**

This group includes those engineering technicians who specialize in performing technical tasks contributory to technological development of processes and plant, and/or technical operations in aviation or nuclear power generation.

Examples of occupational titles classified here are:-

- Technician, aeronautical engineering
- Technician, avionics
- Technician, nuclear power

### **MINOR GROUP 314: MINING AND METALLURGICAL TECHNICIANS**

Mining and metallurgical technicians perform technical tasks related to metallurgical research and development of improved methods of extracting solid minerals, oils and gas as well as the design, construction, operation, maintenance and repair of mines and mine installations, systems for transporting and storing natural gas and plant, extracting metals from their ores and refining metal.

#### **314-11 Mining Technician**

Performs technical work, normally under direction and supervision of mining engineer; contributes to the extraction of metallic and solid non-metallic minerals from the earth and their preparation for distribution or processing.

Examples of occupational titles classified here are:-

- Technician, mining
- Under-manager, mines
- Ventilation officer, mines

#### **314-12 Metallurgical Technician**

Performs technical tasks normally under direction and supervision of a metallurgist, contributes to development and control of processes for extraction of metals from their ores and metal refining, technical supervision of metal and alloy manufacture and processing.

Examples of occupational titles classified here are:-

- Technician, foundry
- Technician, metal extrusion
- Technician, metal heating
- Technician, metallurgical

### **MINOR GROUP 315: ELECTRICAL ENGINEERING TECHNICIANS**

Electrical engineering technicians perform technical tasks connected with electrical engineering research as well as with the design, manufacture, assembly, construction, operation maintenance and repair of electrical equipment, facilities and distribution systems.

#### **315-11 Electrical Engineering Technician**

Performs task normally under direction and supervision of an electrical engineer; contributes to the design, development, construction, installation, maintenance and repair of electrical systems and equipment. Prepares specifications for manufacture and installation of electrical machinery and equipment. Gives support functions in electrical engineering research.

Examples of occupational titles classified here are:-

- Technician, electrical engineering
- Technician, electrical instruments
- Technician, electrical power transmission
- Technician, electrical power distributor

**315-12 Electricity Tracer**

Discovers or finds vestiges or signs of investigation on electricity faults from the source.  
Tests using electrical testing equipment to find faults and report or repairs.

**MINOR GROUP 316: ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING TECHNICIANS**

Electronics and telecommunications engineering technicians perform technical tasks related to electronic and telecommunications engineering research, as well as with the design, manufacture, assembly, construction, operation, maintenance and repair of electronic equipment and electronic mechanical telecommunication system.

**316-11 Electronic Engineering Technician**

Performs technical tasks, normally under direction and supervision of an electronic engineer; contributes to design, development, construction, installation, maintenance and repair of electronic devices and equipment.

Examples of occupational titles classified here are:-

- Designer, print circuit board
- Technician, aircraft electronics
- Technician, electronic engineering
- Technician, process control

**316-12 Telecommunications Engineering Technician**

Examines drawings, specifications and work areas to determine positioning and connections for telecommunication equipment to be installed; attaches outgoing and incoming wires and cables to appliances being installed; locates, tests and repairs faulty equipments and items his/her area of specialization.

Examples of occupational titles classified here are:-

- Technician, radio/ television maintenance
- Technician, signals
- Technician, telecommunications engineering
- Technician, telephone/telegraph maintenance

**316-13 Computer Technician**

Installs, services and repairs computer hardware. Replaces defective components and wiring of the computer hardware.

Example of occupational title classified here is :-

- Technician, computer

**MINOR GROUP 317: CHEMICAL ENGINEERING TECHNICIANS**

Chemical engineering technicians perform technical tasks connected with chemical engineering

research; design, manufacture, construction, operation, maintenance and repair of chemical plant.

**317-10 Chemical Engineering Technician**

Performs technical tasks normally under direction and supervision of a chemical engineer related to chemical engineering research; design, manufacture, construction, maintenance and repair of chemical plants.

Examples of occupational titles classified here are:-

- Technician, chemical engineering
- Technician, chemical process
- Technician, petroleum
- Technician, water treatment
- Technician, gas production and distribution

**MINOR GROUP 318: PHOTOGRAPHERS, IMAGE AND SOUND RECORDING EQUIPMENT CONTROLLERS**

Photographers, image and sound recording equipment operators take photographs, control motion picture and video cameras and other equipment to record and edit images and sound.

**318-11 Photographer**

Operates a camera to take photographs of persons, places, merchandise and other subjects. Uses the photographs for advertising, and/ or other commercial, industrial or scientific purposes and to illustrate stories and articles in newspapers, magazines and other publications.

Examples of Occupational titles classified here are:-

- Photographer
- Photographer, architecture
- Photographer, commercial
- Photographer, fashion
- Photographer, medical
- Photographer, police
- Photographer, press

**318-12 Camera Operator (Motion Picture)**

Sets up and operates cameras to photograph scenes for motion pictures. Works in motion picture studios or on location.

Example of occupational titles classified here is:-

- Operator, camera/motion picture

**318-13 Television Camera Operator**

Operates cinema or electronic television cameras, in studios or outdoors, to record events or scenes for direct telecast.

Example of occupational titles classified here is:-

- Operator, camera/television

**318-14 Cinematographer**

Plans, directs and co-ordinates filming to control the quality of photography of motion

pictures.

Example of occupational title classified here is:-

- Cinematographer

**318-15 Sound Recording Equipment Operator**

Uses and controls equipment to record sound for motion pictures, video tapes, gramophone records, audio tapes, digital discs, direct broadcasting and other purposes.

Controls equipment to mix and regulate sound recordings to ensure satisfactory volume and quality and to create special sound effects.

Example of occupational title classified here is:-

- Operator, equipment/sound recording

**MINOR GROUP 319: BROADCASTING AND TELECOMMUNICATIONS  
EQUIPMENT CONTROLLERS**

Broadcasting and telecommunications equipment controllers control technical functioning of equipment for transmitting radio and television broadcasts of pre-recorded or live images and sounds, and other types of telecommunications signals on land, sea or air.

**319-12 Radio-telephone Communication Operator**

Transmits and receives radio messages. Selects appropriate circuits to contact receiving stations. Monitors radio traffic; transmits and receives voice messages.

Example of occupational title classified here is:-

- Operator, radio-telephone communications

**319-13 Telegrapher/Signaller**

Transmits and receives messages by use of morse codes or teletype. Receives messages by interpreting code and converting to plain language, and writes messages for transmission.

Examples of occupational titles classified here are:-

- Signaller
- Telegrapher

**319-14 Ship Radio Officer**

Controls ship's radio communications systems, satellite services and multiplex systems at sea. Codes and decodes data for transmission by radio, operates radio, radar, sonar echo sounder and other navigational aids, and uses data obtained to determine safe passage for ships. Communicates with shore stations and other ships using radiotelephones.

Example of occupational title classified here is:-

- Radio officer, ship

**319-15 Flight Radio Officer**

Controls technical functioning of equipment for transmitting radio, as well as other types of telecommunications signals in aircraft.

Example of occupational title classified here is:-

- Radio officer, flight

**319-16 Broadcasting Station Operator**

Operates radio and television broadcasting studio equipment, sets up microphones and amplifiers for use in sound pickup, adjusts control of console to cut microphones in and out, and to blend output of individual microphones for balance between music, dialogue or sound effects, controls video console to regulate transmission of television scenes, observes metres and indicators, and adjusts controls to maintain technical quality of broadcast, tests machines and equipment with testing instruments.

Example of occupational title classified here is:-

- Operator, broadcasting station

**319-17 Cinema Projectionist**

Operates motion picture projection and sound reproducing equipment, switches on equipment, adjusts focus and sound, and changes over or closes down projectors. May operate slide projectors, spotlights or similar equipment.

Example of occupational title classified here is:-

- Projectionist, cinema

**319-18 Public Address Equipment Operator**

Operates technical equipment to amplify and enhance the voice of the speaker when addressing the public. Sets up equipment in accordance with the acoustics of the area and adjusts controls to maintain correct sound levels.

Example of occupational title classified here is:-

- Operator, equipment/public address

**319-21 Radio Communications Operator**

Operates and adjusts equipment of transmitters to broadcast radio and television programmes; maintains log of programmes transmitted, diagnoses faults by testing components using electronic testing equipments and cleans and services equipments.

Example of occupational title classified here is:-

- Operator, Radio Communications

**319-99 Other Broadcasting and Telecommunications Equipment Operators**

This group includes sound equipment operators and cinema projectionists not elsewhere classified. Those editing tapes to prepare master tapes for making multiple copies, testing pressed phonograph records for sound quality, using sound reproduction equipment, editing film to synchronise music and dialogue to insert sound effects by artificial means or from tapes of recording, to accompanying action portrayed by radio and television broadcast, operating a sound mixing panel backstage during theatrical performance.

Examples of occupational titles classified here are:-

- Video tape editor
- Sound mixer
- Radio tape editor

## **SUB-MAJOR GROUP 32: MEDICAL AND HEALTH SCIENCE ASSOCIATE PROFESSIONALS**

Medical and health science associate professionals perform technical tasks related to research, care, sanitation and application of medicine to human patients and livestock.

The tasks usually performed include: assisting in examination of patients, administering prescribed medicine, monitoring patients' progress, discussing cases with medical practitioners and social professionals and maintaining records of their activities. They also inspect and administer public health programmes to local authorities. Other tasks include operating and maintaining medical equipments, x-rays and optical machines.

Occupations in this sub-major group are classified into nine minor groups namely:-

- 321 Auxiliary Nurses**
- 322 Medical/Clinical Officers**
- 323 Sanitarians**
- 324 Optometrists and Opticians**
- 325 Dental Technicians**
- 326 Physiotherapists and Related Associate Professionals**
- 327 Veterinary Officers**
- 328 Pharmaceutical Officers**
- 329 Other Associate Medical, Nursing and Nutrition Workers**

### **MINOR GROUP 321: AUXILIARY NURSES**

Auxiliary nurses provide nursing care for the sick, injured and others in need of such care and in the absence of medical doctors or professional nurses, deal with emergencies.

Diploma/Certificate – Registration as Kenya Enrolled Nurse may be necessary.

#### **321-11 Auxiliary Nurse**

Assists nurse to provide specialized professional nursing services and advice in hospitals, clinics or other establishments which provide medical care and treatment

Example of occupational title classified here is:-

- Auxiliary nurse

#### **321-12 Auxiliary Midwife**

Assists midwife to give professional care and advice to women to aid them during pregnancy, childbirth and postnatal period. Gives care and advice to women in hospitals.

Example of occupational title classified here is:-

- Auxiliary midwife

#### **321-13 Clinical Wound Dresser**

Under direction of clinical officer or nurse cleans and puts medication to wounds such as burns, cuts, etc and wraps the wounds using linens as directed by the clinical officer or nurse

Example of occupational title here is:-

- Dresser, wound

**321-14 First Aid Officer**

Renders first aid and subsequent treatment to injured or ill employees at industrial plants, commercial establishments, mines, or construction sites during emergencies and accident spots; sterilizes, disinfects, anoints and bandages minor cuts and burns.

Example of occupational title classified here is:-

- First aid officer

**MINOR GROUP 322: MEDICAL ASSISTANTS AND CLINICAL OFFICERS**

Medical assistants and clinical officers carry out advisory, diagnostic, preventive and curative medical tasks, limited in scope and complexity than those carried out by medical doctors. They work independently or with the guidance and supervision of medical doctors in institutions or in the field as part of the Public Health Service, and may work mainly with diseases and disorders common in their region, or mainly apply specific types of treatment.

**322-11 Medical Assistant**

Prepares patients for medical examinations and assists doctors in providing treatment.

Examples of occupational titles classified here are:-

- Assistant, medical
- Audio metrist
- Technician, anaesthetic
- Technician, cardiac
- Technician, dialyses
- Technician, renal

**322-12 Clinical officer/assistant**

Performs to a limited extent the tasks of a general physician within a public health service or institution; makes medical examinations; refers patients to a physician or hospital if necessary; prescribes medicines and administers drugs. May inoculate persons with vaccines to provide immunity from diseases.

Examples of occupational title classified here are:-

- Clinical assistant
- Clinical officer
- Vaccinator

**MINOR GROUP 323: SANITARIANS**

Sanitarians provide technical assistance and advice on measures to restore and or improve sanitary conditions, and supervise their implementation.

**323-11 Public Health Technician/Inspector**

Administers public-health programs in their areas of jurisdiction of a county or city; inspects public facilities for health hazards or directs inspection by others. Works in conjunction with institutions, or other authorities and with community groups to formulate health standards.

Examples of occupational titles classified here are:-

- Inspector, public health
- Technician, public health

### **323-12 Sewage Superintendent/Technician**

Supervises and co-ordinates the activities of workers engaged in centres for treatment or disposal of sewerage. Regulates flow of sewage through stages of treatment such as filtering, the addition of chemicals and aeration, and operates waste disposal equipment.

Performs routine servicing and cleaning of plant, pipes and underground delivery channels. Investigates and repairs faults in sewage treatment or disposal systems.

Examples of occupational titles classified here are:-

- Superintendent, sewage
- Technician, sewage

### **MINOR 324: OPTOMETRISTS AND OPTICIANS**

Optometrist and opticians prescribe and fit glasses and contact lenses and advice on their use or the use of other visual aids, as well as on proper lighting for work and reading.

### **324-11 Optometric Technician**

Performs eye examinations and vision tests to determine the presence of visual, ocular and other abnormalities, and prescribes lenses, other optical aids or therapy. Advises patients on eye exercises to correct defective eye muscles and on lighting and visual habits. Refers cases which may require medical treatment to medical doctors. Provides advice in fields related to vision such as contact lens care, vision care of the elderly, optics, occupational and industrial eye safety and carries out research.

Example of occupational title classified here is:-

- Technician, optometric

### **324-12 Dispensing Opticians**

Interprets and dispenses optical prescriptions, and services spectacle lenses and frames. Measures clients for spectacles, discusses styles and fits lenses into frames. Fits frames or contact lenses to customers.

Examples of Occupational titles classified here are:-

- Optician, dispensing
- Optician, ophthalmic

### **MINOR GROUP 325: DENTAL TECHNICIANS**

Dental technicians carry out advisory, diagnostic, preventive and curative dental tasks of a limited in scope and complexity than those carried out by dentists, and they assist dentists by preparing and taking care of instruments and other equipment, preparing materials and helping patients prepare for examination.

### **325-11 Dental Technician**

Fabricates and repairs full and partial dentures according to the dentist's prescriptions, using hand tools, moulding equipment and bench fabricating machines. Administers treatment using prescriptions from a dentist. Rebuilds denture and denture linings to duplicate original thickness. Assists dentist by preparing and taking care of instruments and other equipment, preparing materials and helping patients prepare for examination and treatment by the dentist.

Examples of occupations titles classified here are:-

- Dental assistant, school service
- Mechanic, dental

- Nurse, dental
- Prosthetist, dental
- Technician, dental

**325-12 Dental Hygienist**

Advises communities and individuals on dental hygiene, diet and other preventive measures and takes part in programmes to educate and motivate children, their parents and the community at large in matters relating to oral health.

Examples of occupational titles classified here are:-

- Hygienist, dentist
- Therapist, oral

**MINOR GROUP 326: PHYSIOTHERAPISTS AND RELATED ASSOCIATE PROFESSIONALS**

Physiotherapists and Related Associate Professionals treat disorders of bone, muscles and parts of circulatory or the nervous system by manipulative methods and ultrasound, heating, laser or similar techniques, or apply physiotherapy and related therapies as part of the treatment for the physically disabled and mentally ill or unbalanced.

**326-11 Physiotherapist**

Assists in the treatment of sprains, fractures, paralysis, circulatory and nervous disorders by physical means, usually as prescribed by a physician. Instructs patients on remedial exercises to correct muscle ailments and deficiencies.

Examples of occupational titles classified here are:-

- Occupational therapist
- Physiotherapist

**326-12 Osteopath**

Assists in diagnoses of physiological and mechanical disorders of the human locomotor system. Assesses disorders by discussion, observation and examination of patients and analyses of x-rays and pathological tests. Treats patients primarily by the application of precise manual therapy to the disordered body framework to restore normal mechanical function and prevent further mechanical disorder and disease associated with mechanical disfunction. Prescribes required treatment including rehabilitation and preventive exercises, advice on diet, nutrition and lifestyle.

Examples of occupational titles classified here are:-

- Chiropractor
- Osteopath

**326-13 Podiatrist**

Diagnoses and treats ailments and abnormal conditions of the foot and perform minor surgery using medical and minor surgical procedures and electrical, mechanical or manual methods.

Example of occupational titles classified here is:-

- Podiatrist

**326-14 Orthopaedic Technician**

Assists an orthopaedic specialist to examine body deformities and disorders to determine and write specifications for artificial limbs or other appliances, helps to fit them on patients and explains how to use them.

Example of occupational title classified here is:-

- Technician, orthopaedic

### **326-15 Medical X-ray and Radiograph Technician**

Operates X-ray equipment to make radiographs for medical diagnostic purposes or to give therapeutic treatment. Prepares patients for exposure to X-rays. Develops, fixes, washes and dries X-ray film.

Examples of occupational titles classified here are:-

- Technician, radiograph
- Technician, X-ray/medical
- Radiographer

### **MINOR GROUP 327: VETERINARY ASSISTANTS**

Veterinary assistants carry out but only to a limited extent, diagnostic, preventive and curative veterinary duties normally under the direction of a veterinary doctor.

#### **327-10 Veterinary Assistant**

Carries out but only to a limited extent, diagnostic, preventive and curative veterinary duties normally under direction of a veterinary doctor, more particularly as regards diseases and disorders of animals. Prepare and take care of instruments and other equipment, preparing materials and getting animals ready for examination and treatment

Examples of occupational titles classified here are:-

- Nurse, animal
- Technician, dip/veterinary
- Vaccinator, animal
- Veterinary assistant
- Veterinary Assistant, artificial insemination

### **MINOR GROUP 328: PHARMACEUTICAL ASSISTANTS**

Pharmaceutical assistants dispense and prepare medicaments, lotions and mixtures under the guidance of pharmacists, in pharmacies, hospitals and dispensaries.

#### **328-10 Pharmaceutical Assistant**

Assists in a pharmacies, hospitals or dispensaries to make and dispense medicaments under the guidance of a pharmacist. Weighs, measures and mixes drugs and other pharmaceutical products according to instructions of pharmacists, and packages the medicaments as appropriate.

Examples of occupational titles classified here are:-

- Pharmaceutical assistant
- Shop assistant, chemist

### **MINOR GROUP 329: OTHER ASSOCIATE MEDICAL, NURSING AND NUTRITION WORKERS**

Other medical and health science associate professionals cover associate medical and health science workers not classified elsewhere in sub-major group 32, (Medical and Health Science

Associate Professionals). For instance, those who practise homoeopathy, plan and carry out therapeutical activities to help the mentally ill, or physically handicapped, deal with orientation problems of the blind. This group includes those who look into the nutritional needs of people, animals and those who use plants to treat common ailments.

**329-11 Nutrition Technician**

Under direction of a nutritionist, plans and prepares diets for individuals or groups. Assists in evaluating nutrition elements of health programmes in appraising the various factors related to nutrition and food problems in the community.

Examples of occupational titles classified here are:-

- Social worker, nutrition/animal
- Social worker, nutrition/human
- Technician, food
- Technician, nutrition

**329-12 Herbalist**

Treats common ailments such as insomnia, colds, cuts, abrasions and indigestion by using ointments, juices, baths and oils derived from herbs, medicinal plants, insects or by using other traditional techniques used in the community and which are believed to cure and heal by assisting or stimulating natural body processes.

Example of occupational title classified here is:-

- Herbalist

**SUB-MAJOR GROUP 33:PHYSICAL AND LIFE SCIENCE ASSOCIATE PROFESSIONALS**

Physical and life science associate professionals perform technical tasks related to research and practical application of concepts, principles and operational methods particular to physical and life sciences such as biology, botany, agronomy, zoology, bacteriology and biochemistry as well as laboratory tests. Other task include technical research related to chemistry, physics, geology, meteorology and astronomy as well as technical drawing and economic efficiency of production processes.

The tasks usually include: performing diagnostic and scientific tests, experiments and collating and analysing results, operating and maintaining equipment used in clinical diagnosis and experimental research, collecting and testing samples and preparing, examining, identifying and classifying microscopic samples.

Occupations in this sub-major group are classified into four minor groups namely:-

**331 Physical Science Technicians**

**332 Life Science Technicians**

**333 Agronomy and Forestry Technicians**

**334 Farming and Forestry Advisors**

**MINOR GROUP 331: PHYSICAL AND CHEMICAL SCIENCE TECHNICIANS**

Physical and chemical science technicians perform technical tasks related to research in chemistry, physics, geology, geophysics, meteorology and astronomy, as well as with development of industrial, medical, military and other practical applications of research.

### **331-11 Chemistry Laboratory Technician**

Conducts standard chemical tests in laboratories and makes routine qualitative and quantitative analysis of materials including solids, liquids and gases. Sets up laboratory equipment and instruments required for tests, research or process control. Prepares chemical solutions for use in tests, following standard formulae and procedures. Carries out a limited range of technical functions in chemistry, primarily in relation to laboratory operations and maintenance, quality and process control activities.

Examples of occupational titles classified here are:-

- Analyst, chemical process
- Technician, laboratory/chemistry
- Technician, laboratory/geology

### **331-12 Physics Laboratory Technician**

Performs technical functions in a physics laboratory primarily by setting-up and operating equipment for making physical experiments and measurements and operating physics research facilities following specifications and guidance from physicists. Maintains and repairs laboratory equipment. Records and keeps experimental data.

Example of occupational title classified here is:-

- Technician, laboratory/physics

## **MINOR GROUP 332: LIFE SCIENCE TECHNICIANS**

Life science technicians perform technical tasks related to research in biology or other life sciences, as well as with the development of industrial, agricultural, medical, public health and other practical applications of research.

### **332-11 Biology Laboratory Technician**

Maintains laboratory and field specimens such as animals, plants and micro-organisms. Carries out experimental procedures such as taking animal blood samples and testing experimental materials from plants or animals. Prepares chemicals, vaccines, toxoids, antiserums and hormones; inoculates animals and plants and records results. Collects, classifies and preserves specimens and samples.

Examples of occupational titles classified here are:-

- Technician, biochemistry
- Technician, laboratory/bacteriology
- Technician, laboratory/biology
- Technician, laboratory/veterinary

### **332-12 Medical Laboratory Technician**

Prepares specimens such as body organs, tissues, cells, fluids and stools, using such techniques as fixing and staining; grows cultures of micro-organisms, for tests, analyses and experiments normally under direction and supervision of medical scientist.

Examples of occupational titles classified here are:-

- Technician, laboratory/blood bank
- Technician, laboratory/medical
- Technician, laboratory/serology

### **332-13 Drug Inspector**

Inspects facilities for production, processing, transport, handling, storage and sale of

drugs to ensure conformity with government and other rules, regulations and standards. Inspects finished products or parts for conformity with manufacturers' specifications and standards and advises enterprises and general public on the implementation of government and other rules and regulations concerning hygiene, purity and grading of drugs, cosmetics and similar products.

Example of occupational title classified here is:-

- Inspector, drug

### **MINOR GROUP 333: AGRONOMY AND FORESTRY TECHNICIANS**

Agronomy and forestry technicians perform technical tasks related to research in agronomy and forestry, as well as with the development of agricultural and -forestry applications of research.

#### **333-10 Agronomy and Forestry Technician**

Prepares materials and equipments for experiment, tests and analyses. Collects and prepares specimens of plant cells or parts for experiments, tests and analyses. Assists in performing experiments, tests and analysis in the fields of forestry and agronomy. Analyses seeds for quality, purity and germination rating. Collects data and estimates quantities and costs of materials and labour required for projects.

Examples of occupational titles classified here are:-

- Technician, agronomy
- Technician, forestry
- Technician, soil science

### **MINOR GROUP 334: FARMING ADVISORS**

Farming advisors provide technical assistance, advice and extension services on farming methods and problems.

#### **334-10 Farming Advisor**

Provides technical assistance and advice and extension services on farming methods and problems. Keeps abreast with relevant farming methods and techniques and advises on ways of increasing quality of output, increasing yields and measures to increase efficiency of operations. Advises on measures to deal with problems of pests and soil erosion; collects data and estimates quantities and costs of materials and labour required for projects.

Examples of occupational titles classified here are:-

- Advisor, farming
- Extension officer
- Farm demonstrators

### **SUB-MAJOR GROUP 34: SHIP AND AIRCRAFT CONTROLLERS**

Ships and aircraft controllers and technicians command and navigate ships and aircraft and perform technical functions to ensure safe and efficient movement and operations.

The tasks usually include: controlling the operation of mechanical, electrical and electronic equipment on board ship and or aircraft, commanding and navigating ships or aircraft or directing the movement of ships or aircraft.

Occupations in this sub-major group are classified into four minor groups namely:-

#### **341 Ships Engineer**

- 342 Ships Deck Officers and Pilots**
- 343 Aircraft Pilots and Related Workers**
- 344 Air Traffic Controller**

**MINOR GROUP 341: SHIPS' ENGINEERS**

Ships' engineers control and participate in the operation, maintenance and repair of mechanical, electrical and electronic equipment and machinery on board ship, or perform related supporting functions on shore.

**341-11 Ships' Chief Engineer**

Supervises, controls and co-ordinates the activities of engineers and participates in the operation, maintenance and repair of mechanical, electrical and electronic equipment and machinery on board ship.

Examples of occupational titles classified here are:-

- Chief Engineer, ship
- Engineer, motor vessels

**341-12 Marine Engineering Officer**

Prepares ship's main propulsion engines and auxiliary machinery such as boilers, steam turbines, diesel engines, electrical power generators, steering gear and engine cooling water systems. Assesses the performance of machinery and diagnoses faults. Repairs and maintains machinery and equipment.

Example of occupational title classified here is:-

- Engineer, marine

**341-13 Marine Superintendent (Technician)**

Supervises, controls and co-ordinates the activities of workers engaged in constructing and repairing ships and boats. Prepares detailed drawings for production, installation and construction of structural parts and sections. Estimates and makes requisitions of materials and supplies needed for completion of work; inspects materials and processed products to ensure that the quality meets prescribed standards.

Examples of occupational titles classified here are:-

- Superintendent, marine
- Technician, marine

**MINOR GROUP 342: SHIP'S DECK OFFICERS AND PILOTS**

Ships' deck officers and pilots command and navigate ships and similar vessels, and perform related functions onshore.

Licence may be required.

**342-11 Ship's Master (Captain)**

Directs and co-ordinates the work of all departments on board vessel. Controls the safety of vessel and its equipment, cargo, passengers and crew. Controls the navigation of vessel and supervises ship's officers in the performance of their tasks such as watch keeping and ballasting. Represents the owners of vessel and takes responsibility for the safe, efficient and economic operation of vessel. Ensures compliance with local, national and international regulations pertaining to the safety of life at sea and protection

of the marine environment.

Examples of occupational titles classified here are:-

- Captain, ship
- Master, ship

**342-12 Ship Navigating Officer**

Navigates and controls the safe operation of ships at sea, in port and at anchor. Determines the position of ships at sea using navigational aids such as radar, Decca, omega, satellite navigator and echo sounders. Supervises, steers and keeps ships on safe track.

Example of occupational title classified here is:-

- Navigating officer, ships

**342-13 Ship pilot**

Gives advice to ships masters to steer for safe passage of vessels through waterways such as harbors, channels, straits, rivers and other waters where special skills and knowledge of the area is required.

Examples of occupations classified here are:-

- Pilot, marine
- Pilot, ship

**342-14 Marine Superintendent Officer (Deck)**

Co-ordinates the activities of the deck crew; supervises loading and unloading and ballasting operations. Directs the activities of the deck crew for navigational support tasks, berthing and unberthing, maintenance, cleaning and painting of superstructures, repair and replacement of defective deck gear and equipment.

Example of occupational title classified here is:-

- Superintendent, marine/deck

**MINOR GROUP 343: AIRCRAFT PILOTS AND RELATED WORKERS**

Aircraft pilots and related workers control the operation of mechanical, electrical and electronic equipment, in order to navigate aircraft for transporting passengers, mail and freight and perform related pre-flight and in-flight tasks.

Licence may be required.

**343-11 Passenger Aircraft Pilot**

Flies aircraft to transport passengers, mail and freight. Controls aircraft at all stages of operation, including taxing and parking on the ground, taking off and landing, climbing, descending, cruising and maneuvering. Obtains briefs and clearance before flights and maintains contact with air traffic or flight control during flights. May pilot a variety of aircraft types including helicopters and may operate on regular airline flights, commuter, charter or executive flights.

Examples of occupational titles classified here are:-

- Captain, aircraft
- Pilot, aircraft/commercial

- Pilot, helicopter

**343-12 Cargo and Service Aircraft Pilot**

Pilots aircraft for purposes other than passenger, mail or freight transportation, such as for testing or delivering aircraft, spraying insecticides and fungicides for pest control, aerial surveys, aerial photography and exhibitions of flying skills or piloting fighters and bombers as in the air force.

Examples of occupational titles classified here are:-

- Pilot, aerial surveys
- Pilot, agricultural aircraft
- Pilot, air force

**343-13 Flight Navigator**

Establishes and monitors aircraft positions in flight and uses navigational aids and charts to plot aircraft courses. Monitors air and weather conditions and calculates their effect on aircraft operations. Prepares flight plans prior to flights, keeps logs of flight details and provides operational support to pilots during flights.

Examples of occupational titles classified here are:-

- Navigation officer, flight
- Navigator, flight
- Observer, navy

**343-14 Flight Engineer**

Operates aircraft engines and systems in accordance with captains instructions. Monitors aircraft mechanical performance at all times and reports on mechanical condition of engines, especially abnormal trends or malfunctions. Manages fuel feed systems in co-ordination with pilots. May service aircraft and certify airworthiness when ground staff are not available.

Examples of occupational titles classified here are:-

- Engineer, flight
- Engineer, maintenance/aircraft

**343-15 Air Traffic Safety Technician**

Performs technical tasks concerning the design, installation, operation, maintenance and repair of air traffic control and air navigation systems. Inspects and certifies aircraft safety.

Examples of occupational titles classified here are:-

- Controller, air traffic
- Rigger, parachute
- Technician, air traffic safety

**MINOR GROUP 344: AIR TRAFFIC CONTROLLERS**

Air traffic controllers direct aircraft movements in air space and on the ground, using radio, radar and lighting systems, and provide information relevant to the operation of aircraft.

**344-11 Air Traffic Controller**

Clears aircraft for landing and take-off at airports and controls aircraft in flight in the

vicinity of airport or in a designated sector of airspace, controls movement of aircraft about to leave, transfers departing flight to surveillance of sector controller and takes over control of incoming flights, controls and monitors airport lighting and other installation and issues instructions to pilots and ground staff in cases of emergency.

Example of occupational title classified here is :-

- Controller, air traffic

### **344-99 Other Air Traffic Controllers**

Provides pre-flight briefings and aeronautical information services to pilots and distribute and accept flight plans. Provide pilots flying in uncontrolled air space with information on other aircraft in their vicinity. Advise changes in weather conditions and in operational status of facilities such as aerodromes, navigational aids and communications. Monitor the progress of flights and initiates search and rescue action in the event of emergencies or if aircraft are overdue.

## **SUB-MAJOR GROUP 35: BUSINESS AND SOCIAL SERVICES ASSOCIATE PROFESSIONALS**

Business and social services associate professionals buy and sell financial instruments, different types of insurance, real estate, travel and other business services; deal foreign exchange, act as wholesale representatives or as buyers on behalf of organizations, appraise the value of commodities, real estate and other properties and sell them by auction; prepare accounting statements and payrolls and assist in planning the collection, processing and presentation of statistical data.

The tasks usually include analysing market trends for financial instruments, foreign exchange, commodities and real estate and buying or selling on behalf of clients; advising on and selling insurance coverage; ensuring proper recording of transfers of financial instruments and selling tours; acting as contact between producers, importers and buyers, buying and selling goods and services on behalf of organizations; appraising the value of commodities, real estate or other property, or selling by auction. Arranges contracts for performance of entertainers and artists as well as for the publication of books, production of plays, recording and sale of music.

Occupation in this sub-major group are classified into five minor groups, namely:-

- 351 Securities and Finance Dealers**
- 352 Insurance Brokers and Agents**
- 353 Real Estate Agents**
- 354 Business Service Agents**
- 355 Buyers, Appraisers and Auctioneers**

### **MINOR GROUP 351: SECURITIES AND FINANCE DEALERS AND BROKERS**

Securities and finance dealers and brokers buy and sell securities, stocks, bonds and other financial instruments, and deal on the foreign exchange on the spot, or on future markets, on behalf of their own company or their customers on a commission basis and recommend transactions to clients or senior management.

Skill level: Certificate or Diploma from professional body.

#### **351-10 Securities Salesman**

Buys and sells stocks and other securities on behalf of their own company or for customers on a commission basis and recommends transactions to clients or senior

management. Obtains information about financial circumstances of customers and companies in which investments may be made; analyses market trends for securities, stocks and other financial instruments and advises prospective customers about market conditions and prospects.

Examples of occupations classified here are:-

- Broker, foreign exchange
- Broker, securities
- Broker, stocks and shares
- Salesman, securities

### **MINOR GROUP 352: INSURANCE BROKERS AND AGENTS**

Insurance brokers and agents advise on and sell life, accident, automobile, liability, endowment, fire, marine and other types of insurance to new and established clients.

Minimum Skill level: Certificate or Diploma from professional body.

#### **352-11 Insurance Broker**

Sells life, fire, accident, industrial and marine insurance for companies. Interviews and advises prospective and present customers on policies, risks covered, rates and benefits. Checks details of insurance companies' policies. Selects the cover most appropriate for customers' requirements.

Examples of occupations classified here are:-

- Broker, insurance
- Broker, insurance/life

#### **352-12 Insurance Underwriter**

Obtains information about customers' circumstances necessary to determine appropriate type of insurance and conditions. Negotiates with customers to determine type and degree of risk for which insurance is derived, extent of coverage and terms of payment.

Negotiates and places reinsurance contracts.

Examples of occupations classified here are:-

- Underwriter, insurance

#### **352-13 Insurance Salesman**

Sells life, accident, endowment, fire, marine and other types of insurance; compiles lists of prospective customers from directories and other sources, interviews prospective customers, determines their insurance needs to sell suitable policies by explaining the risks covered, the premium rates and benefits and initiates arrangements for medical examination or other policy stipulation.

Examples of occupations classified here are:-

- Sales representative, life assurance
- Salesman, general insurance

#### **352-14 Insurance Claims Officer/Assessor**

Inspects insured properties to evaluate conditions affecting underwriting standards and develops and promotes safety programmes. Compiles data affecting premiums and prepares reports and recommendations to reduce risks. Analyses claims and accident

history data or inspects scenes of accident to determine causes and effects. Develops safety programmes compatible with the needs and recourses of the policy holders.

Examples of occupations classified here are:-

- Adjuster, loss
- Assessor, claims
- Assessor, insurance
  
- Claims officer
  
- Inspector, claims

### **MINOR GROUP 353: REAL ESTATE AGENTS**

Real estate agents arrange the sale, purchase, rental and lease of real property, on behalf of clients and for a commission.

Minimum Skill level: Diploma/Certificate

#### **353-10 Real Estate Salesman**

Arranges the sale and leasing of real estate and property on behalf of owners as a commission agent; assists buyers to find suitable properties. May arrange for land brokerage and conveyancing, arrange rent collection, and oversee the maintenance of premises.

Examples of occupations classified here are:-

- Agent, estate
- Agent, real estate
- Broker, real estate
- Realtor
- Salesman, property

### **MINOR GROUP 354: BUSINESS SERVICES AGENTS**

Business services agents/salesmen sell various goods on wholesale basis including installation, equipment and technical products and related services, also sell advertising services, materials and space in the media

Min Skill level: Diploma/Certificate

#### **354-11 Advertising Salesman**

Sells advertising services, materials and space in the media, and ensures that the service purchased is made available to the buyer in the agreed form at the agreed time.

Examples of occupations classified here are:-

- Advertiser, performance/musical
- Advertiser, sales/business
- Advertiser, sports
- Advertiser, theoretical
- Salesman, advertising

#### **354-12 Business Services Salesman**

Sells business, financial and related services such as credit information and debt collection. Provides information on market services, consumer information, business publications and training. Negotiates contracts on behalf of seller or buyer and

explains terms of sale and signs agreements on behalf and ensures that contract is honoured.

Examples of occupations classified here are:-

- Salesman, business services

**354-13 Sales Supervisor**

Supervises workers engaged in selling activities in wholesale and retail establishments or sales departments of other establishments; estimates the types, qualities and quantities of goods required by their customers and ensures adequate stocks; supervises sales staff ensures that credit and other security procedures are observed.

Examples of occupations classified here are:-

- Supervisor, sales

**354-14 Sales Representative (Business Services)**

Represents companies in selling of various manufactured goods and services. Provides specialized information as required to clients, solicits orders and sells goods to customers reactions and requirements to the manufacturer.

Examples of occupations classified here are:-

- Representative, sales/business services

**354-15 Technical Salesman**

Sells and supplies technical equipment, supplies and related services to business establishments or individuals. Provides prospective customers with general and specialised information about the characteristics and functions of the equipment and demonstrates its use.

Examples of occupations classified here are:-

- Advisor, sales/technical
- Salesman, technical

**354-16 Manufacturer's Agent**

Represents companies for sale of goods and services to industrial business professionals or other establishments. They visit clients at their establishments to show samples and take orders.

Examples of occupations classified here are:-

- Agent, manufacturer's

**354-17 Reservations Officer/ Travel Consultant**

Organizes, plans and advises on itineraries Sells tickets for sporting or entertainment venues, travel, lodging, and makes reservations and accommodation arrangements.

Examples of occupations classified here are:-

- Agent, reservations
- Booking officer
- Consultant, travel
- Reservations officer

**354-18 Trade Broker**

Trade broker buy and sell commodities, usually in bulk, at auctions on the spot or in

future.

Examples of occupation titles classified here are:

- Broker, commodity
- Broker, shipping
- Broker, trade

**354-21 Clearing and Forwarding Agent**

Carries out customs clearing procedure and ensures that Insurance export/import licenses and other formalities are in order.

Examples of occupational titles classified here are:

- Agent, clearing
- Agent, forwarding
- Agent, shipping

**354-22 Employment Agents and Labour Contractors**

Matches jobseekers with vacancies, find workers for employers and contract labour for particular projects at the request of clients, or finds places for jobseekers for a commission.

**354-23 Business Service Agents Trade Broker N.E.C**

Sells business service such as, transport, credit and other information; arranges contracts for athletes, entertainers and artists: publication of books, production of plays, recording, performing and sale of music.

Examples of occupational titles classified here are:-

- Agent, literacy
- Agent, musical performance
- Agent, sports
- Agent, theatrical

**MINOR GROUP 355: BUYERS, APPRAISERS AND AUCTIONEERS**

Buyers, appraisers/valuers and auctioneers value property and various goods and assess losses covered by insurance policies, sell objects, properties and goods by auction: Buy goods and services on behalf of industrial, commercial or other enterprises and organisations.

Skill level: Diploma/Certificate

**355-11 Purchasing Agent**

Negotiates and contracts for the purchase of equipment, raw materials, products and supplies for industrial plant utilities, government departments or other establishments.

May

also purchase merchandise for sale.

Examples of occupations classified here are:-

- Agent, purchasing
- Buyer

**355-12 Appraiser/Valuer**

Determines the quality or value of raw materials, real estate, industrial equipment, personal and household effects, work of art, gems and other effects offered for sale or to be auctioned.

Examples of occupations classified here are:-

- Valuers/appraisers, land
- Valuers/appraisers, real estate

**355-13 Auctioneer**

Sells by auction various kinds of property, commodities, cars, real estate, livestock, jewellery and other objects.

Examples of occupations classified here are:-

- Auctioneer
- Auctioneer, livestock
- Auctioneer, real estate
- Court broker

**SUB-MAJOR GROUP 36: ADMINISTRATION MIDDLE LEVEL PERSONNEL**

Administration middle level personnel perform technical tasks connected with practical application of knowledge relating to business enterprises, administration, bookkeeping, legal, statistical; activities relating to crime investigations, customs, travel, tax, welfare, licensing as well as social work, land and agricultural extension work; administrative duties relating to job placements, factory and schools inspections, industrial development, computing and other services.

The tasks include: investigating, detecting and preventing crimes; issuing travel documents and checking persons and goods crossing international borders; determining types and amounts of tax to be paid; providing social support to individuals and groups and advising individuals and organisations on the determination of employment benefits; licensing, regulation of prices and inspection of weights and measures; personnel services; handling goods; carrying out statistical surveys, assisting in planning and implementation of economic policy, determining and projecting manpower needs and controlling data bases; advising farmers, overseeing wildlife activities, providing information to tourists; occupational health inspections, Employment services wages and disputes; schools inspection, advising on health, socio and economic issues of the community and disseminating information.

Occupations in this sub-major group are classified into nine minor groups, namely:-

**361 Police Inspectors, Detectives, Customs and Boarder Officials**

**362 Government Tax and Excise Officials**

**363 Welfare and Pension Officials**

**364 Government Licensing Officials**

**365 Business and Public Service Middle Level Personnel**

**366 Statistical, and Planning Officials**

**367 Fisheries, Wildlife and Tourist Officials**

**368 Lands, Agricultural and Livestock Officials**

**369 Other Middle Level Personnel**

**MINOR GROUP 361: POLICE INSPECTORS, DETECTIVES, CUSTOMS AND BORDER OFFICIALS**

Police inspectors, detectives, customs and borders officials investigate crimes obtain information which may be used in crime prevention, check documents of persons and vehicles crossing national borders to enforce relevant government rules and regulations.

Skill level: Diploma/Certificate

**361-11 Police Inspector**

Controls and directs the activities of junior policemen/women in the investigation, detection and prevention of crime. May prosecute offenders in a court of law.

Examples of occupations classified here are:-

- Inspector, Police

**361-12 Detective**

Establishes contacts and sources of information about crimes planned or committed in order to prevent crimes or identify culprits. Investigates events and circumstances suspected of being criminal in nature to obtain evidence and identify the perpetrators. Investigates possible cases of theft of any nature from business and other possible cases of unlawful behaviour.

Examples of occupations classified here are:-

- Agent, inquiry
- Detective, police
- Detective, private
- Investigator, private

**361-13 Customs Officer**

Inspects the luggage of persons crossing the national borders to ensure that it conforms to government rules and regulations concerning import or export of goods and currencies. Checks transport documents and freight of vehicles crossing national borders to ensure conformity with government rules and regulations concerning goods in transit and the import and export of goods: verifies that necessary payment has been made.

Examples of occupations classified here are:-

- Assistant, customs
- Customs officer
- Examining officer, customs
- Inspector, customs

**361-14 Immigration Officer**

Examines applications and other relevant documents and determines whether a passport, residential, working, visiting and other immigration permits and passes can be granted and the conditions which should be attached.

Examples of occupations classified here are:-

- Immigration officer
- Checking Officer, Passport

**361-15 Registrar of Persons /Registration Officer**

Ensures implementation of compulsory registration of all births and deaths occurring in any locality within their jurisdiction irrespective of nationality. Also provides for the optional registration of births and deaths of Kenyans occurring outside the country. Registers, preserves and keeps security of births and deaths records, issues

births and deaths certificates, processes vital statistics on natality ( births statistics) and mortality (deaths statistics) and re-registration upon legitimation and recognition.

**361-99 Other Border Inspectors**

Checks travel documents of persons crossing national borders to ensure that they have the necessary authorisation and certificates such as medical certificates.

Examples of occupations classified here are:-

- Inspector, health/border

**MINOR GROUP 362: GOVERNMENT TAX AND EXCISE OFFICIALS**

Government tax and excise officials examine tax returns, bills of sale and other documents to determine the type and amount of taxes, duties and other types of fees to be paid by individuals or businesses.

Min Skill Level: Diploma/Certificate

**362-11 Revenue Officer**

Collects revenue from the public on behalf of the government. Takes charge of government revenue collecting offices and remits the revenue collected to local authorities.

Examples of occupations classified here are:-

- Assistant Revenue Officer
- Excise officer
- Revenue officer

**362-12 Tax Officer**

Examines tax returns, bills of sale and other relevant documents to determine type and amount of taxes, duties and other types of fees to be paid.

Examples of occupations classified here are:-

- Assessor, tax
- Collector, tax
- Tax officer

**362-13 Market Master**

In charge of a market in the municipalities or county councils. Oversees the daily operations of market activities such as collection of rates, market entry fees and disputes. Assigns duties to market cleaners and ensures the tasks are adequately performed.

Examples of occupations classified here are:-

- Master, market

**362-14 Levy Inspector**

Inspects places of business and examines business records, bills of sale and other relevant records to ensure that government rules and regulations concerning the determination, type and amount of levy to be paid are complied with.

Examples of occupations classified here are:-

- Inspector, levy

### **MINOR GROUP 363: WELFARE AND PENSIONS OFFICIALS**

Welfare and pensions officials examine applications for benefits, in cash or kind, to determine eligibility and amount of benefit.

Min Skill Level: Diploma/Certificate

#### **363-11 Social Welfare Officer**

Provides social support and advice to individuals or group of people experiencing social, emotional or financial difficulties. Assists social workers in specialised welfare areas, involving children, older people, handicapped people, families, single parents, refugees and people in institutions.

Examples of occupations classified here are:-

- Assistant, social welfare officer
- Leader, youth
- Social welfare officer
- Youth worker

#### **363-12 Probation Officer**

Prepares reports for courts on social and personal aspects of cases and supervises offenders who have been released from corrective institutions on condition that they report regularly. Interviews offenders, their families, employers and teachers to obtain relevant information; rehabilitation of offenders as directed by courts, maintains contact with families to help solve problems of readjustment.

#### **363-13 Pensions Officer**

Advises laws, rules and regulations concerning pensions: determination and disbursement of payments.

Examples of occupations classified here are:-

- Pensions officer
- Benefits Claims officer

#### **363-14 Co-operatives Officer**

Examples of occupations classified here are:-

- Co-operatives officer

### **MINOR GROUP 364: GOVERNMENT LICENSING OFFICIALS**

Government licensing officials examine applications for licences to export or import goods, set up a business, build a house or other structures, and determine whether applications are to be approved and whether specific conditions are to be attached to the licence.

#### **364-11 Licensing Officer**

Examines applications and relevant documents and determines whether the particular licence required can be granted and the conditions which should be attached.

Examples of occupations classified here are:-

- Licensing officer

**364-12 Price Control Inspector**

Inspects places of business such as shops, butcheries and supermarkets to ensure that price regulations are being adhered to. Initiates action such as the preparation of reports and documents, when a breach of price regulations is detected with a view to prosecuting the offenders.

Examples of occupations classified here are:-

- Inspector, price control

**364-13 Weights and Measures Inspector**

Examines places of business to ensure the use of correct weights and measures in trade.

Examples of occupations classified here are:-

- Inspector, weights and measures

**MINOR GROUP 365: BUSINESS AND PUBLIC SERVICE MIDDLE LEVEL PERSONNEL**

Business and public service middle level personnel assist in matters of staff selection, development and organisation as well as in marketing, supplying and handling of goods

Skill Level: Diploma/Certificate

**365-11 Personnel Assistant**

Arranges for advertising of vacancies, interviewing and testing of applicants and selection of staff. Provides information on conditions of service, salaries and promotion opportunities. Maintains personnel records.

Examples of occupations classified here are:-

- Appointment Officer
- Assistant, personnel officer
- Recruitment officer
- Placement officer

**365-12 Establishment Staffing officer**

Establishes and co-ordinates staff management, development and counselling. Defines staff requirements and qualifications and advises management on placement and promotion of staff.

Examples of occupations classified here are:-

- Assistant, establishment
- Establishment officer
- Staffing officer

**365-13 Administrative Officer**

Assists the head of unit in of an administrative matters. Writes and answers business or technical letters and other similar correspondence.

Examples of occupations classified here are:-

- Administrative officer
- Assistant, administrative

**365-14 Training Officer**

Administers internal training programmes and ensures that follow-up advice or guidance and training materials are available. Recommends and designs training courses to prepare individuals for specific positions. Compiles training manuals, visual aids and materials. Conducts training courses.

Examples of occupations classified here are:-

- Training officer

**365-15 Storeman Woman**

Receives, handles and dispatches goods coming into, or going out of stores or warehouse.

Examples of occupations classified here are:-

- Storeman
- Store woman

**365-16 Marketing Officer**

Plans, organises and carries out programmes of information dissemination on products and services to influence existing and potential customers to buy.

Examples of occupations classified here are:-

- Marketing officer

**365-17 Supplies Officer**

Prepares for purchasing supplies, storage and distribution to user departments to maintain stock levels. Liaises with suppliers; negotiates contracts. Directs and monitors the activities of supply and distribution staff.

Examples of occupations classified here are:-

- Supplies officer

**MINOR GROUP 366: STATISTICAL AND PLANNING OFFICIALS**

Statistical, and planning officials usually work under the guidance of a, statistician and related personnel. Assist in planning collection, processing and presentation of, statistical data.

Min Skill level: Diploma/Certificate

**366-11 Statistical Officer/Assistant**

Works under the guidance of a statistician and assists in planning the collection and processing of statistical data. Carries out statistical calculations and prepares and disseminates reports for presentation in graphical or tabular forms.

Examples of occupations classified here are:-

- Assistant, statistical
- Statistical officer

**366-12 Planning/Assistant**

Assists in planning and implementation of economic policy. Helps in research into

economic programmes; participates in plans for researching into activities of organisations in consultations with other planners. Gives his assessment of economic results to the planning officer for recommendation and implementation.

Examples of occupations classified here are:-

- Assistant, planning

### **366-13 Manpower Planning Officer**

Assists in the planning and implementation of Manpower development policies: review of policies relating manpower planning systems and methodologies. Assisting in regular and ad-hoc manpower surveys and sectoral studies at national and sub-national levels.

Examples of occupations classified here are:-

- Manpower Planning officer
- Assistant, manpower planning

### **MINOR GROUP 367: FISHERIES, WILDLIFE AND TOURIST OFFICIALS**

Fisheries, wildlife and tourist officials advise on the enforcement of the law pertaining to fisheries and wildlife conservation to protect wildlife and fish in specified areas; provide information on travel and accommodation to tourists.

Skill Level: Diploma/Certificate

### **367-11 Fisheries Officer**

Studies aquatic life forms as part of the fishing industry. Conducts experiments and observes the effect of environment, nutrition and chemical agents on various types of fish. Advises fish farmers on how to keep their ponds and the best types of fish to rear.

Examples of occupations classified here are:-

- Assistant, fisheries
- Fisheries officer

### **367-12 Game Warden**

Patrols game and supervises hunting in the public national parks and game reserves. Prevents thefts and killing of game.

Examples of occupations classified here are:-

- Warden, Game

### **367-13 Tourist Officer**

Answers queries from tourists and offers suggestions on tours, travel routes and accommodation. Provides literature and information on local and interstate tours and places of interest. Discusses transport availability and cost, arranges tickets for travel and accommodation and assists travel agents in preparing itineraries for tourists.

Examples of occupations classified here are:-

- Tourist officer

## **MINOR GROUP 368: LANDS, AGRICULTURAL AND LIVESTOCK OFFICIALS**

Lands, agricultural and livestock officials carry out functions related to land adjudication and demarcation; advice farmers, agriculture and livestock businesses, rural industry and other clients on the best methods of farming. They also enforce laws pertaining to land, agriculture and livestock.

Skill Level: Diploma/Certificate

### **368-11 Land Adjudication Officer/Assistant**

### **368-12 Agricultural Assistant**

Provides advice on areas of agriculture and assists in developing new methods of planting, harvesting and processing crops to achieve optimum land usage. Identifies pathogenic micro-organisms and insects, parasites, fungi and weeds harmful to crops and livestock, and assists in devising methods of control. Advises producers on farming techniques and management.

Examples of occupations classified here are:-

- Agricultural officer
- Assistant, agricultural officer
- Cereals officer
- Horticultural officer

### **368-13 Agricultural Technical Officer**

Carries out technical support functions and provides advice in areas of agriculture or animal husbandry such as research, production servicing and marketing. May plan harvesting, slaughtering and other aspects of production processes.

Examples of occupations classified here are:-

- Assistant, technical/agricultural
- Field crop officer
- Poultry officer
- Technical officer/agricultural

### **368-14 Livestock Officer**

Provides advice to farmers, agricultural businesses and other clients on how to deal with livestock including the general care of animals and feeding programmes. Visits farms to inspect livestock and collects, analyses and evaluates samples of grasses to determine their nutrition value to animals.

Examples of occupations classified here are:-

- Assistant, livestock officer
- Dairy officer
- Livestock officer

### **368-15 Quarantine Officer**

Examines imported plants and animals, and products such as timber, seeds or fruits and makes quarantine arrangements.

Examples of occupations classified here are:-

- Quarantine officer

**368-16 Breeding Officer/Animal Health Technician**

Inseminates female livestock by selecting semen, and injecting semen to fertilize livestock. May treat sick animals.

Examples of occupations classified here are-

- Breeding officer
- Inseminator, livestock
- Technician, artificial insemination

**368-17 Hides and Skins Inspector**

Inspects and tests hides or skins for size, cleanliness, colour, markings and quality, and sorts into lots for drying, salting or tanning.

Examples of occupations classified here are:-

- Inspector, hides and skins

**MINOR GROUP 369: OTHER MIDDLE LEVEL PERSONNEL**

Other middle level personnel covers middle level personnel not classified elsewhere in sub-major group 36- "Administration Middle Level Personnel". For instance, here should be classified those who examine places of business, to ensure the use of correct weights and measures in trade, ensure workers' safety at workplace and monitor the application of price or wage regulations and placement of job seekers; ensure proper teaching methods are followed in educational institutions and assist in the operation of computers.

Skill level: Diploma/Certificate

**369-11 Community Development Officer**

Evaluates resources devoted to health, welfare, recreation, housing, employment, training and other community facilities. Interprets identified needs for community organisations, social agencies and groups, and stimulates their interest and enlists co-operation. Provides leadership and co-ordinates programmes.

Examples of occupations classified here are:-

- Assistant, community development
- Development officer, community

**369-12 Labour Officer/Inspector**

Undertakes administration and enforcement of the country's labour laws/regulations. This includes formulation of labour policies, promotion of employment/employee relations; investigation of trade disputes and taking remedial action; inspection of wages, terms and conditions of employment to ensure compliance with labour laws/regulations; advising the government, employers, employees and trade unions on labour laws and policies and on industrial relation matters; and investigation of labour related crimes and prosecution of offenders.

**369-13 Employment Officer/Assistant**

It also involves the overall organisation, promotion and direction of national employment, compilation and analysis of employment, underemployment and unemployment data including the registration and placement of job seekers;

development and maintenance of employment market information systems both at national and district levels.

**369-14 Factories Inspector**

Inspects places of work such as factories and other industrial plants to ensure that the working environment, machinery and equipment conform to government and other rules, regulations and standards. Obtains facts about work practices and accidents to determine compliance with safety rules and regulations.

Examples of occupations classified here are:-

- Inspector, factories

**369-15 Industrial Development Officer**

Conducts industrial studies on organisation structures, methods, systems and procedures used in industrial establishments and other institutions, a view to improving industrial development.

Examples of occupations classified here are:-

- Development officer, industrial

**369-16 Education Officer**

Applies knowledge of learning processes and school structures to develop operational or training programmes. Provides teacher assistance and undertakes school reviews, teacher assessment and educational planning in schools. Assesses the suitability of teachers for promotion or further training.

Examples of occupations classified here are:-

- Education officer
- Education officer, curriculum development
- Education officer, planning
- Education officer, special education
- Education officer, staff development

**369-17 School Inspector**

Inspects schools periodically and confers with the administration and teaching staff on questions relating to curricula, teaching methods, equipment and other matters. Prepares reports and makes recommendations to educational authorities concerning possible changes and improvements in curricula, teaching methods and other matters.

Examples of occupations classified here are:-

- Inspector, schools

**369-18 Computer operator**

Operates and controls peripheral and related computer equipment which is used to record, store, transmit and process digital data and to display data as letters, numbers or graphs on screen, paper or film and organises computing jobs as specified by users to ensure timely, safe and efficient execution. Mounts magnetic tapes and discs as needed for processing or recording data in machine-readable form and keeps library discs and tapes; sorts and distributes output, replenishes stationery and performs related tasks. May perform routine maintenance and cleaning of equipment.

Examples of occupations classified here are:-

- Operator, computer
- Operator, console/computer

**369-19 Fingerprint Officer/Technician**

A fingerprint Technician uses fingerprints dusted with chemicals to make it easier to see and then lifted or photographed. It is then compared with the fingerprint image on a person's fingers. The patterns are then stored in a computer database. Fingerprints can be classified according to the specific features that make up the unique pattern of each print. With computerized storage and retrieval systems, however, classification is not really necessary as the computer can readily scan and match the whole pattern of thousands of prints. The image of fingerprints can readily be enhanced and clarified with scanning and digitizing technology. The finger prints may be useful in identifying someone at the scene of a crime.

**369-20 Trade Marks Officer**

Helps to enforce rules governing registration of Trade Marks that distinguish the goods of an industrial or a commercial enterprise or a group of such enterprises consisting of one or more distinctive works, letters, numbers, drawings or pictures, monograms, signatures, colours or combination of colours or combinations of any of the said elements such as a word, a symbol, a design, or a combination of these, goods or services of one person or organization from those of others in the market place and application of rules concerning patents.

**SUB-MAJOR GROUP 37: PRIMARY AND PRE-PRIMARY EDUCATION AND OTHER TEACHERS**

Primary and pre-primary education teachers teach a range of subjects at primary and pre-primary education levels and organise educational activities.

The tasks include: preparing programme of learning, giving instructions in a range of subjects at primary and pre-primary education level, and organising some educational activities and preparing reports. Other tasks include planning and organising activities designed to facilitate children's development of language or physical and social skills.

Occupations in this sub-major group are classified into three minor groups, namely:-

**371 Primary Education Teachers**

**372 Pre-primary Education Teachers**

**373 Other Teacher/Instructors**

**MINOR GROUP 371: PRIMARY EDUCATION TEACHERS**

Primary education teachers, teach various subjects at the primary education level.

Skill level: Diploma/Certificate

**371-10 Primary Education Teacher**

Prepares programme of learning and gives instructions to primary school children in areas such as reading, writing, arithmetic, creative expression and physical education skills within prescribed or recommended curriculum. Encourages personal development by assisting children to use and develop their capabilities and discusses their progress with parents and head teacher. Maintains discipline in classroom and other areas of the school.

Examples of occupations classified here are:-

- Teacher, lower primary education
- Teacher, primary education
- Teacher, upper primary education

### **MINOR GROUP 372: PRE-PRIMARY EDUCATION TEACHERS**

Pre-primary education teachers organise group and individual play and education activities to support and promote physical, mental and social development of children below primary school age.

Skill level: Diploma/Certificate

#### **372-10 Pre-primary Education Teacher**

Plans and organises activities in pre - primary centres and kindergartens, designed to facilitate the children's development of the physical and social skills. Promotes language development. Observes nutritional, health, welfare and safety needs of children and identifies disabilities such as ill health or emotional disturbances which may impede children's progress. Discusses children's progress and problems with parents.

Examples of occupations classified here are:-

- Teacher, kindergarten
- Teacher, nursery
- Teacher, pre-primary education

### **MINOR GROUP 373: OTHER TEACHERS AND INSTRUCTORS**

Other teachers and instructors engage in teaching activities other than those connected with primary and pre-primary school level.

Skill Level: Diploma/Certificate

#### **373-11 Adult Education Teacher**

Prepares programme of learning and gives instructions to illiterate adults in areas such as reading, writing and arithmetic. Presents subject matter to classes through talks, demonstrations and audio-visual aids. May also teach rudimentary agriculture, hygiene and social sciences. Tests and evaluates individual's progress in written and oral work.

Examples of occupations classified here are:-

- Teacher, adult education

#### **373-12 Driving Instructor**

Plans and prepares programme of learning and gives instructions to learners to teach them how to drive motor vehicles, explaining uses and operations of driving controls. Accompanies pupils on training drives and explains driving regulations and laws.

Examples of occupations classified here are:-

- Instructor, driving/motor vehicle

#### **373-13 Flying Instructor**

Develops course outlines and instructional procedures, and prepares study materials. Demonstrates and provides practical exercises on techniques of controlling aircraft in all flight aspects including day, night and cloud flying. Demonstrates pre-flight inspection of aircraft and use of emergency equipment. Teaches techniques for using

aircraft instruments such as radio and navigational aids. Tests students proficiency using written, theoretical, practical and verbal examination techniques. Makes recommendations for examining and licensing at termination of training.

Examples of occupations classified here are:-

- Instructor, flying

**373-14 Animal Trainer**

Trains animals such as horses and dogs to perform certain tasks like racing, drug detection, arresting suspects, e.t.c.

Example of occupations classified here are:-

- Break, horse
- Trainer, animal
- Trainer, dog
- Trainer, horse

**SUB-MAJOR GROUP 39: OTHER BUSINESS, SOCIAL SERVICES, ATHLETICS, SPORTS AND RELATED WORKERS**

Other business, social services, athletics/sports and related workers perform technical tasks in social work, sports, entertainment, information and religion.

The tasks include: performing social work in the community; performing in the fields of entertainment and sports; executing some religious tasks and providing information and accessing information such as news to listeners, and library services to readers.

Occupation in this sub-major group are classified into nine minor groups, namely:-

- 391 Non-ordained Religion Assistants.**
- 392 Social Advisers and Helpers**
- 393 Athletics / Sportsmen and Related Workers**
- 394 Decorators and commercial Designers**
- 395 Radio, Television and Other Announcers**
- 396 Street, Nightclub and Related Musicians, Singers and Dancers.**
- 397 Acrobats, Clowns, Magicians and Related Workers.**
- 398 Safety, Health and Quality Inspectors/Controllers**
- 399 Mechanical, Electrical, Building and Fire Inspectors**

**MINOR GROUP 391: NON-ORDAINED RELIGIOUS ASSISTANTS**

Non-ordained religious assistants undertake religious works, devote their lives to contemplative prayer or meditation and preach and propagate the teachings of their particular religion.

Skill Level: Diploma/Certificate

**391-11 Faith Healer**

Endeavours to cure human mental and physical ailments by power of faith. Advises communities and individuals on proper behaviour and faith to preserve or improve health and well-being.

Examples of occupations classified here are:-

- Healer, faith

**391-12 Islamic Teacher**

Propagates religious doctrine among Muslims in order to appeal and strengthen their religious faith. May also give religious instruction to children and teach them how to read and write.

Examples of occupations classified here are:-

- Maalim
- Teacher, Islamic

**391-13 Catechist**

Prepares programme of learning and gives religious instructions to adults and grown-up children. These instructions are mainly given by a succession of questions and answers specifically designed for this purpose.

Examples of occupations classified here are:-

- Catechist

**391-14 Missionary and Related Worker**

Ministers religion to members of his/her faith and seeks to propagate religious doctrines, conducting religious worship, administering the rites of a religious faith or denomination and providing spiritual and moral guidance to the members; propagates religious doctrines in own or foreign countries and performs other functions, such as nursing, teaching, e.t.c.

Examples of occupations classified here are:-

- Missionary
- Missionary, medical services

**391-15 Other Religious Workers**

This group includes other workers who perform various functions to assist religious in religious rites and ceremonies, and religious meetings: propagating doctrine and instructing children or other candidates for admittance to a particular faith, carrying out research and studies on theological questions, or performing other religious activities.

Examples of occupations classified here are:-

- Leader, lay/religion
- Monk
- Nun
- Preacher, lay.

**MINOR GROUP 392: SOCIAL WORKERS AND HELPERS**

Social workers and helpers provide guidance to clients in social and related matters to enable them to find and use resources to overcome difficulties and achieve particular goals.

Skill Level: Diploma/Certificate

**392-11 Social Welfare Worker (General)**

Helps individuals and families to understand and resolve their personal and social problems; interviews clients and investigates nature, extent and cause of their problems, taking account of social, economic, environmental, medical, psychological

and other potentially relevant factors.

Examples of occupations classified here are:-

- Social worker
- Social worker, enterprise
- Welfare worker

**392-12 Psychiatric Social Worker**

Provides guidance and help to mentally handicapped persons or those with psychiatric problems to obtain adequate treatment and improve their ability to function in society.

Examples of occupations classified here are:-

- Social worker, psychiatric
- Welfare worker, psychiatric

**392-13 Culture Centre Worker**

Organizes and supervises social, recreational and educational activities in youth clubs, community centres and similar organizations. Arrange for activities such as games, dances, plays, talks, discussions, debates, outings and non-academic activities.

Examples of occupations classified here are:-

- Worker, Cultural Centre

**392-14 Institutional House-Mother**

Supervises and takes care of children in a boarding school or in an institution.

Examples of occupations classified here are:-

- House-mother, institutional

**392-15 Library Assistant**

Sorts, shelves, issues and receives library items such as books, magazines, tapes and motion pictures, and maintains associated records.

Examples of occupations classified here are:-

- Assistant, library
- Assistant, library/information
- Librarian, computer tape

**392-16 Information Assistant**

Provides information on the availability and location of goods and services. Such as Answers inquiries regarding departures, arrivals, stops and destinations of vehicles in transport organisations.

Examples of occupations classified here are:-

- Assistant, information

**MINOR GROUP 393: ATHLETES,SPORTSPERSONS AND OTHER RELATED WORKERS**

Athletes, sportspersons and other related workers participate in competitive sporting events, conduct sports training and officiate at sporting events.

**393-11 Sportsperson**

Trains for events under the guidance of coaches to improve fitness, skills and mental preparation. Assesses other competitors and conditions at venues and decides on strategies in consultation with coaches. Practices regularly and participates in competitive sporting events.

Examples of occupations titles classified here are:-

- Athlete
- Boxer
- Footballer

**393-12 Sports Coach**

Coaches teams or instructs sport persons by demonstrating techniques, overseeing practice sessions and evaluating players' and athletes' physical condition. Prescribes routine and corrective exercises to strengthen muscles and improve fitness. Plans and directs game strategies, develops play patterns, analyses game progress and motivates and instructs players.

Examples of occupational titles classified here are:-

- Coach, athletics
- Coach, soccer

**393-13 Physical trainer/instructor**

Instructs sportspersons in development and maintenance of their own physical fitness. Teach and demonstrate skills, techniques and use of gymnastics.

Examples of occupational titles classified here are:-

- trainer, physical
- therapist, physical
- trainer, weight lifting

**MINOR GROUP 394: DECORATORS AND COMMERCIAL DESIGNERS**

Decorators and commercial designers apply artistic techniques to product design, interior decoration and sales promotion.

Skill level: Diploma/Certificate

**394-11 Commercial Artist**

Designs art and copy layouts of material for visual communication media such as books, magazines, newspapers, television and audio-visual presentation and advertising.

Examples of occupational titles classified here are:-

- Artist, commercial

**394-12 Decoration Designer**

Designs and paints scenery and tattoos decorative designs on client's skin.

Examples of occupational titles classified here are:-

- Designer, decoration
- Tattooist

**394-13 Interior Decoration Designer**

Creates interior decorating schemes and plans furnishings for domestic premises, public buildings, ships and other places and arranges for the decorating work to be done.

Examples of occupational titles classified here are:-

- Designer, interior

**394-14 Fashion Designer**

Designs styles of clothing and accessories, and endeavors to harmonize aesthetic considerations with technical and other requirements.

Examples of occupational titles classified here are:-

- Designer, fashion
- Designer, clothes

**394-15 Industrial Designer**

Creates designs for industrial and commercial products; harmonizing aesthetic considerations with technical and other factors influencing design of products such as furniture, textile, pottery, domestic appliances, vehicles and packaging containers.

Examples of occupational titles classified here are:-

- Designer, industrial products

**394-16 Sign Writer**

Lays out and paints letters and designs to make signs.

Examples of occupations classified here are:-

- Painter, sign
- Writer, sign

**394-17 Graphic Designer**

Creates and executes artistic effects for use in show windows and other display areas.

Examples of occupational titles classified here are:-

- Designer, graphic

**394-18 Florist**

Prepares floral arrangements and organizes storage, sale and delivery of arrangements and flowers. Exhibits floral arrangements at flower shows often in competition for prizes.

Examples of occupational titles classified here are:-

- Florist

**MINOR GROUP 395: RADIO, TELEVISION AND OTHER ANNOUNCERS**

Radio, television and other announcers read news bulletins, conduct interviews and make other announcements or introductions on radio, television or in the theatres and other establishments.

Skill Level: Diploma/Certificate

**395-11 Radio and Television Announcer/Commentator**

Broadcasts news, sports and other information on radio and television.

Examples of occupations classified here are:-

- Announcer, radio
- Commentator, television

**395-12 Compere**

Organizes entertainment events and introduces performers, speakers using public address systems or other means and hosts special events.

Examples of occupations classified here are:-

- Compere

**MINOR GROUP 396: STREET, NIGHTCLUB AND RELATED MUSICIANS**

Street, nightclub and related musicians, singers and dancers perform music, or sing or dance on the streets, in nightclubs, circuses and related places.

**396-11 Band Conductor**

Leads instrumental groups at rehearsals and performances to achieve harmony and rhythm.

Examples of occupations classified here are:-

- Conductor, band

**396-12 Instrumentalist (Except Orchestra)**

Plays one or more musical instruments as a soloist or as a member of a band to entertain audiences .

Examples of occupational titles classified here are:-

- Guitarist, band

**396-13 Singer (Vocalist)**

Sings songs to entertain audiences.

Examples of occupational titles classified here are:-

- Singer, street
- Vocalist, band

**396-14 Dancer**

Performs dance as a soloist, with a partner or as a member of a group, to entertain audiences.

Examples of occupations classified here are:-

- Dancer, night-club

**MINOR GROUP: 397 ACROBATS, CLOWNS, MAGICIANS AND RELATED WORKERS**

Acrobats, clowns, magicians and related workers entertain audiences in circuses and other

places by performing a variety acts.

**397-11 Acrobat**

Performs difficult, spectacular and unusual physical acts with skill. Performs other gymnastic or juggling feats usually for the purpose of entertainment.

Examples of occupations classified here are:-

- Acrobat
- Artist, circus

**397-12 Aerialist**

Performs spectacular swings on cross-bars suspended by ropes usually to entertain the audience. May walk on ropes performing a balancing act at shows, theatres or public entertainment places.

Examples of occupations classified here are:-

- Aerialist

**397-13 Clown**

Tells comical jokes and humorous stories especially in pantomime or circus usually with traditional costume and make-up to entertain the audience.

Examples of occupations classified here are:-

- Clown

**397-14 Magician**

Performs magical tricks, antics and hypnotism to entertain the public on the streets or in clubs for a fee.

Examples of occupational titles classified here are:-

- Magician

**MINOR GROUP 398: SAFETY, HEALTH AND QUALITY INSPECTORS/ CONTROLLERS**

Safety, health and quality inspectors/controllers inspect places of work for occupational safety, ensure compliance with health and environmental protection rules and regulations as well as with the quality standards specifications of manufacturers.

Skill Level: Diploma/Certificate

**398-11 Meat Inspector/Grader**

Examines carcasses or specimens of meat to detect and identify diseases and other damages and rejects those of sub-standard quality. Checks meat during processing to establish quality, size and grade of the product. Designates grading of meat and records details of assessment according to established classification system. Ensures that required standards of hygiene are observed at storage, processing and packing facilities and in transport vehicles.

Examples of occupational titles classified here are:-

- Grader, Meat
- Inspector, Meat

**398-12 Occupational Health and Safety Inspector**

Carries out regular and systematic inspection of work places for compliance of safety required standards. Advises employers on machinery safety, electrical safety and works of engineering and construction safety. Monitors the causes of environment pollutants. Develops and determines the permissible levels of exposure to environmental contaminants. May prosecute those who contravene the law.

Examples of occupational titles classified here are:-

- Inspector, Occupational Safety and Health

**398-13 Consumer Products Health and Safety Inspector**

Inspects areas of production, processing, transport, handling, storage and sale of products to ensure conformity with government and other rules, regulations and standards. Advises enterprises and the general public on the implementation of government and other rules and regulations concerning hygiene, sanitation, purity and grading of primary products, food, drugs, cosmetics and similar goods.

Examples of occupational titles classified here are:-

- Inspector, Consumer Products Health and Safety.

**398-14 Consumer Products Quality Inspector/Controller**

Inspects finished products or parts for conformity with manufactures specifications and standards.

Examples of occupational titles classified here are:-

- Inspector, Quality Consumer Products

**398-15 Pollution Safety and Health Inspector**

Inspects establishments to ensure that they conform to government and other rules and regulations concerning emission of pollutants and disposal of dangerous wastes.

Examples of occupational titles classified here are:-

- Inspector, pollution safety and health.

**MINOR GROUP 399: MECHANICAL, ELECTRICAL, BUILDING AND FIRE INSPECTORS**

Inspects and tests machinery and related mechanical equipment for finish, mechanical operation and conformance to manufacturer's standards. Checks equipment and parts against technical specification, inspect new and existing houses, industrial plant and other buildings and structures to ensure compliance with building grading and zoning laws, and approved plans, specifications and standards, inspect fire prevention systems and investigate fire sites.

Skill Level: Diploma/Certificate

**399-11 Building Inspector**

Advises those erecting buildings and other structures on the implementation of building, grading and zoning laws. Inspects buildings and structures during and after construction to ensure compliance with building, grading and zoning and safety laws and approved plans specifications and standards. Checks existing buildings and structures to determine whether lack of proper maintenance, housing violations or hazardous conditions exist.

Examples of occupational titles classified here are:-

- Inspector, Building

**399-12 Mechanical Products Inspector**

Inspects and tests machinery and related mechanical equipment for finish, mechanical operation and conformance to manufacturer's standards. Checks equipment and parts against technical specification, tests devices and observes mechanical operation of machinery and parts.

Examples of occupational titles classified here are:-

- Inspector, Mechanical Products

**399-13 Electrical and Electronic Products Inspector**

Inspects and tests electrical and electronic equipment for conformance to the manufacturer's standards. Checks equipment and parts according to technical specification.

Examples of occupational titles classified here are:-

- Inspector, electrical and electronic equipment

**399-14 Fire Inspector**

Inspects industrial plant, hotels, cinemas and other buildings and structures to detect fire hazards and advice on their removal. Advise on the installation of fire detectors and sprinkler systems and use of materials in the construction of buildings, and means of transportation to reduce risk. Investigates fire sites to determine cause of fire.

Examples of occupational titles classified here are:-

- Inspector, Fire

**399-15 Fire Prevention Specialist**

Inspects fire extinguishing and fire protection equipment at regular intervals; inspects work and storage areas, investigates practices which are likely to cause fires.

Examples of occupational titles classified here are:-

- Specialist, Fire Prevention

## **MAJOR GROUP 4 SECRETARIAL, CLERICAL SERVICES AND RELATED WORKERS**

Secretarial, clerical services and related workers require the knowledge and experience necessary to record, organize, store and retrieve information. It further involves the computation of numerical, financial and statistical data and a number of client-oriented clerical duties. It also involves money-handling operations, travel management, business information, appointments and secretarial duties. Most occupations in this major group require skills at the 3<sup>rd</sup> KNOCS skill level.

The tasks usually include: carrying out secretarial duties, stenography, typing; operating word processors and other office machines; data entry; compiling numerical data; keeping records relating to stocks, production and transport; passenger and freight transport; carrying out clerical duties in libraries; filing documents; carrying out duties in connection with mail services; preparing and checking material for printing; correspondence handling; performing money-handling operations; supplying information to clients and making appointments; operating a telephone switchboard.

Occupations in this major group are classified into two sub-major groups, namely:-

**41 Secretaries and Office Clerks**

**42 Client Oriented Clerks**

**SUB-MAJOR GROUP 41: SECRETARIES AND OFFICE CLERKS**

Secretaries and office clerks record, organise, store and retrieve information related to the work in question and compute financial, statistical and other numerical data. The tasks usually include: carrying out secretarial duties; stenography and typing; operating word-processors or data entry, calculating, and similar office machines; recording and computing accounting, book-keeping, statistical, financial (including non-client oriented money-handling) and other numerical data; keeping records of production schedules, level of stocks and timely delivery of goods; keeping records of operational aspects and co-ordinating the timing of passenger and freight transport; carrying out clerical duties in libraries; filing documents; carrying out duties in connection with mail services; preparing and checking material for printing and correspondence handling

Occupations in this sub-major group are classified into seven minor groups, namely:-

**411 Secretaries, Stenographers and Typists**

**412 Office Machine Operators**

**413 Numerical Clerks**

**414 Material Recording and Transport Clerks**

**415 Library, Mail and Related Clerks**

**416 Coding, Proof-reading and Related Clerks**

**417 General Office Clerks**

**MINOR GROUP 411: SECRETARIES, STENOGRAPHERS AND TYPISTS**

Secretaries, stenographers and typists use typewriters or word processing equipment to check and transcribe correspondence and other documents and to record oral or written matter to produce documents. They deal with incoming and outgoing mail, screen leave requests for meeting or appointments and screen leave, organise and supervise filing systems, and deal with routine correspondence on their own initiative.

Skill Level: Diploma/Certificate

**411-11 Secretary**

Assists managers or other executives by performing clerical, secretarial and other administrative tasks, by keeping executive's personal appointment books and making appointments and travel arrangements. Takes and transcribes dictation of letters and other documents, using dictation equipment, typewriters or word processors. Receives, ascertain nature of business and directs visitors to appropriate persons.

Examples of occupations titles here are:-

- Secretary
- Secretary, executive
- Secretary, personal

**411-12 Stenographer**

Records various kinds of dictated or other matter in shorthand and makes a transcription in typewritten form. Records in shorthand, dictated matter; types matters from shorthand notes, written drafts; recording on dictating machines or other

sources and cuts stencils. Proof reads work for typographical and grammatical errors.

Examples of occupations titles here are:-

- Stenographer
- Typist, shorthand

**411-13 Typist**

Transcribes in typewritten form letters, reports, documents, accounts and other material from written or printed sources, from recording on a dictating machine or other sources; types letters, memoranda and similar matters from written drafts or recordings; types statistical information after determining layout in accordance with instructions or using own judgement; types on forms, bills, invoices, insurance policies or other documents, cuts stencils, and checks type-written work for correctness. Assists in other office tasks such as answering telephones, receiving clients, photocopying, filing and other routine clerical tasks.

Examples of occupations classified here are:-

- Typist
- Typist, copy

**MINOR GROUP 412: OFFICE MACHINE OPERATORS**

Office machine operators type, edit and print various documents using word processing equipment, or send and receive messages and facsimiles by means of a teleprinter, telefax or similar machines.

Skill Level: Form IV

**412-10 Office Machine Operator**

Operates electrical and manual machines to perform calculations, records financial Transactions transcribes data into computer, sending and receiving messages and reproduction of documents.

Examples of occupational titles classified here are:

- Operator: photocopier
- Operator: teleprinter
- Operator: cyclo-styling machine

**MINOR GROUP 413: NUMERICAL CLERKS**

Their duties include book keeping and accounting and computation of wages and costs. They compile and compute statistical data or perform clerical tasks related to their duties.

Skill Level: Form IV

**413-11 Accounts Clerk**

Their duties involve daily accounts and book keeping transactions which include cash, sales, and other related documents.

Examples of occupational titles classified here are:-

- Clerk, accounts
- Clerk, book-keeping
- Clerk, finance

**413-12 Wages Clerk**

Computes wages and salaries due from time sheets and other records, and pays wages and salaries. Arranges for deductions to be forwarded to taxation department and other institutions and maintains records of overtime, absenteeism and other variations in working arrangements.

Examples of occupational classified here are:-

- Clerk, payroll
- Clerk, salaries
- Clerk, wages

**413-13 Statistical Clerk**

Compiles statistics from source materials such as records of production, sales, expense invoices, debit notes, bank records, time-sheets, survey sheets and data from industry associations and government statistical bureaux. Verifies the authenticity of source material and calculates totals, averages, percentages and other parameters and presents them in the required form. Draws and maintains graphs and charts.

Examples of occupational titles classified here are:-

- Clerk, statistical
- Enumerator, field

**413-14 Finance Clerk**

Calculates and analyses cost items, working from records such as time and production sheets and payrolls. Calculates standard costs and values from purchase invoices and shipping files and prepares journal entries. Maintains records of inventory transfers, surpluses or scrap materials, salvage and rejections and assists in the preparation of actual cost computations.

Examples of occupations classified here are:-

- Clerk, cost computing
- Clerk, finance

**413-15 Bank Clerk**

Maintains records of all financial transactions of the bank with guidance from bank accountants. Verifies accuracy of documents and records relating to payments, receipts and other financial transactions.

Examples of occupations classified here are:-

- Clerk, bank

**413-16 Audit Clerk**

Verifies invoices, cheques, payment advises and similar documentation related to accounts payable and accounts receivable. Reports variations between invoice amounts and payments received and verifies the accuracy of figures and calculations and certifies entries.

Examples of occupations classified here are:-

- Clerk, audit

**413-17 Meter Reader**

Observes and records meter readings. Notes any suspected malfunction or misuse by the consumer and makes reports to concerned authorities.

Examples of occupational titles classified here are:-

- Meter reader, electricity
- Meter reader, water

**413-99 Other Numerical Clerks**

These include those who perform actuarial computations and compile charts and graphs for actuarial work.

Examples of occupational titles classified here are:-

- Clerk, actuarial

**MINOR GROUP 414: MATERIAL RECORDING AND TRANSPORT CLERKS**

Material recording and transport clerks maintain records of goods produced and production materials received, weighed, issued, dispatched or put into stock, compute quantities of materials required at specified dates for the production program and prepare and check production operation schedules, keep records of operational aspects and co-ordinate the timing of train, road and air passenger and freight transport, and prepare reports for management.

Skill Level: Form IV

**414-11 Stock Clerk**

Maintains stock records of an establishment, verifies, issues, estimates needs and requisitions for new stocks; examines articles for conformity with specifications; fills orders or issues supplies from stock and prepares inventories. May examine production, sales or other records and estimates future needs including costs of requisition or value of stores.

Examples of occupational titles classified here are:-

- Clerk, stock
- Clerk, store
- Keeper, stock records
- Store-keeper
- Storeman

**414-12 Production Clerk**

Compute quantities of materials required for the production programme; assists in the preparation of production operation schedules on the basis of customer's orders and production capacity and performance; checks consignments of goods received or dispatched to ensure that articles are in good condition and correspond to invoices, manifestos or other records

Examples of occupational titles classified here are:-

- Clerk, production
- Clerk, production dispatching
- Clerk, production planning
- Clerk, production receiving

**414-13 Transport Clerk**

Keeps records of operational aspects and co-ordinates the timing of train, road and air

passenger and freight transport; checks passenger lists and documents of goods received or dispatched; checks passenger tickets to ensure that correct fares have been paid; co-ordinates allocation of vehicles and drivers according to operating requirements, loading and unloading of vehicles, storage of goods in transit, provision of terminal facilities and other operational work.

Examples of occupational titles classified here are:-

- Clerk, air transport services
- Clerk, freight
- Clerk, railway transport services
- Clerk, road transport services
- Clerk, traffic
- Clerk, transport
- Dispatcher, boat
- Dispatcher, bus
- Dispatcher, lorry/van
- Dispatcher, train

#### **414-14 Clearing and Forwarding Clerk**

Examines manifests and bills of lading to ascertain cargo to be released. Records details of shipment and clearance requirements, computes, storage and clearance charges and bills customers. Ascertains details of outgoing cargo, arranges booking of freight space and informs clients of bookings, and arranges for collection of goods. Prepares bills of lading and entries in manifests and forwards documentation to customers and authorizes collection of cargo. Maintains clerical records, computes payments due and arranges for clearance of goods from customs or bonded warehouses.

Example of occupational title classified here is:-

- Clerk, clearing and forwarding

#### **414-99 Material recording and Transport Clerks n.e.c.**

This group includes those who weigh goods received, issued, produced or dispatched and maintain relevant clerical records.

Example of Occupational title classified here is:-

- Clerk, weighing

### **MINOR GROUP 415: LIBRARY, MAIL AND RELATED CLERKS**

Library, mail and related clerks maintain library services or perform duties related to the filing and classification of records. Perform sorting, recording, delivery and other duties in connection with mail services from post offices or related organisations, as well as from within an establishment, and perform a number of miscellaneous clerical duties; write letters and complete forms on behalf of illiterate persons.

Skill Level: Form IV

#### **415-11 Library Assistant/Clerk**

Issues items from library collections to borrowers and records identification data and due dates. Sorts material according to identification numbers and places articles in designated storage areas. Reviews records to compile lists of overdue items and issues overdue notices to borrowers. Inspects returned items for damage, verifies dates, and

determines and receives fines levied on overdue items. Locates, retrieves, prepares and issues material to users.

Examples of job titles classified here are:-

- Attendant, library
- Clerk, library

**415-12 Registry Clerk**

Sorts material such as cards, correspondence, invoices, receipts and maps according to established procedures and classified systems and keeps registers of materials to be filed, distributed or retained. Classifies and numbers documents, and assigns codes to previously unclassified documents. Keeps records of material removed or returned. Controls access to important or confidential documents to ensure limited circulation.

Examples of occupational titles classified here are:-

- Clerk, filing

**415-13 Mail Sorting Clerk**

Performs sorting, delivery and other duties in connection with mail services from post offices or related organisations, as well as from within an establishment. Assists in the verification of registered and special articles. Segregates and distributes mail into categories and according to destinations. Operates mail processing equipment such as letter preparation lines, letter indexing and sorting equipment and postmarking machine. Checks and reroutes insufficiently addressed mail.

Examples of occupational titles classified here are:-

- Clerk, mail dispatch
- Clerk, mail sorting
- Postman
- Post woman

**MINOR GROUP 416: CODING, PROOF-READING AND RELATED CLERKS**

Coding, proof-reading and related clerks code information mark forms with identification numbers, verify and correct data.

Skill Level: Form IV

**416-11 Coding Clerk**

Codes information for data-processing purposes; sorts forms and marks them with identification numbers.

Examples of Occupations titles classified here are:-

- Clerk, coding

**416-12 Proof-reading Clerk**

Verifies and corrects proofs. Performs routine checking duties to ensure accuracy of recorded data, compares figures on one record against the same data on other records; corrects or records omissions, errors or inconsistencies found.

Examples of occupations titles classified here are:-

- Clerk, data control

- Clerk, proof-reading

### **MINOR GROUP 417: GENERAL OFFICE CLERKS**

General office clerks perform a wide range of general clerical duties mostly connected with keeping of various office records.

Skill Level: Form IV

#### **417-10 General Office Clerk**

Performs a variety of clerical tasks, depending on the nature and size of office in which employed. Examines incoming mails referred to him for attention and assembles information needed for preparation of reply; prepares and sends replies to correspondence received and initiates other routine correspondence; collects sales records and gives instructions for preparation of invoices and other documents in connection with sales and deliveries.

Examples of occupational titles classified here are:-

- Clerk
- Clerical officer (general)

### **SUB-MAJOR GROUP 42: CLIENT ORIENTED CLERKS**

Client oriented clerks deal directly with clients in connection with money-handling operations, travel arrangements, requests for information, appointments, and by operating telephone switchboards.

The tasks usually include; performing money-handling operations in banks, post-offices, betting and gambling establishments, or payments for goods and services bought or pledged; dealing with travel arrangements; supplying information requested by clients and making appointments; operating a telephone switchboard. Supervision of other workers may be included.

Occupations in this sub-major group are classified into three minor groups, namely:-

**421 Cashiers, Tellers and Related Clerks**

**422 Information Clerks**

**423 Other Client Oriented Clerks**

**424 Legal and Related Clerks**

#### **Legal and related Clerks**

Legal and related associate professionals perform support functions in courts of law or in law offices, provide services related to such legal matters as insurance contracts, the transferring of property and the granting of loans and other financial transactions or conduct investigations for clients.

#### **424-10 Court Clerk**

Carries out tasks of documenting court proceedings and judgements; serving statements of claims, summonses, warrants, subpoenas and other court orders; maintaining order in court and hearing rooms; preparing legal documents including trial briefs, pleadings, appeals, wills and contracts and preparing, papers summarising

legal positions, or setting out conditions of loans or insurance; investigating facts, assembling evidence and researching relevant statutes, decisions and other legal documents to prepare cases; advising clients on legal matters; examining documentation such as mortgages, liens, judgements, easements, contracts and maps in order to verify properties' legal descriptions and ownership; preparing documents relating to transfer of real estate, stocks or other matters requiring formal registration; investigating possible cases of theft of goods, money or information from business establishments and of other possible cases of unlawful behaviour by customers or employees; investigating establishments or the circumstances and behaviour of persons on behalf of clients.

Examples of the occupations classified here:

- Bailiff
- Judge's clerk
- Conveyancing clerk
- Justice of the peace
- Law clerk
- Legal assistant
- Paralegal
- Private detective

#### **MINOR GROUP 421: CASHIERS, TELLERS AND RELATED CLERKS**

Cashiers, tellers and related clerks collect payments for goods or services brought into establishments such as stores and ticket offices, or they pay out cash in banks and related organisations; deal directly with clients of banks or post offices in connection with receiving and paying out money, or providing mail services. Determine odds and receive and pay off on results of sporting or other events, or conduct games of chance in gambling establishments. Lend money against articles deposited as pledges or against property or other security.

Skill Level: Form IV

##### **421-11 Cashier**

Makes payments, including wages, to establishment personnel against written orders. Receives payments from customers or clients and makes payments to customers or clients. Counts and records money paid out or received and checks the amounts against the relevant documents. Arranges and conducts banking, cashes authorised cheques and prepares petty cash disbursements. Pays out and receives cash. May receive and issue receipts for unutilised funds.

Examples of occupations titles classified here are:-

- Cashier, bank
- Cashier, store

##### **421-12 Teller**

Receives and pays out money at counters; keeps records of transactions, issues receipts and encashes cheques.

Examples of occupations classified here are:-

- Clerk, post office counter
- Teller, bank.

**421-13 Money Changer**

Changes money from one currency to another on behalf of and as requested by clients.

Examples of occupations classified here are:-

- Changer, money

**421-14 Ticket Seller**

Sells tickets for sporting or entertainment , travel, lotteries or betting and maintains records of transactions made. Makes reservations.

Examples of occupations classified here are:-

- Clerk, ticket
- Seller, ticket

**421-15 Bookmaker**

Determines and offers odds, accepts bets on the results of events and pays off bets.

Example of occupational title classified here is:-

- Bookmaker

**421-16 Croupier**

Conducts games of chance in gambling establishments. Distributes cards, rolls dice or spins roulette wheel. Collects and pays money or chips at gaming tables, calls games and deals cards in gambling casinos.

Examples of occupational titles classified here are:-

- Croupier

**421-17 Debt Collector**

Collects payments for overdue accounts, instalments, damage claims or dishonoured cheques. Performs clerical duties associated with the collections.

Examples of occupations titles classified here are:-

- Collector, debt.

**MINOR GROUP 422: INFORMATION CLERKS**

Information clerks supply information, arrange travel itineraries and obtain necessary reservations. Receive clients or patients; provide information and make appointments on behalf of various establishments, including hospitals, medical or dental surgeries. Operate a telephone switchboard or a section thereof, and deal with local or long distance calls, and handles various telephone inquiries.

Skill Level: Form IV

**422-11 Travel Agency Clerk/Information Clerk**

Advises customers on itineraries and method of travel and makes the necessary reservations. Obtains visas if necessary and prepares bills and receives payment.

Examples of occupations classified here are:-

- Clerk, ticket issuing/travel
- Clerk, travel/airlines
- Clerk, travel agency

**422-12 Receptionist**

Receives visitors, ascertains their wants and directs them accordingly, deals with telephone calls and keeps records of callers. Provides Information on goods and services and may distribute standard forms and information pamphlets.

Examples of occupations titles classified here are:-

- Clerk, information
- Receptionist

**422-13 Telephone Switchboard Operator**

Operates a telephone switchboard or section thereof dealing with calls; monitors switchboards for incoming calls, make contact with caller and persons called

Example of occupational title classified here is:-

- Switchboard-operator, telephone

## **MAJOR GROUP 5 SERVICE WORKERS , SHOP AND MARKET SALES WORKERS**

This group covers occupations mainly concerned with performing services related to the knowledge and experience necessary to provide the everyday needs of families and other groups of individuals. The tasks include protective service, personal services related to travel, housekeeping, catering and personal care. It also includes those tasks which involve selling goods in shops, demonstration of goods and modelling. Most occupations in this major group require skills at the 3<sup>rd</sup> KNOCS skill level.

The tasks include posing as models for advertising, artistic creation and display of goods; selling goods in wholesale or retail establishments, as well as at stalls and on markets; demonstrating goods to potential customers; personal care such as hairdressing or beauty treatment; embalming; funeral arrangements; astrology, fortune-telling and traditional divining; law and order, fire fighting and housekeeping; preparation and serving of food; organisation and provision of services during travel; companionship.

Occupations in this major group are classified into three sub-major groups, namely:-

- 51 Models, Shop Assistants and Demonstrators**
- 52 Personal and Protective Service Workers**
- 53 House Stewards, Caterers, Waiters and Related Workers**
- 54 Travel attendants and Guides**

### **SUB-MAJOR GROUP 51: MODELS, SHOP ASSISTANTS AND DEMONSTRATORS**

Models, shop assistants and demonstrators pose as models for artistic creation and display, or demonstrate and sell goods in wholesale or retail shops and similar establishments, as well as at stalls and on markets.

The tasks include posing as models for advertising, artistic creation and display of goods; selling goods in wholesale or retail establishments, or at stalls usually placed at particular places and on markets; demonstrating goods to potential customers.

Occupations in this sub-major group are classified into two minor groups, namely:-

**511 Fashion and Other Models**

**512 Shop Assistants and Demonstrators**

**MINOR GROUP 511: FASHION AND OTHER MODELS**

Fashion and other models wear and display clothing and other items of new or current styles for sale to customers or pose as models for advertising or for artistic creation.

Skill Level: Form IV

**511-10 Fashion and Other Model**

Dresses in sample apparel of new or current styles or of types wanted by customer, walks, turns and otherwise demonstrates style and other characteristics to best advantage. Poses as model for advertising or for artistic creation.

Examples of occupational titles classified here are:-

- Model, advertising
- Model, fashion

**MINOR GROUP 512: SHOP ASSISTANTS AND DEMONSTRATORS**

Shop assistants and demonstrators exhibit, demonstrate and sell goods in wholesale establishments to retailers and large-scale consumers or to customers in retail establishments.

Skill Level: Form IV

**512-11 Shop Assistant**

Sells and demonstrates goods in wholesale and retail establishments, wholesalers, or retailers showrooms; explains qualities and functions of goods; performs other tasks related to the foregoing.

Examples of occupational titles classified here are:-

- Assistant, shop
- Demonstrator, shop

**512-12 Fuel Station Pump Attendant (Petroleum)**

Sells fuel, lubricants and other automotive accessories, and performs minor maintenance on motor vehicles at retail service stations.

Examples of occupational titles classified here are:-

- Attendant, /fuel pump

**512-13 Stall Assistant**

Sells household goods, foodstuffs and other related items at stalls or kiosks. Keeps records of transactions including accounts.

Examples of occupational titles classified here are:-

- Assistant, kiosk
- Assistant, market stall

## **SUB-MAJOR GROUP 52: PERSONAL AND PROTECTIVE SERVICES WORKERS**

Personal and protective service workers provide services related to travel, housekeeping, catering, personal care or protection against fire and unlawful acts.

The tasks include hairdressing or beauty treatment; embalming; funeral arrangements; astrology, fortune-telling and traditional divining; law and order and fire fighting.

Occupations in this sub-major group are classified into three minor groups, namely:-

### **521 Hairdressers, Barbers, Beauticians and Related Workers**

### **522 Undertakers and Embalmers**

### **523 Fortune Tellers, Astrologers and Related Workers**

### **524 Protective Service Workers**

## **MINOR GROUP 521: HAIRDRESSERS, BARBERS, BEAUTICIANS AND RELATED WORKERS**

Hairdressers, barbers, beauticians and related workers cut and dress hair, shave and trim beards, give beauty treatment, apply cosmetics and make-up and other kinds of treatment to individuals in order to improve their appearance

Skill Level: Form IV Certificate or Diploma with experience

### **521-11 Hairdresser**

Advises customers on hair styles. Shampoos and rinses hair, and provides other treatments such as dyeing, tinting, streaking, permanent waving or scalp treatment. Styles or straightens hair using brushes, combs, rollers, clips, curling irons and dryers.

May perform facial and scalp massages, manicures and tint eyelashes and eyebrows. Cuts and dresses hair, applies cosmetics and make-up and gives other kinds of personal appearance treatment. Their functions include: cutting, washing and dressing hair and performing other personal services incidental to hairdressing, shaving, trimming beards and giving other related treatment.

Examples of occupational titles classified here are:-

- Barber
- Hairdresser
- Hair stylist

### **521-12 Beautician**

Selects treatment in consultation with clients. Cleans skin applies creams, lotions and related products to face and parts of body. Uses appliances, lamps and cosmetic masks to treat skin and body, gives facial massages, tints and bleaches facial and body hair and may pluck eyebrows and apply false eyelashes. May advise clients on further treatment, exercise programs or nutrition.

Examples of occupational titles classified here are:-

- Beautician

**521-13 Manicurist**

Cleans, shapes and polishes finger and toe-nails and treats minor ailments of the human foot such as corns, calluses, or deformed toe-nails.

Examples of occupations classified here are:-

- Manicurist

**521-14 Masseur**

Massages clients and administers body treatments for beauty or fitness purposes.

Examples of occupational titles classified here are:-

- Masseur

**MINOR GROUP 522: UNDERTAKERS AND EMBALMERS**

Undertakers and embalmers make arrangements for and conduct funerals, cremations and burials, embalm human bodies to retard or arrest the process of decay.

Skill Level: Experience

**522-11 Undertaker**

Coordinates, supervises and advises funeral workers on funeral arrangements, including selection of coffins, types of service and publication of press notices. Collects bodies from morgues and ensures death certificates have been issued, burial and cremation certificates processed and liaises with clergy, and cemetery and crematorium officials. May arrange the construction of memorials or the disposal of ashes.

Examples of occupational titles classified here are:-

- Attendant, cemetery
- Undertaker

**522-12 Embalmer**

Embalms human bodies to retard or arrest the process of decay by using spices or chemicals. Prepares bodies for viewing and burial, by washing, draining body fluids, sewing lips and incisions, applying padding and cosmetics, dressing bodies and placing them in coffins.

Examples of occupational titles classified here are:-

- Attendant, mortuary
- Embalmer

**MINOR GROUP 523: FORTUNE TELLERS, ASTROLOGERS AND RELATED WORKERS**

Fortune tellers, astrologers and related workers predict future events in people's lives by practising astrology or by other techniques and give warnings and advise on possible courses of action

Skill Level: Experience/Super Natural Power

**523-11 Fortune Teller**

Interprets characteristics of clients palms, samples of playing cards, position of tea leaves or coffee remnants in a cup, shapes and patterns of bones of dead animals, and

many other observations and gives interpretations. Forecasts events on the basis of these interpretations and gives warnings and advice on possible courses of action.

Examples of occupations classified here are:-

- Palmist
- Seer
- Teller, fortune

**523-12 Astrologer**

Predicts future events in a person's life by studying the positions of stars and gives warnings and advice on possible courses of action.

Examples of occupational titles classified here are:-

- Astrologer

**523-13 Oracle**

Uses traditional knowledge to explain events including sickness in a client's life. May administer or prescribe concoctions meant to exorcise spirits or otherwise gives advice on possible courses of action.

Examples of occupations classified here are:-

- Oracle
- Sorcerer/sorceress
- Witch-doctor

**MINOR GROUP 524: PROTECTIVE SERVICE WORKERS**

Protective service workers protect individuals and property against fire and other hazards, maintain law and order and enforce laws and regulations.

Skill Level: Post school/Certificate

**524-11 Police officer**

Maintains law and order, protects persons and property from hazards and unlawful acts and arrests persons for contravention of the law. Familiarises him/herself with areas and persons living in it and notes suspicious persons and establishments, performs services such as patrolling assigned areas, directing traffic, assuming authority in cases of accidents, rendering first aid and making necessary investigations; and provides information of a general nature, keeps records, makes reports of activities and gives evidence in courts.

Examples of occupational titles classified here are:-

- Constable, police
- Inspector, police
- Reserve, police

**524-12 Prison Warder**

Takes care of inmates in jail, and maintains discipline; searches prisoners and locks them in to cells. Makes periodic inspection tours of cells, supervises prisoners and Patrols prison areas to prevent escape.

Examples of occupational titles classified here are:-

- Chief officer, prison
- Warder, prison

**524-13 Customs Preventive Guard**

Provides security to goods crossing national borders; ensures that government rules and regulations in regard to goods entering and leaving the country have been followed. Patrols national borders and coastal waters to stop goods from illegally entering or leaving the country and from illegally importing and exporting currency .

Examples of occupational titles classified here are:-

- Guard, preventive/customs

**524-14 Fire Fighter (General)**

Fights fires as a member of fire-fighting body, rescues the trapped and administers artificial respiration to those overcome by heat or smoke and, performs other services during emergency, using specialized equipments where necessary.

Examples of occupational titles classified here are:-

- Fighter, fire

**524-15 Security Officer**

In charge of property or parts of establishment such as industrial plants, banks or museums to prevent theft, violence, infractions of rules or other irregularities. May patrol areas and keep watch for suspicious persons or activities and take action to prevent violence or disturbances. Normally is in charge of security guards who perform the routine work of guarding the establishments.

Examples of occupational titles classified here are:-

- Security guard
- Security officer, bank

**524-16 Local Authority Askari**

Ensures that the council's by-laws are obeyed, prevents unauthorised trading within the council's boundaries, orders wrongly parked vehicles to be towed away and charges motorists for parking violations including non-payment of parking fees.

Examples of occupations classified here are:-

- Askari, council

**524-99 Protective Service Workers n.e.c**

The group includes those who keep watch in a central installation, equipment to receive automatic alarm; maintains order in courtrooms, patrols beaches and swimming pools to prevent accidents and to rescue bathers from drowning; performs various underwater tasks generally connected with salvage work or recovering dead bodies; investigates fire sites to determine cause of fire and accompanies persons and goods to prevent harm or loss.

Examples of occupations classified here are:-

- Escort, Security
- Guard , body
- Orderly, court
- Prevention worker, safety and accident

### **SUB-MAJOR GROUP 53: HOUSE STEWARDS, CATERERS, WAITERS AND RELATED WORKERS**

House stewards, caterers, waiters and related workers provide services related to housekeeping and catering.

The tasks include housekeeping; taking care of general welfare and suitable conduct of individuals in institutions; controlling the purchase, storage and issue of supplies; preparing and cooking foodstuffs; serving food and beverages.

Occupations in this sub-major group are classified into three minor groups, namely:-

#### **531 House Stewards and Housekeepers**

#### **532 Cooks and Other Catering Service Workers**

#### **533 Waiters and Bartenders**

### **MINOR GROUP 531: HOUSE STEWARDS AND HOUSEKEEPERS**

House stewards and housekeepers organise, supervise and carry out housekeeping functions in commercial establishments, institutions or private households or control and arrange for the purchase and issue of supplies in commercial establishments, institutions or private households.

Skill Level: Form IV

#### **531-11 House Steward**

Controls and arranges for the supply, storage and use of food and drink, cleaning supplies, linen, food and beverages making facilities and cleaning equipment in hotels, clubs, boarding schools or similar establishments and in private households.

Examples of occupational titles classified here are:-

- Steward, house
- Steward, room

#### **531-12 Housekeeper**

Organises, supervises and carries out housekeeping functions in hotels, motels, lodging houses, clubs, boarding schools and other enterprises and institutions and in private households.

Examples of occupational titles classified here are:-

- Housekeeper

#### **531-13 Matron (Non-Medical Institution)**

Engages, trains, organises and supervises workers employed as domestic staff in schools or similar institutions. Supervises general welfare and conduct of individuals in institutions and assists in cases of minor injuries or illnesses by performing tasks such as putting on bandages and giving medicines.

Examples of occupational titles classified here are:-

- Matron, college
- Matron, hotel
- Matron, school

### **MINOR GROUP 532: COOKS AND OTHER CATERING SERVICE WORKERS**

Cooks and other catering service workers plan, prepare and cook foodstuffs in hotels, restaurants and other public eating places, or board ships, on passenger trains and in private households.

Skill Level: Form IV

#### **532-10 Cook**

Plans, organises, prepares and cooks foodstuffs in hotels, restaurants and other public eating places, on board ships, on passenger trains and in private households.

Examples of occupational titles classified here are:-

- Cook
- Cook, head

### **MINOR GROUP 533: WAITERS AND BARTENDERS**

Waiters and bartenders serve food and beverages in commercially operated dining and drinking places, clubs, hotels, restaurants, institutions and canteens, on board ships and on passenger trains.

Skill Level: Form IV

#### **533-11 Waiter/Waitress**

Serves food and beverages to patrons in hotels, restaurants, clubs and similar commercially-operated establishments. Presents menus to patrons and suggests dishes, answers questions regarding service, food preparation and takes orders and relays them to kitchen staff. Ensures delivery of meals at appropriate times. Presents bills to patrons and gets payment.

Examples of occupational titles classified here are:-

- Waiter/Waitress
- Waiter/Waitress, hotel

#### **533-12 Bartender**

Organises cocktails, sells alcoholic and non-alcoholic drinks in licensed dining and drinking places, clubs, institutions and canteens, on board ships or on passenger trains. Washes glassware, arranges bottles and glasses on shelves or benches and cleans and maintains bar service area.

Examples of occupations classified here are:-

- Barmaid
- Barman
- Bartender

### **SUB-MAJOR GROUP 54: TRAVEL ATTENDANTS AND GUIDES**

Travel attendants and guides provide services in connection with travelling by aircraft, ships, train, bus or other vehicle, and escorting individuals and groups on travel tours, sightseeing visits and excursions.

The tasks include ensuring the comfort and safety of passengers; serving food and refreshments; providing necessary or requested information and answering various questions in connection with the journey; collecting or issuing tickets on board public transport;

accompanying individuals or groups on sightseeing tours or excursions and describing points of interest; providing other guide services.

Occupations in this sub-major group are classified into three minor groups, namely:-

**541 Ship and Flight Attendants and Travel Stewards**

**542 Transport Conductors**

**543 Travel Guides and Ground Attendants**

**MINOR GROUP 541: SHIP AND FLIGHT ATTENDANTS AND TRAVEL STEWARDS**

Ship and flight attendants and Travel stewards render personal services to ensure the comfort and safety of passengers, serve meals and beverages, or plan and coordinate housekeeping and social activities on ships

Skill Level: Form IV

**541-11 Ship Steward**

Takes care of general needs and comfort of passengers, including cleaning cabins, lounges, alleyways and other public areas. Provides room service for passengers and crew, and supplies linen and towels, and makes passengers' beds.

Examples of occupations classified here are:-

- Steward, chief/ship's
- Steward, ship's

**541-12 Aircraft Cabin Attendant**

Renders personal services to ensure the comfort and safety of aircraft passengers, receives passengers and conducts them to assigned seats, ensures that passenger seat belts are fastened and "No smoking" sign is obeyed before take-off and landing, distributes reading materials, answers to questions about aircraft, its schedules and route and points out places of interest. Ensures pre-prepared meals and beverages are on board and serves them, keeps cabin tidy and stores equipment securely, observes passengers to detect signs of discomfort, administers minor medical aid as necessary and renders any other service contributing to passengers' comfort.

Examples of occupational titles classified here are:-

- Attendant, aircraft cabin
- Hostess, aircraft cabin

**541-13 Sleeping Car Attendant (Train)**

Attends to and takes care of sleeping-car on a passenger train, including distributing linen, blankets and similar items. Serves meals and beverages to passengers and provides information and assistance to passengers inquiries.

Examples of occupational titles classified here are:-

- Attendant, sleeping-car/train

**MINOR GROUP 542: TRANSPORT CONDUCTORS**

Transport Conductors collect fares, issue tickets and take care of safety and comfort on trains, buses and other public transport vehicles.

Skill level: Form IV

**542-11 Passenger Train Guard**

Monitors the operation of trains, checks trains for readiness to operate, signals station staff and signals drivers to move trains. Checks for irregularities when trains are moving. May supervise unloading of freight, truck detaching and coupling and passenger activities.

Examples of occupational titles classified here are:-

- Guard, passenger train

**542-12 Bus Conductor**

Issues tickets and ensures safety and comfort of passengers on buses, collects fares and issues tickets, keeps records, such as of trips, tickets issued, fares collected and hours on duty.

Examples of occupational titles classified here are:-

- Conductor, bus

**542-13 Transport Conductor (except bus)**

Takes charge of passenger trains, and other public transport vehicles (Except Buses) during journeys, ensures that safety regulations are respected and that time schedules are maintained.

Examples of occupations classified here are:-

- Conductor, train
- Conductor, transport

**MINOR GROUP 543: TRAVEL GUIDES AND GROUND ATTENDANTS**

Travel guides and ground attendants accompany individuals or groups on sightseeing tours or excursions, describe points of interest and provide other related services.

Skill Level: Certificate/Diploma

**543-10 Tour Guide**

Accompanies individuals or groups on sightseeing tours or excursions, describes points of interest and provides other guide services.

Examples of occupations classified here are:-

- Guide, art gallery
- Guide, safari
- Guide, sightseeing
- Guide, tour
- Guide, travel

## **MAJOR GROUP 6**

### **SKILLED FARM, FISHERY, WILDLIFE AND RELATED WORKERS**

The group covers occupations related to agriculture, animal husbandry and fishing. The main tasks therefore require the knowledge and experience necessary to grow and harvest crops, breed, feed or hunt animals, gather wild fruit and plants, catch or breed fish, cultivate or gather other forms of aquatic life. This group includes those functions which are meant for both domestic and commercial purposes. Most occupations in this major group require skills at the 2<sup>nd</sup> and 3<sup>rd</sup> KNOCS skill levels.

The tasks usually include: preparing the soil; sowing, planting, spraying, fertilising and harvesting field crops; growing fruit and other tree and shrub crops; growing garden vegetables and horticultural products; breeding, raising and tending domestic animals mainly to obtain meat, milk, hair, skin, apiarian or other products; breeding or catching fish; cultivating or gathering other forms of aquatic life; gathering wild fruits and plants; cultivating, conserving and exploiting forests; tending or hunting wild animals; storing and carrying out some basic processing of their produce; selling their products to purchasers, marketing organisations or at markets. Supervision of other workers may be included.

Occupations in this major group are classified into five sub-major groups, namely:-

- 61 Farm Workers (except Fish)**
- 62 Fishery and Related Workers**
- 63 Subsistence Agricultural and Fishery Workers**
- 64 Forestry and Related Workers**
- 65 Hunting and Wildlife Workers**

#### **SUB-MAJOR GROUP 61: FARM WORKERS (EXCEPT FISH)**

Farm workers (except fish) plan and carry out the necessary operations to grow and harvest field or tree and shrub crops, breed, tend or hunt animals, produce a variety of animal husbandry products, for sale or delivery on a regular basis to purchasers, marketing organisations or at markets

The tasks usually include: preparing the soil; sowing, planting, spraying, fertilising and harvesting field crops; growing fruit and other tree and shrub crops; growing garden vegetables and horticultural products; raising, breeding and tending domestic animals mainly to obtain meat, milk, hair, skin, apianian or other products; storing and carrying out some basic processing of their produce; selling their products to purchasers, marketing organisations or at markets. Supervision of other workers may be included.

Occupations in this sub-major group are classified into three minor groups, namely:-

- 611 Field Crop, Vegetable and Horticultural Farm Workers**
- 612 Poultry, Dairy and Livestock Producers**
- 613 Crop and Animal Producers**

#### **MINOR GROUP 611: FIELD CROP, VEGETABLE AND HORTICULTURAL FARM WORKERS**

Field crop, vegetable and horticultural farm workers plan and carry out the necessary operations to grow and harvest crops, to grow fruit and other tree and shrub crops, to grow vegetables and medicinal plants and other plants and to produce horticultural and horticultural nursery products; propagation and cultivation of trees, shrubs, flowers and production of bulbs and seeds for sale or delivery on regular basis. Or perform a variety of tasks in irrigating land; or perform necessary duties to keep grounds of private residences neat and in orderly conditions.

Skill Level: Certificate (from agricultural institutions)

##### **611-11 Field Crop and Vegetable Grower**

Plans and carries out the necessary operations to grow and harvest various types of field crops e.g. maize, wheat, rice, sugar-cane, cotton, potatoes, cabbages, ground-nuts, tobacco, etc; for sale on a regular basis.

Examples of occupational titles classified here are:-

- Farm worker, skilled/field crop
- Farmer, cereal
- Farmer, cotton
- Farmer, field crop
- Farmer, rice
- Farmer, sugar-cane
- Farmer, tobacco

**611-12 Tree and Shrub Crop Grower**

Plans and carries out the necessary operations to grow and harvest trees and shrubs e.g tea and coffee bushes, fruit trees, cocoa nut and cashew nut trees, miraa trees, etc; for sale on a regular basis.

Examples of occupational titles classified here are:-

- Farm worker, skilled/coffee
- Farmer, coffee
- Farmer, fruit
- Farmer, tea
- Picker, tea

**611-13 Horticultural Farmer**

Determines kinds and amounts of vegetables, horticultural and nursery products to be grown and purchases seeds, bulbs, fertilizers and other farm inputs and supplies. Performs farm operations such as land preparation, sowing, growing vegetables by intensive cultivation, cultivating flowers, and harvesting crops. Produces saplings, bulbs and seeds and grows plants for exhibition or medicinal purposes. Prepares and packages plants for sale or transport.

Examples of occupational titles classified here are:-

- Farm worker, skilled/horticultural
- Farmer, flower
- Farmer, horticultural
- Gardener, market
- Grower, french beans
- Grower, mushroom/gardening

**611-14 Gardener**

Performs any combination of the following duties, in accordance with instructions of employer, to keep grounds of private residence in neat and orderly condition: plants, transplants, fertilizes, sprays with pesticides, prunes, cultivates, and waters flowers and

Examples of occupational titles classified here are:-

- Gardener
- Shamba boy/Domestic gardener

**611-15 Plant Nursery Worker**

Performs a variety of tasks in the propagation and cultivation of trees, shrubs, flowers and other plants, and the production of bulbs and seeds for sale. Performs tasks similar to those of market garden worker, but specializes in the propagation of trees, shrubs, flowers and other plants and in the production of their bulbs and seeds, performs nursery tasks such as propagating from cutting or by budding and grafting or layering, stimulating plant growth with hormones, pruning and shaping trees, and shrubs and staking young plants.

Examples of occupational titles classified here are:-

- Grower, nursery plant
- Worker, skilled plant nursery

**611-16 Irrigator**

Performs a variety of tasks in irrigating agricultural land. Checks that irrigation channels are unobstructed and starts water flow from canal or river by operating motorised pump or by opening gate in irrigation conduit, stops water flow when land is sufficiently irrigated ; maintains and repairs irrigation equipment and keeps irrigation channels and conduits in good order.

Examples of occupational titles classified here are:-

- Irrigator

**MINOR GROUP 612: POULTRY, DAIRY AND LIVESTOCK PRODUCERS**

Poultry, dairy and livestock producers plan and carry-out the necessary operations to breed, raise and tend birds, livestock, game or a variety of poultry, dairy or animal or bee-keeping products for delivery or sale on a regular basis.

Skill Level: Certificate (from agricultural institutions)

**612-11 Poultry Farmer**

Determines the kinds and amounts of poultry and poultry products to be produced, purchases chicks or breeds them. Plans and carries out the necessary operations to raise and tend chickens, turkeys, ducks or other poultry for sale or delivery of eggs, meat or feathers. Slaughters, dresses and packs poultry for delivery and markets poultry products. Stores and carries out some basic processing of their produce and maintains farm buildings, machinery and equipment.

Examples of occupational titles classified here are:-

- Farm worker, skilled/poultry
- Farmer, poultry

**612-12 Livestock Farmer**

Performs a variety of tasks in the breeding and raising of two or more species of livestock, feeds, waters, treats for minor diseases and injuries and otherwise cares for two or more species of livestock such as cattle, horses, sheep, goats, pigs, tends grazing herds, preventing animals from straying, eating poisonous plants, drinking polluted water and guarding them against other dangers.

Examples of occupational titles classified here are:-

- Farm worker, skilled/livestock
- Farmer, livestock
- Herdsman

**612-13 Dairy Farmer**

Conducts a farm on own behalf or in partnership primarily for production of milk. Performs tasks similar to those of livestock farmer but specializes in raising animals for the production of milk, directs and supervises or performs dairy farming operations such as breeding, feeding and caring for milk cows, goats or other animals. Determines kinds and amounts of livestock and livestock products to be produced.

Purchases the required animals, produces or purchases fodder and other supplies and rents or invests in grazing land, buildings, equipment and machinery. Breeds, raises and tends livestock. Milks animals, stores and carries out some basic processing of the milk. Maintains farm buildings, machinery and equipment and delivers or markets dairy products.

Examples of occupational titles classified here are:-

- Farm worker, skilled/dairy
- Farmer, dairy
- Milker

**612-14 Apiary Worker**

Assists in maintaining beehives and beekeeping appliances, in breeding, raising and tending bees and in removing, processing and marketing honey or beeswax. Maintains cleanliness of buildings, and equipment.

Examples of occupational titles classified here are:-

- Keeper, bee
- Worker, apiary

**612-99 Specialised Farmers n.e.c**

This group includes those who breed and raise animals like rabbits, crocodiles, ostriches, snakes and other rare animals; or those who breed and raise birds and insects.

Examples of occupational titles classified here are:-

- Breeder, crocodile
- Breeder, ostrich
- Keeper, bird
- Keeper, Rabbit
- Keeper, Snake

**MINOR GROUP 613: CROP AND ANIMAL PRODUCERS**

Crop and animal producers plan and carry out the necessary operations for mixed farming of the kind that produces a combination of crops or animals or both crops and animals and related products for delivery or sale on a regular basis.

Skill Level: Certificate (from agricultural institution)

**613-11 Commercial Farmer**

Conducts a farm to produce, mainly for sale, a variety of agricultural and animal husbandry products. Determines kinds and amount of crops to be grown and livestock to be raised; purchases seeds, fertilizers, farm machinery, livestock, fodder and other supplies; performs operations such as preparing, keeping machinery and equipment in good repair; markets farm products, keeps production, sales, receipts, expenditure and other farming records.

Examples of occupational titles classified here are:-

- Farmer, commercial

**613-12 Mixed-Crop Farmer**

Plans and carries out the necessary operations to grow and harvest specific combinations of field crops, field vegetables, tree and shrub crops, and garden, horticultural and nursery products for sale on a regular basis.

Examples of occupational titles classified here are:-

- Farm worker, skilled/mixed-crop
- Farmer, mixed-crop

**613-13 Mixed-Animal Producer**

Plans and carries out the necessary operations to breed, raise and tend different types of livestock, such as cattle, sheep, pigs, goats, camels and horses as well as poultry, and to produce apiarian products for sale on a regular basis.

Examples of occupational titles classified here are:-

- Farm worker, skilled/mixed-animal
- Farmer, mixed-animal

**613-14 Crop and Animal Producer**

Plans and carries out the necessary operations to grow and harvest field, tree and various other crops, as well as to breed, raise and tend animals and to produce a variety of animal husbandry products, for sale on a regular basis.

Examples of occupational titles classified here are:-

- Assistant, farm
- Assistant, field
- Farm worker, skilled/mixed farming
- Farmer, mixed farming

**SUB-MAJOR GROUP 62: FISHERY AND RELATED WORKERS**

Fishery and fish farm workers breed or catch fish and cultivate or gather other forms of aquatic life for sale or delivery on a regular basis to purchasers, marketing organisations or at markets.

The tasks usually include: breeding and raising fish or catching them; cultivating or gathering other forms of aquatic life; storing and carrying out some basic processing of their produce; selling their products to purchasers, marketing organisations or at markets. Supervision of other workers may be included.

Occupations in this sub-major group are classified into one minor group, namely:-

**621 Fishery Workers**

**MINOR GROUP 621: FISHERY WORKERS**

Fishery workers breed and cultivate fish and other forms of aquatic life for sale or delivery on a regular basis or enforce rules and regulations governing fishing.

Skill Level: Certificate (from agricultural institution)

**621-11 Aquacultural Farmer**

Breeds and raises fish and cultivates oysters and other aquatic life for sale on a regular basis

Examples of occupational titles classified here are:-

- Farm worker, skilled/fish
- Farm worker, skilled/oyster
- Farm worker, skilled/seafood
- Farmer, aquacultural
- Farmer, fish
- Farmer, oyster
- Farmer, seafood

**621-12 Fish Scout**

Enforces rules and regulations governing fishing. Ensures that fishers are at designated areas and using the right nets. Advises on the location of various types of fish. May report to the relevant authorities cases of harmful water pollution.

Examples of occupational titles classified here are:-

- Scout, fish

**621-13 Inland and Coastal Water Fisherman**

Works alone or as a member of fishing crew and operates fishing vessels to, from and at fishing grounds. Prepares and repairs nets and other fishing gear and equipment. Employs knowledge of species sought, fishing grounds, seasons and capability of vessel and crew to carry out fishing operations. Baits, sets and hauls fishing gear and gathers different forms of aquatic life from shores and shallow waters. Cleans, freezes, ices or salts catch on vessels or offshore and delivers or markets products.

Examples of occupational titles classified here are:-

- Diver, oyster
- Fisherman, Coastal waters
- Fisherman, inland waters

**621-14 Deep-sea Fisherman**

Works as a member of fishing vessel crew and operates fishing vessels to, from and at fishing grounds., Uses nets, lines, poles, pots and traps at varying depths to catch fish, molluscs and crustacean and carries out fishing operations by employing knowledge of species sought, fishing grounds, seasons and capability of vessel and crew. Harvests shellfish from sea bed using towed dredges or rakes. Prepares and repairs nets and other fishing gear and equipment and takes part in the loading, unloading and storage of supplies, equipment and catch, and the preserving, processing and marketing of catch.

Examples of occupational titles classified here are:-

- Fisherman, deep-sea

**SUB-MAJOR GROUP 63: SUBSISTENCE AGRICULTURAL AND FISHERY WORKERS**

Subsistence agricultural and fishery workers grow and harvest field or tree and shrub crops, grow vegetables and fruit, tend or hunt animals, gather wild fruits and plants, catch fish and gather other forms of aquatic life in order to provide food, shelter and a minimum of cash income for themselves and their households.

The tasks usually include: preparing the soil; sowing, planting, tending and harvesting field crops; growing vegetables; growing and gathering fruit and other tree and shrub crops; gathering wild fruits, medicinal and other plants; tending, feeding or hunting animals mainly

to obtain meat, milk, hair, skin or other products; gathering firewood; fetching water; breeding or catching fish and cultivating or gathering other forms of aquatic life; building shelters and making simple tools, clothes and utensils for use by the household; storing and carrying out some basic processing of their produce; selling some products at local markets.

It should be noted that the necessary skills - an understanding of the natural environment and the crops and animals worked with, as well as manual strength and dexterity are usually acquired by working from childhood with other members of the household to produce the necessities for subsisting.

Occupations in this sub-major group are classified into one minor group, namely:--

### **631 Subsistence Agricultural and Fishery Workers**

#### **MINOR GROUP 631: SUBSISTENCE AGRICULTURAL AND FISHERY WORKERS**

Subsistence agricultural and fishery workers, using necessary skills and understanding of the natural environment and the crops and animals worked with, as well as manual strength and dexterity acquired by working from childhood with other members of the household, grow, and harvest field or tree and shrub crops, grow vegetables and fruits, gather wild fruits, medicinal and other plants, tend or hunt animals, catch fish and gather various forms of aquatic life in order to provide food, shelter and a minimum of cash income for the individual or household.

Skill Level: Certificate (from agricultural institution)/seminars

#### **631-10 Subsistence Agricultural and Fishery Worker**

Grows and harvests field or tree and shrub crops, grows vegetables and fruit, gathers wild fruits, medicinal and other plants, tends or hunts animals, catches fish and gathers various forms of aquatic life in order to provide food, shelter and a minimum of cash income for him/herself and his/her household,

Examples of occupational titles classified here are:-

- Farm worker, skilled/subsistence farming
- Farmer, subsistence farming
- Fisherman, subsistence fishing
- Gatherer, food
- Pastoralist

#### **SUB-MAJOR GROUP 64: FORESTRY AND RELATED WORKERS**

Forestry and related workers plan and carry out the necessary operations to cultivate, conserve and exploit forests, for sale or delivery of forestry products on a regular basis to purchasers or at markets.

The tasks usually include: establishing and caring for forest stands; locating trees to be felled and estimating volume of timber; felling trees and sawing them into logs; trimming and topping trees; shaping rough wooden products from logs at felling site; stacking logs, loading them onto transporters; operating a simple kiln to convert wood into charcoal; keeping watch to prevent illegal exploitation of forest products and to detect forest fires and participating in fire-fighting operations. Supervision of other workers may be included.

Occupations in this sub-major group are classified into one minor group, namely:--

### **641 Forestry and Related Workers**

## **MINOR GROUP 641: FORESTRY AND RELATED WORKERS**

Forestry and related workers, plant and carry out the necessary operations to cultivate, conserve and exploit forests or convert wood into charcoal or extract turpentine from wood using traditional techniques, for sale or delivery on a regular basis to purchasers or at markets.

Skill Level: Form IV/Certificate in forestry

### **641-11 Forest Worker**

Undertakes tree cultivation, conservation and harvesting operations and enforces safety and preservation regulations in a forest. Undertakes seed harvesting, propagation and cultivation of young trees in forest, nursery tree planting, thinning, pruning, spraying with insecticides and other pest and disease control activities, and execution of flood control and soil conservation projects.

Examples of occupational titles classified here are:-

- Worker, forest

### **641-12 Forest Ranger**

Performs a variety of tasks in the establishment and care of forest stands, collects, prepares and stores tree seeds, ploughs, drains, irrigates, fertilizes and otherwise prepares beds and afforestation areas, sews cones, and tree seeds and raises seedlings in afforestation areas, sprays insecticides, builds fences and performs other tasks to protect trees against insects, diseases and predatory animals. Prevents unauthorised tree felling and trespassing in forests

Examples of occupational titles classified here are:-

- Ranger, forest

### **641-13 Timber Cruiser**

Locates and estimates volume of marketable standing timber in a forest by examining and measuring samples of the trees.

Examples of occupational titles classified here are:-

- Cruiser, timber

### **641-14 Tree Feller**

Locates trees to be felled and estimates the volume of timber. Determines the natural and intended fall of each tree. Fells the tree in the direction of intended fall by using felling aids such as wedges, felling bars, levers and push poles. Maintains chainsaws and sharpens cutting chains using files. Removes major branches and tree tops from felled trees. Measures the length of trunks and saws them into standard length logs. Stacks logs and loads them into chutes for delivery to saw mills.

Examples of occupational titles classified here are:-

- Barker, tree
- Feller, tree
- Logger

### **641-15 Charcoal Burner**

Operates kiln and converts wood into charcoal by slow burning process, loads kiln with wood, places kindling in kiln and starts fire, seals off kiln when desired heat is

reached, observes colour of smoke coming from kiln and regulates formation of charcoal by opening and closing drought holes, seals drought hole to smother fire when process is completed.

Examples of occupational titles classified here are:-

- Burner, charcoal

**641-99 Forestry Workers n.e.c.**

Forestry group includes those who undertake growing mushroom species or gathering roots, herbs, reeds, osier and other natural forest products for sale on a regular basis.

Examples of occupational titles classified here are:-

- Collector, forest products

**SUB-MAJOR GROUP 65: HUNTING AND WILDLIFE WORKERS**

Hunting and wildlife workers hunt and trap mammals, birds and reptiles or protect and conserve wildlife for tourism or other commercial purposes. The tasks usually include: hunting or trapping mammals, birds or reptiles; control and protection of wildlife; running of wildlife sanctuaries and operation of zoos. Supervision of other workers may be included.

Occupations in this sub-major group are classified into one minor group, namely:-

**651 Hunting and Wildlife Workers**

**MINOR GROUP 651: HUNTING AND WILDLIFE WORKERS**

Hunting and wildlife workers hunt and trap animals, birds and reptiles for skins, meat, feathers and other products for purposes of sale, delivery or other commercial reasons on a regular basis; or care, control, protect and conserve wildlife for tourism or other commercial purposes; or engage in breeding raising and tending wild animals, game birds and other birds or trains animals in reserves, stables, zoos, circuses, research organisations, animal homes and similar institutions for sale, delivery or commercial purpose on a regular basis.

Skill Level: Form IV/Certificate

**651-11 Hunter**

Traps and hunts, wild animals, wild fowl and other game for skins, meat, selling alive or to exterminate them as pest. Traps birds and animals by means of baited and camouflaged snares and traps, or hunts them with firearms or other weapons, inspects traps periodically, removes captured prey and resets traps, transfers animals trapped for selling alive to cages for shipment, kills and skins game trapped or hunted for meat or pelts and treats and packs pelts for marketing. Maintains and repairs trapping and hunting equipment.

Examples of occupational titles classified here are:-

- Hunter
- Trapper

**651-12 Game Ranger**

Performs tasks, as a member of the disciplined the control and protection of wildlife. Under the direction of a game warden, carries out culling of old and excess wildlife. Prevents poaching and ensures that animals and other wildlife stay within game parks

and  
other designated areas.

Examples of occupational titles classified here are:-

- Ranger, game

**651-13            Game Scout**

Protects and cares for wild animals and birds in game preserves and wildlife sanctuaries. Looks for animals which stray outside parks. Assists hunters by building camouflaged traps and beating bushes to flush game.

Examples of occupational titles classified here are:-

- Scout, game

**651-14            Zoo Keeper**

Engages in breeding, raising and tending wild mammals, game birds and other birds, snakes

and other reptiles for sale or observation by members of the public or research organisations.

Captures injured or sick wild animals for care and treatment and releases them back into their natural habitat after treatment. May undertake some form of animal training.

Examples of occupational titles classified here are:-

- Keeper, animal orphanage
- Keeper, ostrich
- Keeper, zoo

## **MAJOR GROUP 7 CRAFT AND RELATED TRADES WORKERS**

Craft and related trades workers apply their specific knowledge and skills in the fields of mining and construction, form metal, erect metal structures, set machine tools, or make, fit, maintain and repair machinery, equipment or tools, carry out printing work as well as produce or process foodstuffs, textiles, or wooden, metal and other articles, including handicraft goods.

The work is carried out by hand and by hand-powered and other tools which are used to reduce the amount of physical effort and time required for specific tasks, as well as to improve the quality of the products. The tasks call for an understanding of all stages of the production process, the materials and tools used, and the nature and purpose of the final product. Most occupations in this major group require skills at the 2<sup>nd</sup> and 4<sup>th</sup> KNOCS skill levels.

The tasks usually include: extracting and working solid minerals; constructing, maintaining and repairing buildings and other structures; casting, welding and shaping metal; installing and erecting heavy metal structures, tackle and related equipment; making machinery, tools,

equipment, and other metal articles; setting for operators, or setting and operating various machine tools; fitting, maintaining and repairing industrial machinery, including engines and vehicles, as well as electrical, electronic and solar powered instruments and other equipment; making precision instruments, jewellery, household and other precious-metal articles, pottery, glass and related products; producing handicrafts; executing printing work; producing and processing foodstuffs and various articles made of wood, textiles, leather and related materials. Supervision of other workers may be included.

Occupations in this major group are classified into eight sub-major groups, namely:-

- 71 Extraction and Building Trades Workers**
- 72 Metal, Machinery and Related Trades Workers**
- 73 Precision and Handicraft Workers**
- 74 Printing and Related Trades Workers**
- 75 Food Processing and Related Trades Workers**
- 76 Woodworking Trades Workers**
- 77 Textile, Garment and Related Trades Workers**
- 78 Upholsterers, Pelt, Leather and Shoe-making Trades Workers**

#### **SUB-MAJOR GROUP 71: EXTRACTION AND BUILDING TRADES WORKERS**

Extraction and building trades workers extract and work solid minerals from underground or surface mines or quarries, shape and finish stone for building and other purposes, or construct, maintain and repair buildings and other structures.

The work is carried out by hand and by hand-powered and other tools which are used to reduce the amount of physical effort and time required for specific tasks, as well as to improve the quality of the products. The tasks call for an understanding of the work organisation, the materials and tools used, and the nature and purpose of the final product.

The tasks usually include: extracting and working solid minerals from underground or surface mines or quarries; cutting and shaping stone for building and other purposes; constructing, maintaining and repairing buildings and other structures; applying paint to buildings and other structures, as well as to various products such as vehicles, or various manufactured articles, or covering interior walls with wallpaper or fabric; cleaning exterior surfaces of buildings and other structures. Supervision of other workers may be included.

Occupations in this sub-major group are classified into two minor groups; namely:-

- 711 Mining, Blasting, Stone Cutting and Related Workers**
- 712 Building Trades Workers**

#### **MINOR GROUP 711: MINING, BLASTING, STONE CUTTING AND RELATED WORKERS**

Mining, blasting, stone cutting and related workers extract solid minerals from underground or surface mines or quarries, charge and detonate explosives, or cut, shape and finish stone for building and other purposes.

Skill Level: Trade Certificate

##### **711-11 Miner**

Extracts solid minerals from underground or surface mines; cuts under working face to

facilitate blasting by operating cutting machines. Installs timbering and lays track to accommodate mine cars.

Examples of occupations classified here are:-

- Digger, gold
- Digger, precious stones
- Miner, minerals
- Miner, diatomite
- Miner, lead

**711-12 Quarryman**

Removes mud and muck from surface of stone using pick shovel and steam hose, shapes and reduces chipping weights using pick. Breaks stones into pieces using sledge hammer. Drives wedges into quarried stone to break it into slabs or blocks and selects and grades slabs and blocks of granite, marble and other stones. Sets and operates machines which cut, saw, plane, grind and polish building and monumental stones. Performs any one or combination of cutting and shaping building stones.

Examples of Occupations classified here are:-

- Carver, stone/building
- Cutter, stone
- Maker, ballast
- Quarryman
- Splitter, stone

**711-13 Blaster**

Determines strength and pattern of blast required, charges and detonates explosives on surface or underground mines, pit or quarry to fracture or separate stone or minerals from solid formations. Studies formation to determine amount, type and location of explosive required. Connects electric wire to primera and covers charge or fills blast hole with clay, sand and other materials; inspects blast to ensure safety.

Examples of Occupations classified here are:-

- Blaster
- Shot-firer

**711-99 Mining, Blasting, Stone cutting and Related Workers n.e.c**

This group includes those who prospect for gold and other precious stones along river beds and other locations known to contain valuable ores; or harvest sand in sand pits.

Examples of Occupations classified here are:-

- Assayer, gold
- Harvester, sand
- Prospector, precious stones

**MINOR GROUP 712: BUILDING TRADES WORKERS**

Building trades workers prepare, construct, cover, apply, install or maintain and repair foundations, walls, roofs, floors, surfaces, glass in windows or other frames and main parts of buildings or plumbing, piping and electrical systems in buildings and other construction both

internally and externally.

Skill Level: Trade Certificate

**712-11 Builder (Traditional Houses)**

Prepares ground for erecting building or other structures and collects necessary materials. Erects structures to support roof and building and covers walls with mud, straw or other materials. Fixes rafters to roof and covers them with roofing material. Levels floor to make it smooth and serviceable. Maintains and repairs existing structures.

Example of Occupation classified here is:-

- Builder, traditional houses

**712-12 Stonemason**

Erects and repairs foundations, walls and structures of stone. May lay bricks, concrete blocks, hollow tiles and similar materials to construct and repair partitions, fireplaces, arches and other structures such as smokestacks, furnaces, converters, kilns and ovens, piers, abutments, walks and pavements. Carries out plastering.

Examples of Occupations classified here are:-

- Bricklayer
- Plasterer
- Stonemason

**712-13 Concrete Block Maker**

Controls automatic moulding machines to produce concrete bricks, tiles and paving blocks. Builds up concrete on moulds, fills moulds with concrete and levels and finishes exposed surfaces. Operates trowelling machines to float, trowel and polish the surface of large areas of structures. Applies a durable smooth surfacing composed of cement, sand pigment and marble particles to concrete floors, known as terrazzo finish.

Examples Occupations classified here are:-

- Finisher, concrete
- Finisher, terrazzo
- Maker, concrete block

**712-14 Brick and Tile Moulder**

Moulds bricks and tiles into special shapes by hand.

Examples of Occupations classified here are:-

- Moulder, brick
- Moulder, tile

**712-15 Floor Layer**

Installs, maintains and repairs parquet and other kinds of flooring, or covers floors, walls and other surfaces with tiles or mosaic panels for decorative or other purposes.

Examples Occupations classified here are:-

- Layer, floor
- Parquetry worker

- Setter, marble
- Setter, tile

**712-16 Carpenter**

Constructs, erects, installs, renovates and repairs structures and fixtures of wood, plywood and wallboard and other materials using carpenters' tools and power tools and conforming to local building codes.

Examples of Occupations classified here are:-

- Carpenter
- Joiner

**712-17 Plumber**

Lays out, fabricates, assembles, installs and maintains piping and piping system fixtures and equipment for steam, water, heating, cooking, lubricating, sprinkling and industrial processing systems on basis of knowledge of system operation and building plans or working drawings.

Examples of Occupations classified here are:-

- Fitter, pipe
- Plumber

**712-18 Roofer**

Covers, maintains and repairs roof frameworks with one or more kinds of material.

Examples of Occupations classified here are:-

- Roofer, asphalt
- Roofer, metal
- Roofer, tile
- Thatcher

**712-21 Glazier**

Installs glass in windows, skylights, store fronts and displays cases or on surfaces such as building fronts, interior walls, ceilings and table tops.

Example of Occupation here is:-

- Glazier

**712-22 Painter**

Cleans and prepares surfaces for painting and applies coats of paint, varnish, shellac and similar materials to the surfaces to protect and decorate them.

Examples of Occupations classified here are:-

- Painter, building
- Painter, hand
- Painter, spray
- Painter, structural

**712-23 Building Electrician**

Installs, maintains and repairs electrical wiring systems and related equipment in various buildings such as schools, hospitals, commercial establishments, residential buildings and other structures.

Example of Occupations classified here is:-

- Electrician, building

**712-99 Building Trades Workers n.e.c.**

This group includes those who construct, assemble, erect and maintain pre-fabricated structures or those who specialise in cleaning exterior surfaces of buildings and other structures.

Examples of Occupations classified here are:-

- Assembler, prefab houses
- Builder, prefab structures
- Cleaner, building exteriors
- Sandblaster, building exteriors

**SUB-MAJOR GROUP 72: METAL, MACHINERY AND RELATED TRADES WORKERS**

Metal, machinery and related trades workers cast, weld, forge and, by other methods, form metal, erect, maintain and repair heavy metal structures, engage in machine-tool setting as well as in fitting, maintaining and repairing machinery, including engines, vehicles, electrical, electronic and solar powered equipment, or they produce tools and various non-precious-metal articles.

The tasks usually include: making moulds and cores for casting metal; casting, welding and shaping metal; installing, erecting, maintaining and repairing heavy metal structures, tackle and related equipment; forging and forming steel and other non-precious metals to make and repair machinery, tools, equipment and other articles; setting for operators or setting and operating various machine tools; fitting, maintaining and repairing industrial machinery, including engines and vehicles, as well as electrical, electronic and solar powered instruments and other equipment. Supervision of other workers may be included.

Occupations in this sub-major group are classified into seven minor groups, namely:-

**721 Metal Moulders, Welders, Structural-Metal Preparers and Related Trades Workers**

**722 Blacksmiths, Tool-makers and Related Trades Workers**

**723 Machinery Mechanics and Fitters**

**724 Electrical Equipment Fitters and Installers**

**725 Electronic Equipment Fitters and Servicers**

**726 Electrical Linesmen and Cable Jointers**

**727 Solar Equipment Fitters and Installers**

**MINOR GROUP 721: METAL MOULDERS, WELDERS, STRUCTURAL-METAL PREPARERS AND RELATED TRADES WORKERS**

Metal moulders, welders, structural-metal preparers and related trades workers make moulds and cores for casting metal, weld and cut metal parts, make and repair articles of sheet metal, install, erect, maintain and repair heavy metal structures, tackle, cable cars and related equipment or carry similar work under water.

Skill Level: Trade Certificate

**721-11 Metal Moulder**

Forms sand moulds by hand or by using auxiliary machines on a bench for small metal castings, or on the foundry floor or in a pit for large castings. Repairs damaged mould surfaces using hand tools.

Examples of occupations classified here are:-

- Moulder, metal

**721-12 Core Maker**

Makes sand cores used in moulds to form holes or hollows in metal castings or tends blow-type core making machine to produce sand cores.

Example of occupations classified here is:-

- Core maker

**721-13 Welder**

Welds or cuts metal parts using gas flame, or an electric arc, thermite compound or other methods. Operates resistance-welding machines; using blow torch to make and repair lead linings, pipes, floors and other lead fixtures. May braze metal parts together or join metal, parts by hand soldering.

Examples of occupations classified here are:-

- Cutter, flame
- Solderer
- Welder

**721-14 Sheet-metal Worker**

Marks out shapes, forms and joints on sheet-metal and other materials to make products or components, using hand and power tools and machines. Finishes products by cleaning, polishing, filing or bathing them in acid solutions. Assembles and installs sheet-metal products or components on site, according to specifications or instructions.

Examples of occupations classified here is:-

- Sheet-metal worker

**721-15 Sheet-metal Maker**

Operates sheet-metal shaping, forming, cutting and joining machines such as brake presses, folding, bending and rivetting machines, rollers, guillotines, drills or spot-welders. Cuts metal using power shears, nibblers and hacksaws following template or previously marked guidelines.

Examples of occupations classified here is:-

- Maker, sheet-metal

**721-16 Tinsmith**

Makes and repairs kitchen utensils and other articles in tin plate.

Examples of occupations classified here is:-

- Tinsmith

**721-17 Boiler Smith**

Makes and repairs boilers, tanks, vats and other containers of sheet and plate steel.

Examples of occupations classified here are:-

- Boiler smith
- Maker, boiler

**721-18 Coach Builder**

Studies blueprints, body drafts, drawings and specifications and constructs framework sections, in metal, fibreglass and other materials, using stretching and shrinking machinery and welding equipment. Bolts, screws, rivets or welds sections together to form complete frameworks. Cuts shapes and attaches panels of sheet-metal, aluminium or re-enforced plastic to framework. May alter assembly line vehicles to special requirements.

Examples of occupations classified here are:-

- Builder, bus bodies
- Builder, coach
- Builder, matatu bodies

**721-21 Panel Beater**

Makes, alters and repairs sheet metal, plastic and fibre-glass bodies of vehicles such as cars, buses, trucks, wagons and railway coaches.

Example of occupations classified here is:-

- Beater, panel

**721-22 Structural-metal Worker**

Studies drawings and other specifications to determine locations and inter-relationships of parts. Checks the alignment of sections and assembles them by clamping, bolting or tack-welding prior to final joining. Joins sections by welding, bolting or riveting and assists in testing assembled structures to ensure that specifications for stress, strain, tension or alignment have been met. Repairs structures on site by unbolting or flame cutting defective sections, replacing worn lugs on bolts and installing new sections. Raises, places and unites girders, columns and other structural-metal members to form completed structures or erects the framework and other metal parts of ships' structures while working as a member of crew.

Examples of occupations classified here are:-

- Erector, structural metal
- Preparer, structural metal

**721-23 Construction Steel Erector**

Assembles and erects the framework and other metal parts of ships' structures and shapes and fits structural-steel plates of ships under construction or repair. Erects steel members for buildings, dams, bridges and other constructions.

Example of occupations classified here is:-

- Erector, construction steel

**721-24 Rigger**

Assembles and installs rigging gear, such as cables, ropes, pulleys and winches to lift, move or position machinery, structural steel or other heavy objects. Sets up various types of cages, aerial cable-ways, moving platforms, lifting tackle and other hoisting equipment for moving workers, materials, machinery and other heavy objects about workshops, shipyards, or other locations. Assembles and adjusts parts of aircraft and prepares ships for sailing by applying masts, spars, rigging, sails and other necessary equipment.

Examples of occupations classified here are:-

- Rigger
- Rigger, ship
- Rigger, aircraft

**721-25 Rope and Cable Splicer**

Joins, installs, repairs and fits attachments to wires, hemp ropes and cables.

Examples of occupations classified here are:-

- Splicer, cable

**721-26 Underwater Worker**

Works under water to lay and repair bridges, piers and harbour-wall foundations. Inspects for suspected damage and makes minor repairs to ships' hulls and underwater installations; reports on condition of wrecked ships; removes underwater obstructions and drills holes for underwater blasting. Performs various underwater tasks connected with salvage work or recovering dead bodies.

Examples of occupations classified here are:-

- Underwater, worker

**MINOR GROUP 722: BLACKSMITHS, TOOL-MAKERS AND RELATED TRADES WORKERS**

Blacksmiths, tool makers and related trades workers hammer and forge bars, rods or ingots of iron, steel and other metals to make and repair various kinds of tools, equipment and other

articles; set for operation or set and operate various machine tools, and polish and sharpen metal surfaces.

Skill Level: Trade Certificate

**722-11 Smith**

Forges and repairs articles of iron and steel such as hand tools, hooks, chains, agricultural implements, locks and metal structural parts using hand or power hammers. May apply heat, flux, hammering; cut keys for locks or open locked safes, doors or padlocks.

Examples of occupations classified here are:-

- Blacksmith
- Cutter, key

- Hammersmith
- Locksmith
- Maker, arrow head
- Maker, key
- Maker, spear
- Operator, forging-press

**722-12 Gunsmith**

Modifies, services and repairs rifles, revolvers and other firearms. Fabricates, fits and assembles parts for custom-built or other specialised small arms.

Examples of occupations classified here are:-

- Gunsmith

**722-13 Metal Former**

Shapes and forms metal parts by hammering, pressing and drop-forging metal, with or without heat.

Examples of occupations classified here are:-

- Former, metal

**722-14 Tool and Die Maker**

Fits and assembles parts to make and repair metal-working dies, cutting tools and jigs.

Examples of occupations classified here are:-

- Maker, die
- Maker, tool

**722-15 Metalworking Machine-tool Setter**

Sets up and resets machine tools which are continuously operated by other workers.

Examples of occupations classified here are:-

- Setter, machine-tool/metalworking

**722-16 Lathe Setter**

Sets up a range of metal turning lathes to shape and form metal stock and castings to fine tolerances according to detailed drawings and specifications.

Examples of occupations classified here are:-

- Setter, lathe
- Turner

**722-17 Milling Machine Setter**

Sets up power driven machines which cut metal with multi-toothed rotary cutters.

Examples of occupations classified here are:-

- Setter- machine/milling

**722-18 Drilling Machine Setter**

Sets metalworking drilling machines for operators to produce metal articles in standardised series.

Examples of occupations classified here are:-

- Setter, machine/drilling

**722-21 Planing Machine Setter**

Sets up power driven machines in which a cutting tool is guided into metal fixed to a reciprocating table.

Examples of occupations classified here are:-

- Setter, machine/planing

**722-22 Grinding Machine Setter**

Sets particular types of metalworking machines for grinding articles or uses grinding wheel or mechanically operated grinding machines to sharpen cutting tools and instruments. Monitors performance using testing and measuring instruments and makes adjustments.

Examples of occupations classified here are:-

- Grinder, card/textile
- Grinder, machine-tool
- Setter-operator, machine/grinding

**722-23 Cutting Instrument Sharpener**

Sharpens and smoothens cutting edges of tools such as axes, chisels, drills, picks and straightens cutting blades, using abrasive wheel.

Examples of occupations classified here are:-

- Sharpener, instrument/cutting

**722-24 Saw Doctor**

Cuts broken teeth from saws using power shears, bevels sheared joints, and brazes or welds new teeth to blades using grinding machines and brazing or welding equipment. Sets teeth to ensure specified width of cuts using special hand tools. Sets up saw-sharpening machines to obtain required distances between saw teeth, angles of bevel and depths of cut. Operates machines to sharpen teeth or may manually sharpen teeth.

Examples of occupations classified here are:-

- Repairer, saw
- Saw doctor
- Sharpener, saw

**722-25 Metal Spinner**

Examines drawings or specifications to determine job requirements and methods of operation. Sets up and operates spinning lathes to spin shaped articles from sheet or structural metal. Verifies dimensions of formed articles, using precision measuring instruments such as micrometer and vernier gauges and then sands or otherwise finishes formed articles.

Examples of occupations classified here are:-

- Spinner, metal

**722-26 Buffing and Polishing-machine Operator**

Operates portable buffing and polishing machines. Selects continuous abrasive bands or polishing heads such as wire brushes, wheels or bobs of felt, leather or fibre, or polishing mops of calico, cotton or chamois. Positions and attaches polishing heads to machines. Sets controls to regulate speeds and angles of polishing heads and feed rate of lubricants. Dresses polishing heads with abrasives or finishing materials such as emery, grease or rouge or applies buffing compounds to surfaces to be polished. Holds surfaces against rotating polishing heads until desired finishes are obtained. Removes imperfections or polishes less accessible areas by hand.

Examples of occupations classified here are:-

- Operator, machine/polishing

**722-27 Textile Card Grinder**

Grinds, polishes, repairs, adjusts and sharpens metal teeth of cylinders in textile carding machines.

Examples of occupations classified here are:-

- Grinder, card/textile

**722-99 Blacksmiths, tool makers and Related Trades Workers n.e.c**

**MINOR GROUP 723: MACHINERY MECHANICS AND FITTERS**

Machinery mechanics and fitters, fit, install, maintain and repair engines, vehicles, agricultural or industrial machinery, and mechanical equipment.

Skill Level: Trade Certificate

**723-11 Motor Vehicle Mechanic**

Fits, examines, tests and services motor vehicle engines and replaces engine components or complete engines. Fits, examines, adjusts, dismantles, rebuilds and replaces defective parts of motor vehicles and installs or adjusts motors and brakes, and adjusts steering or other parts of motor vehicles. Tests road worthiness of vehicles by driving them to make sure that they have been properly serviced and repaired.

Examples of occupations classified here are:-

- Inspector, motor vehicle/mechanical
- Mechanic, motor vehicle

**723-12 Diesel Engine Fitter**

Fits, repairs and services diesel engines which drive generators and other stationary equipment, railway locomotives, construction machinery and other mobile equipment.

Examples of occupations classified here are:-

- Fitter, engine/diesel
- Mechanic, engine/diesel

**723-13 Motorcycle Mechanic**

Diagnoses faults in motor-cycles by discussing with operators, listening to engines and using specialised testing equipment. Dismantles faulty assemblies, checks parts using precision measuring equipment and repairs engines and associated systems. Services or

overhauls engines and tunes engines to achieve smooth running.

Examples of occupations classified here are:-

- Mechanic, motorcycle

**723-14 Aircraft Engine Fitter**

Removes engines from aircraft and dismantles them according to specifications. Rectifies minor faults and sends items requiring major repairs to machine or welding shops, or other support facilities. Re-assembles engines, checks specifications such as clearances, gear movements and nut and bolt torques with the aid of precision measuring and testing instruments at each stage. Submits engines to final tests in specially designed testing facilities, and makes adjustments. Services auxiliary motors and engine accessories such as generators, starters and thermocouples.

Examples of occupations classified here are:-

- Fitter, engine/aircraft
- Mechanic, engine/aircraft

**723-15 Airframe Fitter-assembler**

Positions parts and sub-assemblies such as fuselage, wing or tail components, fuel tanks, landing gear, safety systems and internal fittings on working surfaces, part-assembled airframes or assembly jigs, using hoists. Maintains and overhauls aircraft systems and sub-assemblies, in accordance with established maintenance schedules, and rectifies defects or malfunctions recorded by test or flight crews. Repairs and replaces worn and damaged parts and conducts routine pre-flight aircraft inspections.

Examples of occupations classified here are:-

- Fitter, airframe

**723-16 Marine Engine Fitter-assembler**

Dismantles marine engines according to specifications, rectifies minor faults, and sends items requiring major repairs to machine or welding shops or other support facilities. Re-assembles engines, checking specifications such as gear movements and nut and bolt torques with the aid of precision measuring and testing instruments at each stage. Submits engines to final tests in specially designed testing facilities, and makes adjustments. Services auxiliary motors and engine accessories such as generators, starters and thermocouples.

Examples of occupations classified here are:-

- Fitter, engine/marine
- Mechanic, engine/marine

**723-17 Turbine Fitter-assembler**

Assembles the components or parts of the turbine according to strictly laid down procedures. Inspects and tests new turbines for conformity with standards and specifications. Fits, installs, examines, services and repairs turbines.

Examples of occupations classified here are:-

- Fitter, turbine

**723-18 Metalworking Machine-tool Fitter-assembler**

Dismantles, fits, installs, examines, services and repairs metalworking machine tools.

Examples of occupations classified here are:-

- Fitter, machine-tool/metalworking

**723-99 Machinery Mechanics and Fitters n.e.c.**

These include those who dismantle, fit, install, examine, service and repair mining, agricultural, earthmoving, office and other machinery including industrial and domestic sewing machines.

Examples of occupations classified here are:-

- Erector, machinery
- Fitter-assembler, machine-tool/metalworking
- Fitter-assembler, machinery/agricultural
- Fitter-assembler, machinery/earth-moving
- Fitter-assembler, machinery/mining
- Fitter-assembler, machinery/office
- Installer, machinery
- Mechanic, lift
- Mechanic, sewing-machine

**MINOR GROUP 724: ELECTRICAL EQUIPMENT FITTERS AND INSTALLERS**

Electrical equipment fitters and installers fit, adjust, construct and repair electrical equipment.

Skill Level – Trade Certificate

**724-11 Electrical Fitter**

Fits, assembles, installs, repairs, maintains and tests electrical components and equipment, sub-assemblies and systems by any one combination of following methods; reads work orders, follows production manuals and drawings and sample assemblies and receives verbal instructions regarding duties to be performed.

Examples of occupations classified here are:-

- Fitter, electrical

**724-12 Electrical Motor and Generator Fitter**

Fits, adjusts and repairs various kinds of electrical motors, generators, switchgear and control apparatus. Inspects and tests manufactured electrical products.

Examples of occupations classified here are:-

- Fitter, generator
- Fitter, motor/electrical

**724-13 Electrical Transformer Fitter**

Fits, assembles, maintains, overhauls and repairs electrical transformers. Tests performance of installed transformers and repairs faulty electrical wiring or replaces defective parts.

Examples of occupational titles classified here are:-

- Fitter, transformer/electrical

**724-14 Electrical Instrument Fitter**

Fits, adjusts, assembles, installs, maintains and repairs various kinds of electrical instruments and apparatus. Inspects and tests electrical plant, equipment and components.

Examples of occupations classified here are:-

- Fitter, instrument/electrical

**724-15 Maintenance Electrician**

Assembles, maintains, services and repairs electrical machinery and equipment in various establishments such as factories, hotels, theatres and radio or television studios.

Examples of occupations classified here are:-

- Electrician, maintenance
- Electrician, maintenance/building
- Electrician, maintenance/factory
- Electrician, maintenance/hotel
- Electrician, maintenance/radio and television studio

**724-16 Vehicle Electrician**

Installs and repairs electrical wiring and other electrical equipment in vehicles such as trams and motor vehicles.

Examples of occupations classified here are:-

- Electrician, vehicle
- Wire man, vehicle

**724-17 Electrical Repairman**

Examines electrical circuits to determine sources of malfunctions. Diagnoses faults and repairs or replaces defective parts. Tests circuits, fits fuses and adjusts parts to ensure correct operation.

Examples of occupations classified here are:-

- Repairman, electrical

**MINOR GROUP 725: ELECTRONIC EQUIPMENT FITTERS AND SERVICERS**

Electronic equipment fitters and servicers fit, adjust and repair electronic equipment such as computer hardware, sound and image recording and telecommunications systems.

**725-11 Electronics Fitter-assembler**

Fits, adjusts and repairs electronic apparatus in factories, workshops or places of use.

Examples of occupations classified here are:-

- Fitter-assembler, electronic

**725-12 Electronics Fitter (Radio-TV and Radar Equipment)**

Fits and adjusts sound and image recorders and electronic components of radio and TV sets, and on radar equipment. Monitors radio and television reception to assist in diagnosing faults. Removes protective covering to gain access to equipment and performs voltage and resistance tests and waveform checks, using electronic test equipment. Adjusts and replaces faulty parts. Tests electronic circuitry, resistors and capacitors. Keeps records of servicing time and replacement parts used.

Examples of occupations classified here are:-

- Fitter, electronic/radar equipment
- Fitter, electronic/radio
- Fitter, electronic/television
- Mechanic, Radio & Television

**725-13 Electronics Fitter (Medical Equipment)**

Fits and adjusts electronic components of medical equipment.

Examples of occupations classified here are:-

- Fitter, electronics/medical equipment

**725-14 Computer and Related Equipment Fitter**

Fits and adjusts computer hardware by reading blueprints and consulting manufacturers' manuals to determine fitting procedures.

Examples of occupations classified here are:-

- Fitter, computer equipment

**725-15 Electronics Fitter (Industrial Equipment)**

Fits and adjusts electronic components of industrial equipment.

Examples of occupations classified here are:-

- Fitter, electronics/industrial equipment

**725-16 Refrigeration and Air-conditioning Fitter**

Fits and adjusts electronic components of refrigeration and air-conditioning equipment.

Examples of occupations classified here are:-

- Fitter, air-conditioning equipment
- Fitter, refrigeration equipment

**725-17 Electronic Signalling System Fitter**

Fits and adjusts electronic components of signalling systems.

Examples of occupations classified here are:-

- Fitter, electronic signalling system

**725-18 Office Machine Mechanic**

Examines and operates machines such as typewriters, calculators, cash registers, photocopying, duplicating and other commercial and office machines, and consults customers to determine causes of malfunctions. Disassembles machines, examines components and repairs or replaces defective parts. Re-assembles, test operates and adjusts machines. Cleans machine parts and interiors of machines and carries out routine servicing of machines and advises users on correct operating procedures to prevent malfunctions.

Examples of occupations classified here are:-

- Fitter, office machine
- Fitter, typewriter
- Mechanic, office machine
- Mechanic, photocopier

**725-21 Electronic Products Inspector**

Studies electronic products specifications and inspects all products or takes samples for inspection. Checks products for any malfunctions and examines them for visible defects such as cracks, holes or breakages. Takes measurements of articles to determine conformity to specifications and rejects defective articles.

Examples of occupations classified here are:-

- Inspector, electronic products

**725-22 Telephone and Telegraphic Equipment Installer**

Installs, services and repairs telephone and telegraphic equipment in central installations.

Examples of occupations classified here are:-

- Installer, telegraphic equipment
- Installer, telephone

**725-23 Telephone and Telegraphic Equipment Mechanic**

Maintains and repairs telecommunication equipment and appliances such as telephones, switchboards and telegraph transmission equipment, in homes or at business or telephone exchanges.

Examples of occupations classified here are:-

- Fitter, telegraphic equipment
- Fitter, telephone/fax
- Mechanic, telegraphic equipment

**725-99 Electronic Equipment fitters and servicers n.e.c.**

This group includes those who fit and adjust electronic components of vending and slot machines.

Examples of occupations classified here are:-

- Fitter, slot machine
- Fitter, vending machine

**MINOR GROUP 726: ELECTRICAL LINESMEN AND CABLE JOINTERS**

Electrical linesmen and cable jointers install and repair electrical lines and joint cables.

**726-11 Electrical Power Linesman**

Patrols electrical lines to and from work sites. Installs earth stakes, poles and guy wires and ensures that safe operating conditions exist for working on electrical equipment and distribution systems of all voltages. Performs emergency repairs and de-energising of conductors. Installs or services aerial equipment such as cross arms, insulators, transformers, street lights and customer supply points, and trims trees clear of power lines.

Examples of occupations classified here are:-

- Linesman, electrical power

**726-12 Electrical Traction Linesman**

Installs, repairs, maintains and patrols overhead and underground electrical traction

lines from suppliers to customers. Covers energized conductors with insulating materials and performs low and medium voltage live work. Ensures that safe working conditions exist for working on electrical equipment and distribution systems of all voltages.

Examples of occupations classified here are:-

- Linesman, electrical traction

**726-13 Telephone and Telegraph Linesman**

Installs, maintains and repairs overhead and underground wires and cables for telephone and telegraph transmission.

Examples of occupations classified here are:-

- Linesman, telegraph
- Linesman, telephone

**726-14 Electrical Cable Jointer**

Joints insulated electric power cables in underground conduits and trenches and prepares cable terminations for connection to electrical equipment and overhead lines. Tests performance of installed cables and checks that insulation of cables is in good condition and maintains location diagrams.

Examples of occupations classified here are:-

- Jointer, electric cable

**MINOR GROUP 727: SOLAR EQUIPMENT FITTERS AND INSTALLERS**

Solar equipment fitters and Installers fit, adjust and repair solar equipment.

**727-10 Solar Equipment Fitter and Installer**

Dismantles, fits, installs, services and repairs equipment and appliances which harness and convert solar energy for electrical or other uses

Examples of occupations classified here are:-

- Fitter, cooker/solar
- Fitter, solar equipment/electrical
- Fitter, water heater/solar
- Installer, solar equipment/electrical

**SUB-MAJOR GROUP 73: PRECISION AND HANDICRAFT WORKERS**

Precision and handicraft workers make and repair precision instruments, musical instruments, various articles such as jewellery, precious metalware, ceramics, porcelainware and glassware, as well as handicrafts made of metal, stone, wood, textile, leather or related materials.

The work is carried out by hand and by hand-powered and other tools which are used to reduce the amount of physical effort and time required for specific tasks, as well as to improve the quality of the products. The tasks call for an understanding of the work organization, the materials and tools used, and the nature and purpose of the final product.

The tasks usually include: making and repairing timing, medical, optical and other precision instruments and equipment; making and repairing musical instruments; making jewellery and precious metalware; making pottery, porcelainware, ceramics and glassware; painting and decorating various articles; producing handicraft articles in metal, stone, wood, textile, leather

and related materials. Supervision of other workers may be included.

Occupations in this sub-major group are classified into three minor groups, namely:-

**731 Precision Workers in Metal and Related Materials**

**732 Potters, Glass-makers and Related Trades Workers**

**733 Handicraft Workers**

**MINOR GROUP 731: PRECISION WORKERS IN METAL AND RELATED MATERIALS**

Precision workers in metal and related materials make and repair precision instrument, musical instrument, jewellery and other articles of precious metals.

**731-11 Watch and Clock Repairer**

Repairs or replaces defective parts of watches and clocks, using hand tools and machines such as watchmakers' lathes and electronic timing machines. Tests circuits in electronic watches and clocks, fits and adjusts parts to ensure correct operation, lubricates moving parts and demagnetises mechanisms. Sets and checks timing.

Examples of occupations classified here are:-

- Maker, watch
- Repairer, clock

**731-12 Optical Instrument Maker**

Makes, adjusts and repairs optical instruments such as telescopes, microscopes and binoculars.

Examples of occupations classified here are:-

- Maker, spectacles
- Repairer, instrument/optical

**731-13 Orthopaedic Appliances Maker**

Makes, adjusts and repairs orthopaedic apparatus, appliances and equipment.

Examples of occupations classified here are:-

- Maker, crutches
- Maker, orthopaedic appliances
- Repairer, orthopaedic appliances

**731-14 Dental Prosthesis Maker**

Makes and repairs dental appliances and prostheses. Fabricates full and partial dentures using wax and plaster moulds and shapes metal or plastic plates for dentures.

Examples of occupations classified here are:-

- Maker, denture
- Repairer, denture

**731-15 Surgical Instrument Maker**

Makes, adjusts and repairs surgical appliances and equipment

Examples of occupations classified here are:-

- Maker, surgical instrument

- Repairer, surgical instrument

**731-16 Musical Instrument Maker and Tuner**

Constructs, repairs or restores musical instruments such as accordions, pianos, organs and other stringed and wind instruments, and adjusts or alters them to owners specifications. Tests components using specialised hand tools and gauges and replaces faulty parts, strings, tuning pins and joint connections. Tunes instruments by comparing pitch to that of standard tuning forks or by aural comparison with tuned strings.

Examples of occupations classified here are:-

- Maker, musical instrument/stringed
- Maker, musical instrument/wind
- Tuner, musical instrument

**731-17 Jeweller**

Studies design and specifications for jewellery, prepares wax moulds and pours molten precious metal into moulds for jewellery. Shapes moulded metal by cutting, filing, beating, turning and bending, using special hand and power tools. Assembles articles by soldering, screwing together or otherwise attaching parts. Finishes articles using files, emery paper or buffing machines and repairs jewellery by soldering, replacing or rebuilding worn and broken parts. Engraves letters and designs on jewellery and precious metalware.

Examples of occupations classified here are:-

- Cutter, gem
- Goldsmith
- Jeweller
- Polisher, gem
- Silversmith

**731-99 Precision Workers in Metal and Related Materials n.e.c.**

This group includes those who make, adjust and repair cameras, scales and scientific instruments

Examples of occupations classified here are:-

- Adjuster, scale
- Maker, scale
- Maker, scientific instrument
- Repairer, camera

**MINOR GROUP 732: POTTERS, GLASS-MAKERS AND RELATED TRADES WORKERS**

Potters, Glass-makers and related trades workers make pottery, porcelain-ware and glass-ware, engrave and etch designs on glass articles, and paint or decorate glass, ceramics and related articles and signs

Skill Level – not specified

**732-11 Potter**

Conceives styles and shapes into which pottery pieces are to be formed. Forms articles such as pots, mugs, bowls and tableware on potter's wheel with hands, or using

interior or exterior moulding shapes and shaping tools. Applies glazes to dried pottery by dipping or painting and places finished pieces in kilns. Forms pottery or porcelain ware by casting semi-liquid clay (slip) in plaster-of-paris moulds. Makes clay or plaster-of-paris moulds to form hand crafted pottery and porcelain-ware using hand building and wheel techniques.

Examples of occupations classified here are:-

- Jigger man, pottery and porcelain
- Maker, mould/pottery and porcelain
- Maker, pottery and porcelain
- Potter

**732-12 Clay Extruding-press Operator**

Operates and monitors a machine which extrudes moist clay for further processing.

Examples of occupations classified here are:-

- Operator, extruding-press/clay

**732-13 Abrasive Former**

Forms abrasive wheels by moulding and pressing abrasive mixture

Examples of occupations classified here are:-

- Former, abrasive wheel

**732-14 Glass Former**

Examines sketches and drawings, develops specifications, conceives shapes for objects and determines type of glass to be used. Dips ends of blowpipes into molten glass tanks to gather amount required. Blows through pipes to inflate gobs of molten glass and rotates pipes to form shapes, prevent sagging, and maintain density and colour. Reheats, shapes, forms and joins tubing and shears extended sections, detaches blown articles from blowpipes and measures products or checks against patterns to verify dimensions. Blows or presses molten glass into moulds to form or shape glassware products such as bottles, jars and drinking glasses. Cuts, trims and treats glass to achieve special effects.

Examples of occupations classified here are:-

- Blower, glass
- Former, glass

**732-15 Glass Lens Moulder**

Heats, moulds and presses optical glass to make lens blanks.

Example of occupation classified here is:-

- Moulder, glass lens

**732-16 Glass Cutter**

Determines dimensions and quality of glass required, measures and marks glass for cutting. Lays sheets of glass on padded tables or in jigs, and places patterns on or under-glass. Cuts sheet glass with hand tools and saws prisms and other shapes from optical glass blocks.

Examples of occupations classified here are:-

- Cutter, glass

**732-17 Lens Grinding-machine Operator**

Locates and marks axes and optical centres on lens blocks, makes calculations and operates and monitors machines to grind lenses to specifications

Examples of occupations classified here are:-

- Operator, grinding-machine/lens

**732-18 Lens Polishing-machine Operator**

Operates and monitors machines to polish and surface lenses to meet optical prescription requirements. Tests lenses for trueness and quality.

Examples of occupations classified here are:-

- Operator, polishing-machine/lens

**732-21 Glass Tube Bender**

Heats, bends and shapes glass tubing. forms neon signs, fuses electrodes into ends and charges them with gas.

Examples of occupations classified here are:-

- Bender, glass tube

**732-22 Glass Engraver and Etcher**

Engraves monograms and ornamental designs on glassware or etches decorative designs and textures, calibration markings and other figures on glass articles.

Examples of occupations classified here are:-

- Engraver, glass
- Etcher, glass
- Sandblaster, glass

**732-23 Glass Painter**

Paints designs on glass articles with a brush by spraying or by transferring designs using stencils, rubber stamps and other means.

Example of occupation classified here is:-

- Painter, glass

**MINOR GROUP 733: HANDICRAFT WORKERS**

Handicraft workers apply traditional techniques to produce various articles for personal or household use as well as for decorative purposes.

Skill Level - not specified

**733-11 Handicraft Worker in Metal**

Applies traditional techniques to prepare metallic items such as rings, necklaces, arm and ankle bangles and other ornamental metallic objects for personal or decorative purposes.

Examples of occupations classified here are:-

- Handicraft worker, metal
- Maker, metallic necklace/traditional

**733-12 Handicraft Worker in Stone and Related Materials**

Applies traditional techniques to produce stone and clay items such as mortars, grinding stones, stone beads, carvings, smoking pipes and other moulded shapes for personal, or household use or for decorative purposes.

Examples of occupations classified here are:-

- Carver, stone
- Handicraft worker, stone and related materials
- Maker, stone mortar

**733-13 Handicraft Worker in Wood and Related Materials**

Applies traditional techniques to prepare wood, straw, rattan, reeds and other materials and to produce articles such as wooden curios, stools, hair combs, coconut grater, baskets (including fishing baskets), sleeping and other mats and ornaments made of wood and related materials for personal or household use or for decorative purposes.

Examples of occupations classified here are:-

- Handicraft worker, reed weaving
- Handicraft worker, wooden articles
- Weaver, basketry

**733-14 Handicraft Worker in Textile and Related Materials**

Applies traditional techniques to prepare, make, weave, paint or decorate articles of textile and related materials for personal or household use or for decorative purposes

Examples of occupations classified here are:-

- Handicraft workers, textile and related materials
- Weaver, sisal fibre products

**733-15 Handicraft Worker in Leather and Related Materials**

Applies traditional techniques to prepare, make, decorate and repair articles of leather and related materials for personal or household use or decorative purposes.

Examples of occupations classified here are:-

- Handicraft worker, leather articles
- Maker, leather drums/musical
- Maker, scabbard

**733-99 Handicraft Workers n.e.c.**

This group includes those who prepare, make, decorate and repair handicraft articles made from shells, bones and synthetic beads.

Examples of occupations classified here are:-

- Handicraft worker, bone articles
- Maker, bead belts
- Maker, bead necklace/synthetic

**SUB-MAJOR GROUP 74: PRINTING AND RELATED TRADES WORKERS**

Printing and related trades workers perform printing or book-binding tasks.

The work is carried out by hand and by hand-powered and other tools which are used to reduce the amount of physical effort and time required for specific tasks, as well as to improve

the quality of the products. The tasks call for an understanding of the work organisation, the materials and tools used, and the nature and purpose of the final product.

The tasks usually include: composing and typesetting; stereotyping and electrotyping; engraving and etching; photographic processing; book-binding; silk-screen, block and textile printing. Supervision of other workers may be included.

Occupations in this sub-major group are classified into six minor groups, namely:-

- 741 Compositors and Typesetters**
- 742 Stereotypers and Electrotypers**
- 743 Printing Engravers and Etchers**
- 744 Photographic and Related Workers**
- 745 Bookbinders and Related Workers**
- 746 Silk-screen, Block and Textile Printers**

#### **MINOR GROUP 741: COMPOSITORS AND TYPE SETTERS**

Compositors and typesetters set up and arrange printing type by hand or electronic keyboard or other machines.

Skill Level: Trade Certificate

##### **741-11 Hand Compositor**

Sets types by hand and machine; and assembles types and parts in a galley for printing article headings and other printed matter, determines type, size and compositional pattern from work order.

Example of occupation classified here is:-

- Compositor, hand

##### **741-12 Linotype Operator**

Operates the linotype machine used for setting type, each line of type being cast in the form of a complete bar of metal.

Example of occupation classified here is:-

- Operator, linotype

##### **741-13 Monotype Keyboard Operator**

Operates keyboards of machines which perforate heaps of paper for use in a monotype casting machine.

Example of occupation classified here is:-

- Operator, monotype keyboard

##### **741-14 Printing Maker-up**

Arranges set-up of type and spacing materials and illustration blocks to make pages. Arranges pages in sequence for printing.

Example of occupation classified here is:-

- Maker-up, printing

##### **741-15 Photo Type-setting Machine Operator**

Operates electronic keyboarding machines which enable characters to be converted into

film, sensitized tape or paper for subsequent photo plate-making.

Example of occupation classified here is:-

- Operator, photo type-setting machine

**741-99 Compositors and Type-setters n.e.c.**

This group includes compositors, type-setters and photo-type-setters not elsewhere classified, for example those who take proofs of set-up type by means of proof presses; impress metal sheets in making braille type; and arrange photo-composed type-film on paper (positive) for reproduction on printing plates.

Example of occupation classified here is:-

- Transcriber, braille

**MINOR GROUP 742: STEREOTYPERS AND ELECTROTYPERS**

Stereotypers and electrotypers make printing plates through electroplating processes.

Skill Level: Trade Certificate

**742-11 Stereotyper**

Performs all or several of the tasks involved in making printing plates from set-up type by stereotyping process.

Example of occupation classified here is:-

- Stereotyper

**742-12 Electrotyper**

Makes printing plates by putting lead alloy backing on caper shell made by electroplating moulds to reproduce type.

Example of occupation classified here is:-

- Electrotyper

**742-13 Type Casting Machine Operator**

Operates the machine which casts type in blocks of metal, for use in printing.

Example of occupation classified here is:-

- Operator, machine/type casting

**742-99 Stereotypers and Electrotypers n.e.c**

**MINOR GROUP 743: PRINTING ENGRAVERS AND ETCHERS**

Printing engravers and etchers engrave lithographic stones and printing plates, rollers, dies and blocks by various processes.

**743-10 Printing Engraver and Etcher**

Engraves lithographic stones and printing plates, rollers, dies and blocks by various processes.

Examples of occupations classified here are:-

- Engraver, metal
- Engraver, printing

- Engraver, stone
- Engraver, wood
- Etcher, metal plate/printing
- Etcher, photogravure
- Photo-engraver
- Retoucher, photogravure
- Transferer, lithographic

#### **MINOR GROUP 744: PHOTOGRAPHIC AND RELATED WORKERS**

Photographic and related workers develop and process photographic film and make prints or slides.

##### **744-10 Photographic Worker**

Develops and processes photographic film and makes prints or slides

Examples of occupations classified here are:-

- Darkroom worker, film developing
- Developer, film/colour
- Operator, minilab

#### **MINOR GROUP 745: BOOKBINDERS AND RELATED WORKERS**

Bookbinders and related workers bind covers and perform book-finishing operations.

Skill Level – Trade Certificate

##### **745-11 Book Embosser**

Embosses designs, figures or titles on books by hand or machines.

Example of occupational title classified here is:-

- Embosser, book

##### **745-12 Book Binder**

Binds printed material together by hand or machine to make complete books, collection of documents and series periodicals, fixes them in covers and performs book finishing operations.

Example of occupational title classified here is:-

- Binder, book

#### **MINOR GROUP 746: SILK-SCREEN, BLOCK AND TEXTILE PRINTERS**

Silk-screen, block and textile printers cut stencils for use in silk-screen printing and print on paper, metal, textile and other materials with silk screen, block of rubber, wood or other material, or engraved printing rollers.

##### **746-10 Silk-screen, Block and Textile Printer**

Cuts stencils for use in silk-screen printing and prints on paper, metal, textile and other materials with silk-screens, blocks of rubber, wood or other materials, or engraved printing rollers

Examples of occupational titles classified here are:-

- Cutter, stencil/silk-screen
- Printer, block

- Printer, silk-screen
- Printer, textile

## **SUB-MAJOR GROUP 75: FOOD PROCESSING AND RELATED TRADES WORKERS**

Food processing and related trades workers slaughter animals, kill fish, treat and prepare them and related food items for human and animal consumption, make various kinds of bread, cakes and other flour products, make sweets, process and preserve dairy products, process and preserve fruit, vegetables and related foods; brew or distil traditional alcoholic beverages, taste and grade various food products and beverages, or prepare tobacco and make tobacco products.

The tasks usually include: slaughtering animals; killing fish; treating meat and fish and preparing them and related food items; making various kinds of bread, cakes and other flour products; making sweets, processing and preserving dairy products; processing and preserving fruit, vegetables and related foods; brewing or distilling of various traditional alcoholic beverages; tasting and grading various food products and beverages; preparing tobacco and making tobacco products. Supervision of other workers may be included.

Occupations in this sub-major group are classified into eight minor groups, namely:-

- 751 Butchers, Fishmongers and Related Food Preparers**
- 752 Bakers, Pastry-cooks and Confectionery Makers**
- 753 Dairy Products Makers**
- 754 Fruit, Nut and Related Preservers**
- 755 Tobacco Preparers and Tobacco Products Makers**
- 756 Food and Beverage Tasters**
- 757 Brewers, Distillers and Related Workers**
- 758 Other Food Processing and Related Workers**

### **MINOR GROUP 751: BUTCHERS, FISHMONGERS AND RELATED FOOD PREPARERS**

Butchers, fishmongers and related food preparers slaughter animals, kill fish, treat and prepare them for human and animal consumption.

#### **751-11 Butcher (except Fish Butcher)**

Slaughters animals, removes bones, cuts up carcasses and prepares standard meat cuts. Slaughters animals and flays, trims and reduces carcasses in cold storage rooms. May specialize in particular slaughtering tasks. Cuts sides or quarters of meat into standard meat cuts such as rumps, flanks and shoulders to shape them and remove internal fat, blood clots, bruises and other matter to prepare them for packing and marketing.

Examples of occupational titles classified here are:-

- Butcher, animal
- Cutter, meat
- Slaughterer

#### **751-12 Sausage Maker**

Operates equipment to cut, grind, mince and press meat and extrude meat or meat emulsion to make sausages and similar products.

Example of occupational title classified here is:-

- Maker, sausage

**751-13 Meat and Fish Smoker**

Controls batteries of smoke chambers or ovens in which fish or meat cuts are smoked, cooked or cured.

Examples of occupational titles classified here are:-

- Smoker, fish
- Smoker, meat

**751-14 Fish Butcher**

Scrapes skin and picks bloody meat and other offal from uncooked fish. Cuts, grades and packs fish for sale, freezing or further processing.

Examples of occupational titles classified here are:-

- Butcher, fish
- Filleter, fish

**751-99 Butchers, Fishmongers and Related Food Preparers n.e.c.**

This group includes those who slaughter poultry, butcher and prepare cuts of crocodile meat or those who dry meat or fish in the sun.

Examples of occupational titles classified here are:-

- Butcher, crocodile
- Drier, fish
- Slaughterer, chicken

**MINOR GROUP 752: BAKERS, PASTRY-COOKS AND CONFECTIONERY MAKERS**

Bakers, pastry-cooks and confectionery makers, make various kinds of bread and other flour products.

**752-11 Baker**

Makes bread, cakes, biscuits, pastries, pies and other flour products. Checks the cleanliness and operation of equipment before production runs to ensure health and safety regulations are met. Checks the quality of ingredients for making dough and mixes and kneads dough by hand or machine. Cleans and greases tins, pans and trays, places dough into them, loads them into proofers and then into ovens. Monitors oven temperatures and bread appearance to determine baking times. Unloads ovens and arranges depanning and cooling of bread.

Examples of occupational titles classified here are:-

- Baker
- Baker, bread
- Maker, biscuit

**752-12 Pastry-cook**

Checks cleanliness and operation of equipment before production runs to ensure safety and health regulations are met. Checks quality of raw materials, weighs ingredients and makes dough using hands or machines. Bakes pastries in ovens and may serve them to customers.

Examples of occupational titles classified here are:-

- Maker, pastry
- Pastry-cook

**752-13 Macaroni and Noodle Maker**

Makes macaroni and noodles by preparing flour paste to which other ingredients may or may not be added. Monitors paste for shape and size.

Examples of occupational titles classified here are:-

- Maker, macaroni
- Maker, noodle

**752-14 Chocolate Maker**

Operates equipment which makes chocolate from beans and refines, tempers, coats and moulds chocolate.

Example of occupational title classified here is:-

- Maker, chocolate

**752-15 Confectionery Maker**

Examines production schedules to determine confectionery types and quantities to be made. Weighs and mixes batches of sugar, chocolate and other ingredients according to recipes and makes handmade confectionery. May control temperature and pressure in boilers used to make boiled sweets. Assists in cooling, folding, coating, slicing, moulding and wrapping sweets by hand or machine.

Examples of occupational titles classified here are:-

- Maker, confectionery
- Maker, kashata

**MINOR GROUP 753: DAIRY PRODUCTS MAKERS**

Dairy products makers process and preserve dairy products such as butter, cheese and cream.

**753-10 Butter and Cheese Maker**

Processes and preserves butter and various types of cheese, cream or other dairy products

Examples of occupational titles classified here are:-

- Maker, butter
- Maker, cheese
- Maker, cream

**MINOR GROUP 754: FRUIT, NUT AND RELATED PRESERVERS**

Fruit, nut and related preservers process and preserve fruit, nuts and related foods.

**754-11 Fruit Juice Maker**

Extracts and preserves juice from various fruits.

Example of occupational title classified here is:-

- Maker, fruit juice

**754-12 Fruit Preserver**

Processes or preserves various fruits.

Example of occupational title classified here is:-

- Preserver, fruit

**754-13 Nut Preserver**

Processes or preserves nuts in various ways including cooking, drying and salting.

Examples of occupational titles classified here are:-

- Preserver, cashew nuts
- Preserver, ground nuts

**754-14 Coconut Oil Maker**

Extracts and preserves coconut oil.

Example of occupational title classified here is:-

- Maker, coconut oil

**754-99 Fruit, Nut and Related Preservers n.e.c.**

Included here are those who prepare sim-sim seeds by cooking, sugaring and forming the required shapes.

Example of occupational title classified here is:-

- Preparer, sim-sim seeds

**MINOR GROUP 755: BREWERS, DISTILLERS AND RELATED WORKERS**

**755-11 Traditional Liquor Brewer**

Arranges and prepares ingredients such as fermented millet, roasted maize flour, sugar or sugar cane juice, muratina, etc then mixes them with water and monitors the process until brew is ready. May use traditional methods of distillation in some preparations. Observes hygiene throughout the process.

Examples of occupational titles classified here are:-

- Brewer, busaa
- Brewer, muratina
- Brewer, kangara

**755-99 Brewers, Distillers and Related Workers n.e.c.**

This group includes those who carry out the necessary operations in the making of wine and herbal alcoholic brews.

Examples of occupational titles classified here are:-

- Brewer, miti-ni-dawa
- Maker, wine

**MINOR GROUP 756: FOOD AND BEVERAGE TASTERS**

Food and beverage tasters taste and grade various food products and beverages.

Skill Level: Trade Certificate

**756-11 Coffee and Tea Taster**

Inspects, tests and tastes coffee and tea at various states of processing to determine taste and quality, and grades these into appropriate classes.

Examples of occupational titles classified here are:-

- Taster, coffee
- Taster, tea

**756-12 Wine and Liquor Taster**

Tastes Wines and Liquors at various stages of maturation processes to determine quality and maturity.

Examples of occupational titles classified here are:-

- Taster, liquor
- Taster, wine

**MINOR GROUP 757: TOBACCO PREPARERS AND TOBACCO PRODUCTS MAKERS**

Tobacco preparers and tobacco products makers prepare tobacco and make tobacco products.

Skill Level: Trade Certificate

**757-11 Tobacco Grader**

Grades and assesses cured tobacco leaves by type, quality and locality where grown, and records details of assessments according to classification system. Selects tobacco so graded according to established formula or other specifications.

Example of occupational title classified here is:-

- Grader, tobacco

**757-12 Snuff Maker**

Makes snuff by hand or with simple machines from tobacco leaves which have been mixed according to formula to obtain a blend of distinct flavour.

Example of occupational title classified here is:-

- Maker, snuff

**757-13 Tobacco Blender**

Blends various kinds of tobacco to customers' orders, for wholesale and retail establishments using formulas.

Example of occupational title classified here is:-

- Blender, tobacco

**757-99 Tobacco Prepares and Tobacco Products Makers n.e.c.**

Included here are those who make smoking tobacco by drying tobacco leaves in the sun and then crushing them manually.

Example of occupational title classified here is:-

- Maker, traditional smoking tobacco

## **MINOR GROUP 758: OTHER FOOD PROCESSING AND RELATED WORKERS**

Other food processing and related workers process and preserve seasoning, flavouring agents and pickling solutions and pickle food.

### **758-10 Food Processors and Related Workers n.e.c.**

This group includes those who prepare seasonings, flavouring agents and pickling solutions and pickle food.

Example of occupational title classified here is:-

- Pickler, food

## **SUB-MAJOR GROUP 76: WOODWORKING TRADES WORKERS**

Woodworking trades workers season and preserve wood and wooden items, make and repair wooden furniture, wooden fittings, patterns and models, by using tools and woodworking machines; set or set and operate woodworking machines, decorate and repair wooden articles and wooden parts of goods.

The tasks usually include: seasoning and preserving wood; making, decorating and repairing wooden furniture; making, decorating and repairing parts of or entire wooden vehicles, wooden models, patterns, and articles such as sports goods; setting or setting and operating woodworking machines such as those for precision sawing, shaping or carving; making brooms and brushes. Supervision of other workers may be included.

Occupations in this sub-major group are classified into two minor groups, namely:-

**761 Wood Treating, Cabinetmaking and Related Trades Workers**

**762 Woodworking-machine Setters and Setter-operators**

## **MINOR GROUP 761: WOOD TREATING, CABINET-MAKING AND RELATED TRADES WORKERS**

Wood treating, cabinet-making and related trades workers season and preserve wood and wooden items, make and repair wooden furniture, wooden fittings, patterns and models, make wicker furniture and related articles and decorate and repair wooden parts of goods.

Skill Level: Trade Certificate

### **761-11 Wood Seasoning Worker**

Seasons wood in steam heated kilns in order to make it dry and hard.

Example of occupational title classified here is:-

- Seasoning worker, wood

### **761-12 Wood Treating Worker**

Treats wood with chemicals to protect it against decay or parasites. Controls the loading of wood into treating plants, and prepares wood treating ingredients such as borax, copper chrome arsenate and creosote. Controls treatment cycle by regulating heat and flow of preservatives in dip tank or by regulating air and fluid pressure and temperature. Controls the removal of treated timber.

Example of occupational title classified here is:-

- Worker, wood treating

**761-13 Cabinet Maker**

Sets up and operates variety of woodworking machines and uses various hand tools to fabricate and repair wooden cabinets and high grade furniture.

Example of occupational title classified here is:-

- Maker, cabinet

**761-14 Cart-wright**

Makes and repairs wooden vehicles (carts), wheels or other wooden parts of vehicles.

Examples of occupational titles classified here are:-

- Cart-wright
- Maker, mkokoteni
- Maker hand cart

**761-15 Wooden Pattern Maker**

Prepares full-scale drawings and assembles templates. Marks instructions and information on templates. Repairs and rebuilds damaged templates.

Example of occupational title classified here is:-

- Maker, wooden pattern

**761-16 Wooden Model Maker**

Determines model requirements by examining drawings, drafts or samples and consulting with designers. Selects stock, marks parts and determines layout. Operates woodworking machines to cut and shape parts for models. Fits parts together with dowels, glue, nails, bolts, screws and other fasteners. Planes, shaves, files, scrapes and sands models during hand forming process, referring to templates and measuring devices. May wax and polish finished models.

Example of occupational title classified here is:-

- Maker, wooden model

**761-17 Boat-body Builder**

Lays out full-scale outlines of boats on mouldloft floors according to drawings and establishes dimensional reference points on layouts and makes templates of parts. Scribes lines following templates, and cuts and forms parts such as keels, stems, stern posts, ribs and sidings. Assembles shells of boats by forming steam softened sidings on mould, removing mould and searing sidings to keels, or by securing ribs to keels and covering them with planking. Builds and installs structures such as cabins, mountings for machinery, shafting and propeller supports and rudders. Installs decking, masts, booms and ladders.

Example of occupational title classified here is:-

- Builder, boat-body

**761-18 Woodcarver (except Handicraft)**

Determines job requirements by examining drawings, models or other specifications. Traces detailed drawings of designs on to wood and carves patterns by hand using tools, such as gauges, paving knives, chisels and mallets. Smoothens edges of finished products with chisels or sandpaper.

Example of occupational title classified here is:-

- Woodcarver, construction

## **MINOR GROUP 762: WOODWORKING-MACHINE SETTERS AND SETTER-OPERATORS**

Woodworking-machine setters and setter-operators set or set and operate woodworking machines.

Skill Level: Trade Certificate

### **762-11 Woodworking-machine Setter**

Sets up a line of woodworking machines, determines tooling and machinery requirements and sequences of operations, and observes operations to detect defects, makes adjustments and maintain feed rates, cutting speeds and dimensions cut.

Example of occupational title classified here is:-

- Setter, woodworking-machine

### **762-12 Woodworking-machine Setter-operator**

Sets up and operates variety of woodworking machines to surface, cut and shape lumber and to fabricate parts for wood products such as doors, door and window frames, furniture and sashes according to specifications.

Example of occupational title classified here is:-

- Setter-operator, woodworking machine

### **762-13 Precision Sawyer**

Sets and operates precision sawing machines to reduce logs to primary break-down pieces such as timber slabs or boards. Checks saws and other equipment for safety, sharpness and correct functioning.

Example of occupational title classified here is:-

- Sawyer, precision

### **762-14 Wood Turner**

Operates wood turning lathes to turn and shape wood stock by holding chisels against rotating stock, and reduces square stock to rough cylinders. Lays out cutting lines according to drawings or specifications and places chisels against rotating work pieces to cut shapes and verifies dimensions. Smoothens surfaces of work by holding sandpaper against rotating work pieces and may apply wax or other finishes to work pieces.

Example of occupational title classified here is:-

- Turner, wood

### **762-15 Wood-lathe Setter -operator**

Sets up grinding and honing knives, feed and take-off devices and required templates, and sets, operates and maintains wood turning lathes.

Example of occupational title classified here is:-

- Setter-operator, wood-lathe

**762-16 Wood-shaping-machine Setter-operator**

Sets up, operates and maintains woodworking machines to cut, shape and sand wood stock to specifications.

Example of occupational classified here is:-

- Setter-operator, wood-shaping-machine

**762-17 Wood-routing-machine Setter-operator**

Sets up, operates and maintains woodworking machines such as routers to cut grooves, slots and recesses in timber.

Example of occupational title classified here is:-

- Setter, operator, wood-routing-machine

**762-18 Wood-planing-machine Setter-operator**

Sets up, operates and maintains woodworking machines such as planers and saws, to cut and plane wood stock to pre-determined specifications.

Example of occupational title classified here is:-

- Setter-operator, wood-planing-machine

**SUB-MAJOR GROUP 77: TEXTILE, GARMENT AND RELATED TRADES WORKERS**

Textile, garment and related trades workers prepare natural textile fibres, threads and yarns, and make fabrics by weaving, knitting and other means; make and repair garments and other textile articles.

The tasks usually include: preparing natural textile fibres, spinning, doubling, twisting and winding threads and yarns; making fabrics by weaving, knitting and other techniques; making tailored garments; participating in the manufacture of ready-to-wear garments; making patterns and marking and cutting textiles and similar materials; sewing textiles and similar materials by hand or hand-operated machines. Supervision of other workers may be included.

Occupations in this sub-major group are classified into three minor groups, namely:-

**771 Fibre Preparers**

**772 Weavers, Knitters and Related Workers**

**773 Tailors, Dressmakers and Related Workers**

**MINOR GROUP 771: FIBRE PREPARERS**

Fibre preparers prepare natural textile fibres for spinning and winding.

Skill Level: Trade Certificate

**771-11 Fibre Grader**

Inspects and tests natural textile fibre for cleanliness, colour and quality and assigns gradings and classes.

Examples of occupational titles classified here are:-

- Classer, fibre
- Grader, fibre

**771-12 Wool Scourer**

Blends wool from different bales for feeding into scouring plant. Controls acid, chemical and washing treatments of wool carbonising equipment and the speed and treatment functions of scourers. Controls crushing and willowing equipment to remove carbonised vegetable matter from wool. Operates presses and machines to bale scoured and carbonised wool pieces.

Example of occupational title classified here is:-

- Scourer, wool

**771-13 Fibre Blender**

Operates and maintains machines which mix textile fibre into uniform blends.

Examples of occupational titles classified here are:-

- Blender, fibre
- Mixer, fibre

**771-14 Fibre Picker**

Picks manually or operates controls of tractor - drawn or self-propelled machinery to pick mature fibre such as cotton from plantations.

Example of occupational title classified here is:-

- Picker, fibre

**771-15 Fibre Carder**

Operates and monitors machines which convert laps of textile fibre to slivers by carding.

Example of occupational title classified here is:-

- Carder, fibre

**771-16 Fibre Comber**

Operates and monitors machines which clean and fluff textile fibre, and combs them into slivers for first drawing.

Example of occupational title classified here is:-

- Comber, fibre

**771-17 Fibre Drawer**

Operates and monitors machines which draw fibre and convert it to yarn by spinning.

Example of occupational title classified here is:-

- Drawer, fibre

**MINOR GROUP 772: WEAVERS, KNITTERS AND RELATED WORKERS**

Weavers, knitters and related workers spin and wind yarn by hand, weave materials on hand looms, make carpets by using a knotting technique, knit garments and fabrics by hand or hand-operated machine or repair garments or other textile and fur articles.

Skill Level: Trade Certificate

**772-11 Loom Threader**

Loads rolls of cotton, wool or other fibre into feed holders and other backing materials into machines. Aligns and threads fibre and backing materials through needle beds of looms and on to take-up spindles. Produces felt or other non-woven materials.

Example of occupational title classified here is:-

- Threader, loom

**772-12 Cloth Weaver**

Operates looms to weave plain or figured cloth, lace, tapestry or other fabrics.

Example of occupational title classified here is:-

- Weaver, cloth

**772-13 Carpet Weaver**

Sets up pile-forming mechanisms on carpet-weaving machines and checks and repairs faults in patterns, piles, weaves or widths.

Examples of occupational titles classified here are:-

- Maker, carpet
- Repairer, carpet
- Weaver, carpet

**772-14 Fabrics Repairer**

Mounts rolls of material in brackets of examining frames or places bundles of products on work tables. Examines fabrics for defects and removes defective portions using blades or scissors. Operates sewing machines, mending guns, fringing machines or other equipment to make repairs and re-stitches torn portions or sews patches over holes in fabrics.

Example of occupational title classified here is:-

- Repairer, fabrics

**772-15 Knitter**

Knits fabrics, garment parts or other articles from yarn such as cotton, wool, nylon on hand-operated machine or by hand. Knits woollen or other yarn into sweaters, jerseys, jumpers, pullovers and cardigans by using knitting needles.

Examples of occupational titles classified here are:-

- Knitter
- Knitter, sweater

**772-99 Weavers, Knitters and Related Worker's n.e.c.**

Included here are those who weave fancy articles from silk threads; embroider and trim dress with silk or other lace or threads.

Example of occupational title classified here is:-

- Tatting worker, lace

**MINOR GROUP 773: TAILORS, DRESSMAKERS AND RELATED WORKERS**

Tailors, dressmakers and related workers make and repair garments and other textiles, make patterns and mark and cut textiles.

Skill Level: Trade Certificate

**773-11 Tailor**

Makes garments such as suits, topcoats, overcoats and other dress clothing. Confers with customers to determine types of materials to be used and styles and designs of garments,; measures and records customer's sizes and drafts patterns for garments, or alters patterns to fit customers. Positions and pins patterns to fabric, cuts fabric, assembles garments and bastes garment parts, using needle and thread. Fits basted garments on customers and marks areas requiring alterations. Alters garments, joins parts, fits collar facings, trims and sews collars, sews buttons and button holes to finish garments. Uses presses or steam irons to finish products.

Example of occupational title classified here is:-

- Tailor

**773-12 Dressmaker**

Makes women's garments such as dresses, coats, suits and other clothing, applying knowledge of women's garment design, construction and styling. Confers with customers to determine types of material to be used and styles and designs of garments; measures customers and records measurements for use in preparing patterns and drafts or modifies patterns to suit style and size of garment. Positions and pins patterns to fabric, cuts fabric, bastes fabric parts together, fits basted garments on customers and marks areas requiring alteration. Sews fabric parts together using sewing machines. Presses seams, sews felling stitches in hems of garments to conceal threads, sews button holes and sews on buttons, hooks and eyes or press fasteners to finish garments.

Example of occupational title classified here is:-

- Dressmaker

**773-13 Hat Maker**

Makes and decorates hats to customers' specifications or to standard patterns, from materials such as felt, fabric and fur.

Examples of occupational titles classified here are:-

- Hatter
- Maker, hat
- Milliner

**773-14 Umbrella Maker**

Performs pattern-making, marking and cutting tasks in the manufacture of umbrellas. Assembles and covers umbrellas and carries out repairs.

Examples of occupational titles classified here are:-

- Maker, umbrella
- Repairer, umbrella

**773-15 Garment Cutter**

Unrolls and spreads fabric in layers on tables, arranges patterns on fabric and marks outlines of patterns on fabric, using chalk, crayon or perforating machines. Uses scissors or cutting machines to cut around edges of patterns or along markings on top

layer of fabric to cut out parts.

Example of occupational title classified here is:-

- Cutter, garment

**773-16 Pattern Maker**

Examines sketches, sample articles and design specifications to determine data such as number, shape and size of pattern parts, and quantities of cloth required to make finished articles. Draws outlines of parts on paper using drafting instruments and increases or decreases dimensions of master patterns to produce required sizes. Draws details such as positions of pleats, pockets, buttonholes and buttons on patterns. Cuts out master patterns using scissors and knives and marks size, identification and style information on patterns.

Example of occupational title classified here is:-

- Maker, pattern

**773-99 Tailors, Dressmakers and Related Workers n.e.c.**

This group includes those who do embroidery work on finished products according to customers' specifications and those who make dolls and toys from fabrics.

Examples of occupational titles classified here are:-

- Embroiderer, textile
- Maker, doll
- Maker, toy

**SUB-MAJOR GROUP 78: UPHOLSTERERS, PELT, LEATHER AND SHOEMAKING TRADES WORKERS**

Upholsterers, pelt, leather and shoemaking trades workers upholster furniture and vehicle seats; prepare wool-bearing pelts for further use; make leather from hides and skins; make and repair footwear and other articles made of natural or synthetic leather with the exception of garments, hats and gloves; or make various other articles from leather and similar materials.

The tasks usually include: upholstering furniture, vehicle seats and making mattresses; preparing wool-bearing pelts for making garments and other products by hand or by using simple tools; making leather from hides and skins; making and repairing footwear and other articles made from leather and similar materials. Supervision of other workers may be included.

Occupations in this sub-major group are classified into three minor group, namely:-

**781 Upholsterers**

**782 Fell mongers, Tanners and Pelt Dressers**

**783 Shoe-making and Related Workers**

**MINOR GROUP 781: UPHOLSTERERS**

Upholsters, upholster furniture, make mattresses, or make and install interior decorations of textile, leather and similar materials.

Skill Level: Trade Certificate

**781-11 Upholsterer**

Provides with padding, springs and covering material to furniture, settees and automobile seats or provides rooms with carpets, curtains and cushioned seats. May repair and rebuild upholstered items.

Examples of occupational titles classified here are:-

- Upholsterer
- Upholsterer, car

**781-12 Mattress Maker**

Installs, arranges and secures springs to wire frames, positions padding on units and encases units with covering material to make mattresses. Packages units with protective covering and seals with tape.

Example of occupational title classified here is:-

- Maker, mattress

**MINOR GROUP 782: FELL MONGERS, TANNERS AND PELT DRESSERS**

Fell mongers, tanners and pelt dressers, prepare fur and wool-bearing pelts for making garments and other products, make leather from hides and skins.

Skill Level: Trade Certificate

**782-11 Hides and Skins Grader**

Inspects tanned skins for thickness, size and quality and examines them to detect defects such as scars and holes. Feels skins to detect thin and thick areas and cuts out defective parts. Grades and stacks skins according to thickness, colour and quality.

Examples of occupational titles classified here are:-

- Grader, hides
- Grader, skins

**782-12 Hides and Skins Flesher and Dehairer**

Operates fell-mongering, paint spraying, deburring, wool pulling, wool scouring and drying machines, to remove wool, or fur from fresh hides or skins. May operate machines to remove flesh and fat from hides or may do so by cutting manually.

Examples of occupational titles classified here are:-

- Dehairer, hides and skins
- Flesher, hides and skins

**782-13 Tanner**

Operates rotary drum containing tanning solution to convert hides and skins into leather according to instructions.

Example of occupational title classified here is:-

- Tanner

**782-14 Leather Scourer**

Prepares tanned leather by soaking and scrubbing.

Example of occupational title classified here is:-

- Scourer, leather

**782-15 Pelt Grader**

Inspects, grades and stacks fur and wool-bearing pelts according to thickness, size, quality and colour. Sorts pelts into lots for further processing or despatch.

Example of occupational title classified here is:-

- Grader, pelt

**782-16 Pelt Trimmer and Plucker**

Plucks and removes long, coarse hair from pelts and trims underlying hair to even length.

Examples of occupational titles classified here are:-

- Plucker, pelt hair
- Trimmer, pelt hair

**782-17 Pelt Stretcher**

Stretches and smoothens dressed pelts.

Example of occupational title classified here is:-

- Stretcher, pelt

**782-18 Leather and Pelt Dyer**

Cures and applies dyes and stains to fur pelts or leather

Examples of occupational titles classified here are:-

- Dyer, leather
- Dyer, pelt
- Stainer, leather
- Stainer, pelt

**MINOR GROUP 783: SHOE-MAKING AND RELATED TRADES WORKERS**

Shoe-making and related trades workers make and repair footwear, except leather garments, hats and gloves, such as luggage, and belts, or participate in the manufacture of shoes and related goods.

Skill Level: Trade Certificate

**783-11 Shoe-maker**

Makes patterns to guide the cutting of shoe parts. Selects and spreads leather or other material on cutting beds; positions cutting dies or knives so that grain, finish and pattern of shoe parts will match when assembled and that maximum number of parts can be obtained. Cuts out parts with scissors, knives or clicking machines to join, decorate or re-inforce shoe parts to form uppers. Marks and punches eyelets and inserts and clips metal rings. Selects or assembles lasts, pulls or stretches uppers on to lasts; and shapes footwear items and trims uppers with knives and sews on welts. Attaches uppers to insoles with tacks and adhesives and sews outer soles to lasted uppers or cements soles in place. Cuts and trims excess threads and material, and trims and buffs edges of soles and heels. Brushes dressing dyes on shoes or polishes shoes with rotating power brushes.

Examples of occupations classified here are:-

- Shoe-maker

**783-12 Shoe Repairer**

Positions shoes on lasts and cuts off soles, heels or other finished or torn parts with pincers and knives. Selects sole or heel blanks or cuts pieces to size and positions new parts over shoes and fastens them with nails, tacks or sewing. Re-stitches torn portions or patches over holes in shoe uppers.

Examples of occupational titles classified here are:-

- Cobbler
- Repairer, shoe

**783-13 Shoe Pattern Maker**

Makes patterns to guide the cutting of shoe parts.

Example of occupational title classified here is:-

- Maker, shoe pattern

**783-14 Clicker Cutter**

Cuts shoe parts from leather or other materials by hand or machine, bundles or boxes parts and marks size and style data to assist assembly.

Example of occupational title classified here is:-

- Cutter, clicker

**783-15 Sole Fitter**

Sews outer soles to lasted uppers or cements soles in place and trims and buffs edges of soles.

Example of occupational title classified here is:-

- Fitter, sole

**783-16 Shoe Finisher**

Cuts and trims excess threads and material, brushes dyes on shoes and polishes shoes with rotating power brushes.

Example of occupational title classified here is:-

- Finisher, shoe

**783-17 Leather Goods Maker**

Cuts leather to size and shape and bevels edges using clicking and skiving machines. Fastens parts together using rivets and sewing machines or adhesives and hand sews leather using needles, awls and stitch gauge punches. Stains finished edges using raven oil or beeswax and uses dyes and polish to restore leather articles. Fabricates or repairs leather articles such as wallets, cases, brief-cases, leather bags and other accessories. May emboss leather with patterns.

Examples of occupational titles classified here are:-

- Maker, hand-bag/leather
- Maker, leather goods

**783-18 Leather Cutter**

Selects, matches and arranges leather according to size, design, colour and quality and nails to patterns. Marks leather components on patterns, cuts off unusable parts, trims and shapes them for making, altering or repairing leather articles.

Example of occupational title classified here is:-

- Cutter, leather

**783-21 Saddle and Harness Maker**

Makes and repairs leather saddlery and harnesses for horses, mules and other animals.

Examples of occupational titles classified here are:-

- Maker, harness
- Maker, saddle and harness

**MAJOR GROUP 8  
PLANT AND MACHINE OPERATORS AND ASSEMBLERS**

Plant and machine operators and assemblers operate and monitor industrial and agricultural machinery and equipment, drive and operate trains, motor vehicles and mobile machinery and equipment, or assemble products from component parts according to strict specifications and procedures.

The work mainly calls for experience with and an understanding of the machinery and equipment as well as an ability to cope with machine paced operations and to adapt to technological innovations. Most occupations in this major group require skills at the 2nd and

3rd KNOCS skill level.

The tasks usually include: operating and monitoring machinery and equipment used for drilling and mining or processing mineral products; operating and monitoring machinery and equipment for processing of metal or for producing articles made of metals; operating and monitoring machinery and equipment for processing of wood for producing articles made of wood or paper; operating and monitoring machinery and equipment used to process chemicals and chemical products; operating and monitoring machinery and equipment used for electric power generation and related works; operating and monitoring machinery which process foodstuffs, textiles, fur or leather; assembling products from component parts according to strict specifications and procedures; driving and operating trains, motor vehicles, mobile industrial and agricultural machinery and equipment. Supervision of other workers may be included.

Occupations in this major group are classified into nine sub-major groups, namely:-

- 81 Drilling and Mining Plant and Mineral Products Machine Operators**
- 82 Metal Processing Plant and Metal-Working Machine Operators.**
- 83 Wood Processing Plant and Wood, Rubber and Plastic Products Machine Operators.**
- 84 Chemical Processing Plant and Chemical Products Machine Operators.**
- 85 Power Production Plant Operators.**
- 86 Food and Related Products Machine Operators.**
- 87 Assemblers**
- 88 Drivers and Mobile Machinery Operators**
- 89 Other Plant and Machine Operators and Assemblers**

#### **SUB-MAJOR GROUP 81: DRILLING AND MINING PLANT AND MINERAL PRODUCTS MACHINE OPERATORS**

Drilling, mining, quarrying plant and mineral products machine operators, operate and monitor industrial plant for drilling, mining, quarrying or processing of minerals, stone, oil or water; operate and monitor machines that make products composed primarily of non-metallic mineral materials.

The tasks usually include: an understanding and experience of the industrial plant which is being operated and monitored. The duties usually include operating and monitoring industrial plant for drilling, mining or processing of minerals, stones, oil or water; operating and monitoring machines to extrude, mould, mix, grind and cut various pre-cast cement, concrete and stone products. Supervision of other workers maybe included.

Occupations in this sub-major group are classified into two minor groups, namely:-

- 811 Well Drillers and Borers**
- 812 Mining Plant Operators**
- 813 Stone, Clay, Cement and Other Mineral Products Machine Operators**

#### **MINOR GROUP 811 : WELL DRILLERS AND BORERS**

Well drillers and borers erect and operate drilling machinery and equipment and perform related tasks in the sinking and operation of wells

Skill Level: Trade Certificate

##### **811-11 Derrick-man (Oil and Gas Well)**

Assembles and operates drilling machinery and accessory equipment and prepares derrick pipe

handling devices and Slush pumps. Racks pipes on derrick platforms and assists in erecting and dismantling derrick equipment, repairing drilling machinery, slush pumps and derricks.

Examples of occupational titles classified here are:-

- Derrick-man, oil and gas well
- Offsider, well treatment/oil and gas wells

#### **811-12 Rotary Driller (Oil and Gas Well)**

Operates rotary drilling machinery and equipment to drill oil or gas wells. Monitors equipment and progress during drilling operations and directs the assembly and disassembly of pipes, casings and drill heads. Operates auxiliary equipment such as pumps for air, water or mud.

Examples of occupational titles classified here are:-

- Driller, rotary/oil and gas well
- Operator, power tong/oil and gas well
- Operator, service rig/oil and gas well

#### **811-99 Other Well Drillers and Borers**

This group includes those who set up and operate drilling machinery and equipment to drill wells or bores other than for oil or gas.

Examples of occupational titles classified here are:-

- Driller, bore hole/water
- Driller, water well

### **MINOR GROUP 812: MINING PLANT OPERATORS**

Mining plant operators operate and monitor machinery and equipment which cut channels in a mine or quarry or drills for blasting, or they operate continuous-mining machines.

Skill Level: Trade Certificate

#### **812-11 Cutting/Trench Digging Machine Operator (Mine)**

Operates and monitors machinery and equipment for cutting channels in a mine or quarry and excavates and loads ore and rock in mine workings.

Example of occupational title classified here is:-

- Machine-operator, trench digging/mines

#### **812-12 Drilling Machine Operator (Mines & Quarries)**

Operates and monitors machinery for drilling, blasting holes in mines and quarries. May operate auxiliary equipment and tools used to solve problems in drilled holes caused by the breakdown of drilling rigs and equipment or by adverse natural conditions.

Examples of occupational titles classified here are:-

- Machine-operator, jumbo drill/mines and quarries
- Machine-operator, raise drill/mines and quarries

#### **812-13 Continuous Mining Machine Operator**

Operates and monitors continuous mining machines and equipment for excavating, loading and transporting ore and rock in mines and quarries.

Examples of occupational titles classified here are:-

- Machine-operator, continuous mining
- Operator, longwall mine
- Operator, mechanical bugger/mining
- Operator, underground truck/mining

**812-14 Mineral Crushing Machine Operator**

Operates rotary train dumpers, crushing and related equipment which crush, break or grind lumps of mineral ore and stones to required size.

Examples of occupational titles classified here are:-

- Machine-operator, ballast production
- Operator, crusher/ore and stone
- Operator, flourspar plant

**812-15 Precipitator (Mineral)**

Operates and monitors equipment for combining mineral ores with solvents, and using chemicals to precipitate, and to wash the precipitate in order to remove waste materials.

Examples of occupational titles classified here are:-

- Machine-operator, ore treating solution
- Operator, ore separator
- Precipitator, mineral

**812-16 Screening Machine Operator**

Tends vibrating or oscillating shocker screens that separate solids from liquids or powder chemical materials into particles of specified size. Turns valves, starts conveyors or moves chute cranes to control flow of material to screen according to type of material to be screened. Shifts sample of size product through laboratory test to determine if particle size meets the specification and records results.

Examples of occupational titles classified here are:-

- Machine-operator, floatation/mining
- Machine-operator, screening/mining

**812-99 Other Mining Plant Operator**

This group includes those who operate and monitor separating, washing, bleaching and filtering equipment to wash mineral ores to remove waste material; or separate metal and mineral concentrates from ore or alluvial deposits by thickening, gravity separation, or magnetic, or electrostatic separation.

Examples of occupational titles classified here are:-

- Operator, surface hydraulic fill/mining
- Plant operator, coal preparation/coal mining
- Plant-operator, wash/mining

**MINOR GROUP 813: STONE, CLAY, CEMENT AND OTHER MINERAL PRODUCTS MACHINE OPERATORS.**

Stone, clay, cement and other mineral products machine operators operate and monitor extrusion, moulding, mixing, grinding and cutting machines which manufacture and finish various pre-cast concrete and stone products, or which make cast stone for building purposes.

Skill Level: Trade Certificate

**813-11 Stone Finishing Machine Operator**

Operates and monitors machines which cut, saw, plane, grind and polish building and monumental stones.

Examples of occupational titles classified here are:-

- Machine-operator, mosaic cutting
- Machine-operator, stone finishing

**813-12 Stone working Lathe Operator**

Operates and monitors lathes to cut and polish stone columns, pillars and other cylindrical shapes.

Examples of occupational titles classified here are:-

- Machine-operator, stone products cutting
- Lathe-operator, stone working

**813-13 Cast-stone Products Machine Operator**

Operates and monitors machines which make cast stones for building purposes

Examples of occupational titles classified here are:-

- Machine-operator, artificial stone products
- Machine-operator, cast-stone products

**813-14 Clay Products Machine Operator**

Operates and monitors machines which manufacture and finish a variety of lay products by extruding, moulding, mixing, grinding, cutting and other processes.

Examples of occupational titles classified here are:-

- Machine-operator, brick making
- Machine-operator, clay products
- Machine-operator, tile making

**813-15 Cast-concrete Products Machine Operator**

Operates and monitors extrusion and moulding machines which manufacture and finish various pre-cast concrete products such as flagstone, moulded pipe sections, fencing posts, walling and partitioning slabs, trench liners and building components.

Example of occupational titles classified here is:-

- Machine-operator, cast-concrete products

**813-16 Asbestos-cement Products Machine Operator**

Operates and monitors machines which manufacture and finish asbestos products such as fibres and heat insulating blocks.

Example of occupational title classified here is:-

- Machine-operator, asbestos-cement products

**813-17 Stone Engraving Machine Operator**

Operates and monitors machines with special shaped abrasive wheels for cutting, moulding, groves, panels and other decorative designs in stone blocks.

Example of occupational title classified here is:-

- Machine-operator, stone engraving

**813-18 Industrial Diamonds Cutting Machine Operator**

Operates and monitors machines which cut precious or semi-precious stones by machine.

Example of occupational title classified here is:-

- Machine-operator, industrial diamonds cutting

**813-19 Non-metallic Mineral Production Machine Operator**

Operates and monitors machines which produce non-metallic mineral products such as abrasive coating.

Example of occupational title classified here is:-

- Machine-operator, abrasive coating production

**813-21 Concrete-mixing Plant Operator**

Operates and monitors machines which mix sand, cement and water to make concrete.

Example of occupational title classified here is:-

- Operator, concrete-mixing plant

**813-22 Pelletising Machine Operator**

Operates and monitors machines which compress finely ground minerals or coal into briquettes or pellets.

Example of occupational title classified here is:-

- Machine-operator, pelletising

**813-23 Mineral Products Machine Operators n.e.c**

Operate and monitor machinery and equipment in the production of cement and soda ash.

Examples of occupational titles classified here are:-

- Machine-operator, cement production
- Machine -operator, soda ash production
- Machine -operator, sodium carbonate production

**813-99 Stone, Clay, Cement and Other Mineral Products Machine Operators n.e.c**

Included in this group are machine operators who operate and monitor machines for the production of abrasive products.

Example of occupational title classified here is:-

- Machine-operator, abrasive products

## **SUB-MAJOR GROUP 82: METAL PROCESSING PLANT AND METAL WORKING MACHINE OPERATORS**

Metal processing plant and Metal Working Machine Operators , operate and monitor industrial plant for processing metal, and Metal working machines. Included also are finishing, plating and coating of metal articles.

The tasks usually include: Operating and monitoring industrial plant for processing of metal, and metal working machines such as lathes and boring, grinding and metal –sawing machine tools; operating and monitoring machines in the production of clocks, boilers and metal toys; operating and monitoring machines which finish, plate and coat metal products. Supervision of other workers may be included.

Occupations in this sub-major group are classified into five minor groups, namely:-

- 821 Metal Smelting, Converting and Refining Furnace Operators**
- 822 Metal Melters, Casters and Rolling Mill Operators.**
- 823 Metal Heat-treating Plant Operators, Metal Drawers and Extruders.**
- 824 Machine Tool and other Metal-working Machine Operators**
- 825 Metal Finishing, Plating and Coating Machine Operators**

## **MINOR GROUP 821: METAL SMELTING, CONVERTING AND REFINING FURNACE OPERATORS**

Metal smelting, converting and refining furnace operators operate and monitor ore-smelting, metal converting and refining furnaces.

Skill Level: - Trade Certificate

### **821-11 Blast Furnace-man (Ore Smelting)**

Operates blast furnaces to smelt ore by maintaining runners, dams and spouts that channel molten metal, positioning ladles, tapping and resealing furnaces and operating stoves that provide continuous blasts of hot air to furnaces.

Example of occupational title classified here is:-

- Furnace-man, blast/ore smelting

### **821-12 Open Hearth Furnace-man (Steel)**

Operates open hearth furnaces and controls the introduction of additives such as oxidising agents to pig-iron or scrap-metal to produce steel.

Example of occupational title classified here is:-

- Furnace-man open hearth/steel production

### **821-13 Oxygen Furnace-man (Steel Converting)**

Operates oxygen furnaces and auxiliary equipment to produce steel by controlling the charging of furnaces, regulating the flow of oxygen through oxygen lances, calculating the amount of additives required for changes, positioning transfer cars with ladles and slag pots and tilting furnaces for tapping operations.

Example of occupational title classified here is:-

- Furnace-man, oxygen/steel converting

### **821-14 Bessemer Furnace-man (Steel Converting)**

Operates a steel converter in which molten pig-iron is converted into steel.

Example of occupational title classified here is:-

- Furnace-man, Bessemer (Steel Converting)

**821-15 Electric Arch Furnace-man (Steel Refining)**

Operates an electric air furnace in which high-alloy steel is produced by melting and refining scrap steel

Example of occupational title classified here is:-

- Furnace-man, Electrical Steel Refinery

**821-16 Furnaceman (Non-ferrous Metal Converting and Refining)**

Operates and monitors blast furnaces or other types of furnaces to convert or refine non-ferrous metals such as copper.

Example of occupational title classified here is:-

- Furnace man, non-ferrous metal converting and refining

**821-99 Other Metal Smelting, Converting And Refining Furnace Operators**

Example of occupational title classified here is:-

- Pot Operator (Aluminium)

**MINOR GROUP 822: METAL MELTERS, CASTERS AND ROLLING MILL OPERATORS**

Metal melters, casters and rolling-mill operators operate and monitor rolling mills to roll metal or furnaces to melt or reheat metal, or machines to cast metal.

Skill Level: -Trade Certificate

**822-11 Hot Roller (Steel)**

Operates and monitors rolling mills to shape hot steel into shapes for further processing, or into final shapes. Co-ordinates the operations of rolling mills with other areas such as furnace operations required for hot rolling.

Example of occupational title classified here is:-

- Hot roller, steel production

**822-12 Continuous Mill Roller (Steel)**

Operates continuous mill in which hot steel slabs are passed through a series of rolling (stands) to produce finished plates or sheets in one continuous operation.

Example of occupational title classified here is:-

- Roller, continuous - mill (steel)

**822-13 Cold Roller (Steel)**

Operates and monitors rolling mills to shape cold steel into shapes for further processing, or into final shapes.

Example of occupational title classified here is:-

- Cold roller, steel production

**822-14 Roller (Non-ferrous Metal)**

Operates and monitors rolling mills to reduce or form hot or cold non-ferrous metal to specified shapes, such as plate, sheet or foil.

Example of occupational title classified here is:-

- Roller, non-ferrous metal

**822-15 Seamless Pipe and Tube Roller**

Operates and monitors rolling mills to form seamless tubes and pipes from billets which have been pierced longitudinally.

Example of occupational title classified here is:-

- Roller, seamless pipe and tube

**822-16 Manipulator (Rolling Mill)**

Manipulates control of a rolling mill according to signals from roller to positioning nots or blooms for entry into roll of mill.

Example of occupational title classified here is:-

- Manipulator, Rolling Mill.

**822-17 Furnace-man (Metal Melting)**

Operates cupola or electric furnaces to produce mineral fibre or fibreglass by controlling the flow of liquid rock on to spinning wheels, or by gravity attenuation.

Example of occupational title classified here is:-

- Furnace-man, metal melting

**822-18 Metal Pourer**

Pours molten metal into mould and operates and monitors casting machines.

Example of occupational title classified here is:-

- Pourer, metal/metal smelting

**822-21 Centrifugal Casting-machine Operator**

Operates centrifugal casting machine to cast pipes, brake drums, bushings and other cylindrical metal products.

Example of occupational title classified here is:-

- Machine Operator, Die-casting

**822-23 Continuous Rod-casting Machine Operator(Non-ferrous Metals)**

Operates gas-fired furnace to melt non-ferrous metal such as aluminium and magnesium and pours molten metal into moulds to form castings of items such as kitchen utensils, laundry equipment and power mower housings. Observes light on present lining gauge which indicates metal in mould has solidified.

Example of occupational title classified here is:-

- Machine-operator, continuous rod-casting/non-ferrous metals

## **MINOR GROUP 823: METAL HEAT-TREATING PLANT OPERATORS, METAL DRAWERS AND EXTRUDERS**

Metal heat-treating plant operators, metal drawers and extruders operate and monitor plant, machinery and equipment which alter the physical properties of metal objects by heating, cooling and chemical treatment or which draw and extrude metals to make wire, tubes and similar products.

Skill level: Trade Certificate

### **823-11 Metal Annealer Machine Operator**

Heats metal objects in furnace and cools them at predetermined rate to relieve internal stresses, restores ductility and refines grain structure.

Example of occupational title classified here is:-

- Machine-operator, metal annealer

### **823-12 Metal Hardener Machine Operator**

Operates furnaces and quenching plants to harden metal objects by altering their physical and chemical properties by controlled heating and cooling and by treatment in suitable quenching media.

Example of occupational title classified here is:-

- Machine-operator, metal hardener

### **823-13 Case-hardener Machine Operator**

Operates and monitors plant which imparts hard skins and tough ductile cores to steel objects by treating them with chemicals while heating, quenching and cooling.

Example of occupational title classified here is:-

- Machine-operator, case hardener

### **823-14 Metal Tempering Machine Operator**

Re-heats hardened metal objects in furnaces and quenches them to relieve stresses caused by hardening processes, and to impart hardness.

Example of occupational title classified here is:-

- Machine-operator, metal tempering

### **823-15 Wire Drawing Machine Operator**

Operates machines to reduce the diameter of metal wires or rods by drawing them through graduated dies. May join coiled wires or repair breaks using welding machines.

Example of occupational title classified here is:-

- Machine-operator, wire drawing

### **823-16 Seamless Pipe and Tube Drawer Operator**

Operates and monitors machinery and equipment which draw metals to make seamless pipes and tubing.

Example of occupational title classified here is:-

- Machine-operator, seamless pipe and tube drawing

**823-17 Metal Extruder Machine Operator**

Operates extrusion presses to form products such as rods, bars, wire and structural shapes by extruding hot metal billets through dies.

Example of occupational title classified here is:-

- Machine-operator, metal extruder

**MINOR GROUP 824: MACHINE-TOOL AND OTHER METAL-WORKING MACHINE OPERATORS**

Machine-tool and Other Metal-working Machine operators operate and monitor automatic or semi-automatic metal working machines which perform repetitive work and are set up by machine-tool setters.

Skill Level: Trade Certificate

**824-11 Metal Drilling Machine Operator**

Operates and monitors power driven machines which drill and ream holes in metals.

Example of occupational title classified here is:-

- Machine-operator, metal drilling
- Machine-operator, metal reaming

**824-12 Precision Metal Grinding Machine Operator**

Operates and monitors power driven precision metal grinding machine set up for repetitive work.

Example of occupational title classified here is:-

- Machine-operator, metal grinding

**824-13 Metal Honing Machine Operator**

Operates and monitors honing machines to hone internal and external surfaces of metal parts such as cylinders, bearings or connecting rods.

Example of occupational title classified here is:-

- Machine-operator, metal honing

**824-14 Metal Sawing Machine Operator**

Operates and monitors power driven saw such as hacksaw, band saw or friction saw used to cut straight, curved or irregular shaped parts from metals.

Example of occupational title classified here is:-

- Machine-operator, metal sawing

**824-15 Automatic Transfer Machine Operator**

Operates and monitors transfer machines consisting of series of machines connected by mechanism that automatically transfer work pieces and perform a series of machine operations such as drilling, boring, tapping and milling.

Example of occupational title classified here is:-

- Machine-operator, automatic transfer

**824-16 Metal Shaping and Lapping Machine Operator**

Operates and monitors shaping machines, gear hobbing machines or operates machines automatically controlled by magnetic or punched tapes programmes

Examples of occupational titles classified here are:-

- Machine-operator, metal lapping,
- Machine-operator, metal shaping

**824-17 Lathe Operator**

Operates and monitors metal cutting lathes to shape and form metal stock and castings to fine tolerance according to detailed drawings and specifications.

Examples of occupational titles classified here are:-

- Lathe-operator, metalworking capstan,
- Lathe-operator, metalworking centre,
- Lathe-operator, metalworking engine,
- Lathe-operator, metalworking turret

**824-18 Milling Machine Operator**

Operates and monitors machines which cut metal (with a multi-toothed rotary cutter) to produce articles by milling metal stock.

Example of occupational title classified here is:-

- Machine-operator, milling

**824-21 Metal Planing Machine Operator**

Operates and monitors machine-tools to produce articles by planing metal stock.

Example of occupational title classified here is:-

- Machine-operator, metal planing

**824-22 Metal Boring Machine Operator**

Operates and monitors automatic or semi-automatic power-driven machine in which cylindrical holes in metal parts are aligned to required size by a rotating cutting tool.

Example of occupational title classified here is:-

- Machine-operator, metal boring

**824-23 Jewellery Production Machine Operator**

Operates and monitors metal casting machines used for casting jewellery in the production of jewellery articles.

Example of occupational title classified here is-

- Machine-operator, jewellery production

**824-24 Metal Moulding Machine operator**

Operates and monitors machines which make sand moulds for metal castings using auxiliary machines.

Example of occupational title classified here is:-

- Machine-operator, metal moulding

**824-25 Metal Core Making Machine Operator**

Operates and monitors machines which turn-over draw-type machines that make sand for use in casting metal or; operates and monitors extrusion or blower-type core making machines which make sand cores.

Examples of occupational titles classified here are:-

- Machine-operator, core-blowing
- Machine-operator, tube core making

**824-26 Metal Forging Machine Operator**

Operates and monitors machines which shape heated metal into forgings on power hammer equipped with open dies.

Example of occupational title classified here is:-

- Machine-operator, metal forging

**824-27 Tool Production Machine Operator**

Operates and monitors machines and assembles parts to make and repair metalworking dies, cutting tools, jigs, fixtures, gauges and machinist's hand tools.

Example of occupational title classified here is:-

- Machine-operator, tool produ

**824-28 Metal Burnishing Machine Operator**

Operates and monitors machines for buffing and polishing metal.

Examples of occupational titles classified here are:-

- Machine-operator, metal buffing
- Machine-operator, metal sharp

**824-31 Machine-tool Grinding Machine Operator**

Operates and monitors machines which are used to sharpen knives, surgical instruments and other cutting instruments by means of a grinding wheel.

Example of occupational title classified here is:-

- Machine-operator, machine-tool grinding

**824-32 Tool Grinding Machine Operator**

Operates and monitors machines which sharpen tools used in metalworking, woodworking and other machines by means of a power-operated wheel.

Example of occupational title classified here is:-

- Machine-operator, tool grinding

**824-33 Metal Spinning Machine Operator**

Operates and monitors machines on which rotate metal disks on a special lathe-machine and presses hand tools against discs to shape them; or cut discs and sheet metal stock and drill holes in discs prior to fitting on lathe-machine.

Example of occupational title classified here is-

- Machine-operator, metal spinning

**824-34 Metal Forming Machine Operator**

Operates and monitors machines which trim, bend and shape sheet metal and metal rods.

Example of occupational title classified here is:-

- Machine-operator, metal forming

**824-35 Metal Press Operator (Except forging)**

Operates and monitors a power press (other than a forging press or steel-plate-bending machine) in which dies, punches, or other tools trim, punch, shape, notch or otherwise shape metal stock.

Examples of occupational titles classified here are:-

- Press-operator, metal (except forging)
- Press-operator, metal punching
- Press-operator, metal stamping

**824-36 Metal Bending Machine Operator**

Operates and monitors machines which bend steel plates or rods to desired curvature by means of bending machine.

Example of occupational title classified here is:-

- Machine-operator, metal be

**824-37 Metal Cutting Machine Operator**

Operates and monitors machines used to cut hot or cold metal objects such as slabs, billets, plates, bars, strips and sheets to specified dimensions and angles.

Examples of occupational titles classified here are:-

- Machine-operator, metal cutting
- Machine-operator, metal shearing
- Machine-operator, power-shearing

**824-39 Other Machine-tool Operators (related to grinding, polishing and sharpening)**

Included in this group are machine-operators who operate and monitor machines for making metal articles such as springs, cables, nails, bolts, and steel needles.

Examples of occupational titles classified here are:-

- Machine-operator, cable production
- Machine-operator, metal engraving
- Machine-operator, metal minting
- Machine-operator, needle production
- Machine-operator, nut production/metal
- Machine-operator, pipe production
- Machine-operator, rivet production
- Machine-operator, sports equipment/metal
- Machine-operator, wire goods production

- Machine-operator, wiring production/electrical

**824-41 Clock/Watch Production Machine Operator**

Operates and monitors machines which fit and assemble parts of watches and clocks.

Examples of occupational titles classified here are:-

- Machine-operator, clock production
- Machine-operator, watch production

**824-42 Armature Production Machine Operator**

Operates and monitors machines used in fitting and repairing electrical components of domestic appliances, office machines, industrial machines and other appliances, aircraft, ship, and vehicles.

Examples of occupational titles classified here are:-

- Machine-operator, armature production
- Machine-operator, commutator production

**824-43 Metal Welding Machine Operator**

Operates and monitors machines which weld metal parts by means of electric arc.

Example of occupational title classified here is:-

- Machine-operator, metal welding

**824-44 Metal Flame- cutting Machine Operator**

Operates and monitors machines which cut structural shapes to required dimensions by means of oxyacetylene or other gas flames

Example of occupational title classified here is:-

- Machine-operator, metal flame-cutting.

**824-45 Boiler Production Machine Operator**

Operates and monitors machines which are used in production of boilers, tanks, vats, and other containers of sheet and plate steel.

Example of occupational title classified here is:-

- Machine-operator, boiler production

**824-46 Riveting Machine Operator**

Operates and monitors machines which rivet steel plates, bars, beams or castings.

Example of occupational title classified here is:-

- Machine-operator, rivetting

**824-47 Metal Etching Machine Operator**

Operates and monitors machines which etch printing plates on rollers with acid.

Example of occupational title classified here is:-

- Machine-operator, metal etching

**824-48 Toy Production Machine Operator**

Operates and monitors machines which make metal toys.

Example of occupational title classified here is:-

- Machine-operator, metal toy production.

## **MINOR GROUP 825: METAL FINISHING, PLATING AND COATING MACHINE OPERATORS**

Metal finishing, plating and coating machine operators operate and monitor equipment which finish, plate and coat metal articles or parts in order to give them improved resistance to corrosion and abrasion, for decorative purposes or to impart electrical or magnetic properties.

Skill Level: Trade Certificate

### **825-11 Electroplater**

Controls plating processes and maintains solutions used to coat metal articles or other parts with non-ferrous metals. Operates and monitors electroplating equipment to coat metal objects electrolytically with copper, nickel, chromium or other non-ferrous metals. Removes articles at completion of coating, rinses and dries by use of machines. Recovers residue of precious metals from vats when plating is complete.

Examples of occupational titles classified here are:-

- Machine-Operator, electroplating
- Machine-operator, metal plating
- Machine-operator, metal refining

### **825-12 Hot-dip Plater**

Operates and monitors hot-dip equipment, dipping tank used to coat iron and steel products.

Examples of occupational titles classified here are:-

- Plater, hot-dip
- Machine-operator, metal dipping
- Machine-operator, metal galvanising
- Machine-operator, metal plating

### **825-13 Wire-coating Machine Operator**

Operates and monitors machines which automatically coat wire with non-ferrous metal. Also ensures strength of chemical mixture.

Example of occupational title classified here is:-

- Machine-operator, wire coating

### **825-14 Metal Spraying Machine Operator**

Sets up, operates and monitors equipment to spar molten clay or ceramics on to metal products to provide protective or decorative coatings or build up worn or damaged surfaces.

Example of occupational title classified here is:-

- Machine-operator, metal spraying

### **825-15 Metal Bluing Machine Operator**

Operates and monitors equipment used to impart a rust resistant decorative finish to metal articles by treating them with chemicals and heating them. Or operates and monitors equipment when inserting metal articles in furnaces and removes them when heating is complete and inserts them in vats or chemical solution to be removed when bluing is complete for washing with oil.

Example of occupational title classified here is:-

- Machine-operator, metal bluing

**825-16 Sheradizer**

Specializes in metal plating and coating by casting iron or steel products with zinc by heating them in closed boxes containing powdered zinc compound.

Examples of occupational titles classified here are:-

- Anodizer
- Sheradizer

**825-17 Cast Metal Articles Finishing Machine Operator**

Applies functional testing and inspecting procedures to metal stock and casting after processing, machine, shaping or forming to ensure compliance with engineering standards and contract specifications. Finishes castings by polishing and applying shellac, lacquer, paint or other finish.

Examples of occupational titles classified here are:-

- Fettler
- Machine-operator, cast metal articles

**825-18 Metal Sand-blasting Equipment Operator**

Operates and monitors sand-blasting equipment to clean and smoothen castings on cast metal articles.

Example of occupational title classified here is:-

- Operator, metal sand-blasting equipment

**825-21 Metal Buffing and Polishing Machine Operator**

Operates and monitors fixed polishing machine for buffing and polishing metal through attaching appropriate buffing or polishing material in the machine to remove surface blemishes and obtain even finishes.

Examples of occupational titles classified here are:-

- Machine-operator, metal laminating
- Machine-operator, metal polishing

**825-22 Metal Cleaning Equipment Operator**

Operates and monitors equipment which clean metal articles by removing shavings, dirt and rust spots using air hose, file, sandpaper or by immersing them into chemicals and rinsing solutions in preparations from electroplating, galvanising, enameling or similar process.

Examples of occupational titles classified here are:-

- Machine-operator, metal deceasing

- Operator, metal cleaning equipment

### **SUB-MAJOR GROUP 83: WOOD PROCESSING PLANT AND WOOD, RUBBER AND PLASTIC MACHINE OPERATORS**

Wood processing Plant and Wood, Rubber and Plastic Products Machine Operators, operate and monitor industrial plant for the processing of wood and paper; operate and monitor automatic and semi-automatic wood working machines which perform repetitive work; operate and monitor various types of printing, copying, binding and book embossing machines on machines which produce various articles from paper, paper board and similar material; operate and monitor machines which knead and blend rubber and rubber compounds and produce various components and products from natural and synthetic rubber and plastics.

The tasks usually include: an understanding and experience of the industrial plant which is being operated and monitored in the processing of wood and paper; operating and monitoring wood working or printing and copying or binding and book embossing or paper and paper-board products machines which saw, shape, bore, plain, turn or curve wood, print, copy, bind, emboss books or which produce various articles from paper, paper-board and similar materials; operating and monitoring machines which knead and blend rubber and rubber compounds, and produce various components and products from natural and synthetic rubber and plastic. Supervision of other workers may be included.

Occupations in this sub-major group are classified into five minor groups, namely:-

- 831 Wood Processing and Paper Pulp Plant Operators**
- 832 Wood Products Machine Operators**
- 833 Printing and Binding Machine Operators**
- 834 Paper Products Machine Operators**
- 835 Rubber and Plastic Rubber machine Operators**

### **MINOR GROUP 831: WOOD PROCESSING AND PAPER-PULP PLANT OPERATORS**

Wood processing and paper-pulp operators operate and monitor machinery and equipment which saw, cut and grind wood in preparation for further use, convert wood and other materials into pulp, and make paper from pulp.

Skill Level: Trade Certificate

#### **831-11 Sawmill Sawyer (General)**

Operates saws, log carriages and conveyors to reduce logs, breakdown pieces such as cants, slabs and boards or flitches for further sawing.

Examples of occupational titles classified here are:-

- Operator, ripsaw
- Operator, trim saw
- Sawyer, cant gang
- Sawyer, sawmill

#### **831-12 Edge Sawyer**

Operates multi-blade sawing machines to remove rough edges from timber and saws timber boards to width.

Example of occupational title classified here is:

- Sawyer, edge

**831-13 Saw Mill Machine Operator**

Performs any combination of duties in preparing logs for cutting into lumber and storing the cut lumber in saw mill.

Example of occupational title classified here is:-

- Machine-operator, saw mill

**831-14 Veneer Cutter**

Operates machines to produce, cut and splice veneer sheets. Aligns edges of veneer strips and clamps guillotines, smoothens and squares edges. May process veneer sheets to produce sheets of larger size.

Example of occupational title classified here is:-

- Cutter, veneer

**831-15 Plywood Core-laying Machine Operator.**

Operates machines to process wood veneer or core board sheets to make plywood panels.

Examples of occupational titles classified here are:-

- Feeder, plywood center
- Layer, plywood center
- Machine-operator, plywood core-laying
- Repairer, plywood and veneer

**831-16 Plywood Press Operator**

Sets up and operates presses to bond veneer sheets and core boards with glue to form plywood panels.

Example of occupational title classified here is:-

- Operator, plywood press

**831-17 Wood Chipping Machine Operator**

Operates a continuous plant to chip logs into wood chips and adds adhesives to form materials such as hardboard.

Example of occupational title classified here is:-

- Machine-operator, wood chipping

**831-18 Wood Grinder Operator**

Operates continuous plant to grind logs into wood chips, digest and refine chips, add chemicals such as glues and resins, and form, press and dry material to produce products such as particle boards and hard boards.

Examples of occupational titles classified here are:-

- Operator, wood digester
- Operator, wood grinder
- Operator, hardboard plant

**831-21 Paper Making Machine Operator (Wet End)**

Operates and monitors section of paper making machinery and equipment in which paper is dried, calendared, wounded, slit and rewound.

Example of occupational title classified here is:-

- Machine-operator, paper making/wet end

**831-22 Supercalender Operator**

Operates and monitors supercalenders used to impart gloss and finish to surface paper.

Example of occupational title classified here is:-

- Operator, supercalender

**831-23 Coating Machine Operator**

Operates and monitors machinery and equipment used to coat, glaze or impregnate paper or paper board with finishing solutions or coating mixture.

Example of occupational title classified here is:-

- Machine-operator, coat

**831-24 Paper Pulp Preparation Plant Operator**

Operates equipments to produce paper pulp from wood billets and refine and prepares it for paper making.

Examples of occupational titles classified here are:-

- Operator, beater/paper-pulp preparation
- Operator, bleacher/paper-pulp preparation
- Operator, paper-pulp preparation plant

**MINOR GROUP 832: WOOD PRODUCTS MACHINE OPERATORS**

Wood products machine operators operate and monitor automatic or semi-automatic woodworking machines which perform repetitive work and are always set up by woodworking-machine setters.

Skill Level: Trade Certificate

**832-11 Woodworking Lathe Operator**

Operates and monitors lathe machine which shapes pieces of wood while rotating

Example of occupational title classified here is:-

- Operator, woodworking lathe

**832-12 Wood Curving Machine Operator**

Operates and monitors machines mortising, universal or sanding which curve artistic and decorative designs on surface of pieces of wood or operates and monitors copying machine which automatically reproduces standard design on wood pieces.

Example of occupational title classified here is:-

- Machine-operator, wood curving

**832-13 Furniture Production Machine Operator**

Operates and monitors machines which finish or refinish surface of wooden furniture and fittings; may apply decorative designs to furniture.

Example of occupational title classified here is:-

- Machine-operator, furniture production

**832-14 Woodworking Machine Operator**

Prepares and operates woodworking machines to cut and shape wood, performing specialized tasks.

Examples of occupational titles classified here are:-

- Machine-operator, wood engraving
- Machine-operator, wood etching
- Machine-operator, wood finishing
- Machine-operator, wood polishing

**832-15 Wood Painting Machine Operator**

Operates and monitors automatic spray painting devices to cast or spray wooden articles on a conveyor.

Example of occupational title classified here is:-

- Machine-operator, wood painting

**832-99 Wood Products Machine Operators n.e.c**

Classified here are those who operate woodworking machines to make wooden toys and sports equipment.

Examples of occupational titles classified here are:-

- Machine-operator, wooden sports equipment production
- Machine-operator, wooden toys production

**MINOR GROUP 833: PRINTING AND BINDING MACHINE OPERATORS**

Printing and binding machine operators operate and monitor machines which print on paper and other materials and which bind and emboss books.

Skill Level: Trade Certificate

**833-11 Cylinder Printing Press Operator**

Prepares and makes cylinders for gravure printing and operates and monitors cylinder printing presses.

Example of occupational title classified here is:-

- Operator, cylinder letter press.

**833-12 Platen Letterpress Operator**

Operates and monitors platen-type printing press using prepared letterpress plates to produce printed materials.

Examples of occupational titles classified here are:-

- Operator, platen letterpress
- Operator, platen press

- Operator, printing press

**833-13 Offset Printing Press Operator**

Operates and monitors printing presses in which the ink is transferred from a plate to a rubber surface and then on to paper.

Example of occupational classified here is:

- Operator, offset printing press

**833-14 Direct Lithographic Printing Press Operator**

Operates and monitors printing presses in which printing is done from parts of a flat stone or sheet of zinc or aluminium that is prepared to receive greasy ink.

Example of occupational title classified here is:-

- Operator, direct lithographic printing press

**833-15 Rotogravure Printing Press Operator.**

Operates and monitors printing press in which the process of printing is from photo engraved copper cylinder on which illustrations e.t.c. have been etched below the surface.

Example of occupational title classified here is:-

- Operator, rotogravure printing press

**833-16 Type Casting Machine Operator**

Sets up, monitors and operates machine which automatically casts lines of type for printing.

Example of occupational title classified here is:-

- Machine-operator, type casting

**833-17 Photo Typesetting Machine Operator**

Operates keyboard of machines which reproduce letters on film or sensitized paper for eventual reproduction on printing plates; works on numerical controls of photo typesetting machines.

Example of occupational title classified here is:-

- Machine-operator, photo type-setting

**833-18 Rotary Printing Press Operator**

Operates and monitors printing presses that print from curved metal plates onto a continuous roll of paper.

Examples of occupational titles classified here are:-

- Operator, rotary letterpress
- Operator, rotary printing press

**833-21 Wall Paper Printing Press Operator**

Operates and monitors printing presses to print paper with a coloured design for covering the walls of a room.

Example of occupational titles classified here is:-

- Operator, wall paper printing press

**833-22 Textile Printing Machine Operator**

Operates and monitors printing machine to print on textiles.

Example of occupational title classified here is:-

- Machine-operator, textile printing

**833-23 Bookbinding Machine Operator**

Binds books and other publications by machine. Operates paper guillotines for post press paper cutting and trimming and programmes electronically operated units. Prepares, sets up and supervises the operation of automatic binding and finishing equipment.

Example of occupational title classified here is:-

- Machine-operator, bookbinding

**833-24 Book Embossing Machine Operator**

Operates and monitors pressing machines which emboss designs and titles on book covers.

Example of occupational title classified here is:-

- Machine-operator, book embossing

**MINOR GROUP 834: PAPER PRODUCTS MACHINE OPERATORS**

Paper products machine operators operate and monitor machines which produce boxes, envelopes, bags and other goods from paper, paperboard, cardboard, cellophane and similar materials.

Skill Level: Trade Certificate

**834-11 Paper Box Production Machine Operator**

Operates and monitors machines which cut to required length or cut and crease paperboard to form boxes.

Example of occupational title classified here is:-

- Machine-operator, paper-box production

**834-12 Cardboard Lining Machine Operator**

Operates and monitors machines which glue paper to cardboard, cut it to the required length and creases to form box blanks.

Example of occupational title classified here is:-

- Machine-operator, cardboard lining

**834-13 Cutting and Creasing Machine Operator**

Sets or operates and monitors machines which cut and crease cardboard and paperboard sheets to form box blanks.

Examples of occupational titles classified here are:-

- Machine-operator, paper-box cutting
- Machine-operator, paper-box folding

**834-14 Cardboard Press Operator**

Operates and monitors pressing machines which form drinking cups or other containers from cardboard.

Examples of occupational titles classified here are:-

- Operator, cardboard press

**834-15 Envelope and Paper bag Production Machine Operator**

Operates and monitors machines which cut, fold and glue paper to make envelopes and paper bags.

Examples of occupational titles classified here are:-

- Machine-operator, envelope production
- Machine-operator, paper bag production

**834-16 Paper Embossing Machine Operator**

Operates and monitors machines which glue decorative and protective paper on surface of completed boxes.

Example of occupational title classified here is:-

- Machine-operator, paper embossing

**834-17 Paper board Products Machine Operator**

Operates and monitors machines which make paper products and cardboards such as those which make suitcases with specifically treated cardboard, garland and other paper novelties and paper tubes.

Example of occupational title classified here is:-

- Machine-operator, paperboard products.

**834-18 Cellophane Bag Production Machine Operator**

Operates and monitors machines which cut, fold and seal cellophane or similar materials to make bags.

Example of occupational title classified here is:-

- Machine-operator, polythene bag production

**MINOR GROUP 835: RUBBER AND PLASTIC PRODUCTS MACHINE OPERATORS**

Rubber and plastic products machine operators operate and monitor machines which knead and blend rubber and rubber compounds, and produce various components and products from natural and synthetic rubber and plastics.

Skill Level: Form IV

**835-11 Rubber Milling Machine Operator**

Operates and monitors machines which knead, mix and blend rubber and rubber

compounds for further processing.

Examples of occupational titles classified here are:-

- Machine-operator, rubber compounding
- Machine-operator, rubber milling
- Machine-operator ,rubber processing

**835-12 Tyre Vulcanising Machine Operator**

Operates and monitors machines which mould and cure pneumatic rubber tyres in pot heater or watch case mould.

Examples of occupational titles classified here are:-

- Machine-operator, tyre vulcanising
- Tyre builder

**835-13 Rubber Calender Operator**

Operates and monitors machines which produce sheets of rubber or rubberised fabric by a rolling process.

Example of occupational title classified here is:-

- Operator, rubber calender

**835-14 Rubber Moulding Machine Operator**

Operates and monitors machines in which soft uncured rubber is shaped in mould and vulcanized by steam heat.

Example of occupational title classified here is:-

- Machine-operator, rubber moulding

**835-15 Rubber Extruding Machine Operator**

Operates and monitors machines in which compounded rubber is extruded through heated die to form continuous shaped strips.

Example of occupational title classified here is:-

- Machine-operator, rubber extruding

**835-16 Tyre Rebuilding Machine Operator**

Operates and monitors buffing machines on used tyre to remove old rubber, roughen surfaces and produce uniform shape and radial. Builds new tread by spraying and fitting tread rubber to casings and vasings and vulcanises tyres.

Example of occupational title classified here is:-

- Machine-operator, tyre rebuilding

**835-17 Rubber Stamp Making Machine Operator**

Operates and monitors machines which shape vulcanized rubber by moulding into rubber stamps.

Example of occupational title classified here is:

- Machine-operator, rubber stamp making

**835-21 Plastic Extruding Machine Operator**

Operates and monitors machines in which plastic materials are extruded through a die to form continuous rods, tubes, strips and other products.

Example of occupational title classified here is:

- Machine-operator, plastic extruding

**835-22 Laminating Plastic Machine Operator**

Operates and monitors machines in which layers of plastic or plastic -impregnated materials are heated and pressed to form solid laminated products.

Examples of occupational titles classified here are:-

- Laminator, plastic
- Machine-operator, laminating plastic

**835-23 Plastic Compression-moulding Machine Operator**

Operates and monitors machines in which plastic materials are shaped by injection moulding such as drums, tanks and also grinds scrap plastic into powder form for re-use.

Examples of occupational titles classified here are:-

- Machine-operator, plastic, compression-moulding
- Machine-operator, plastic injection/moulding

**835-24 Plastic Products Fabrication Machine Operator**

Operates and monitors machines which fabricate plastic articles, such as signals, aircraft parts and wind awnings.

Example of occupational title classified here is:-

- Machine-operator, plastic products fabrication

**835-25 Plastic Production Machine Operator**

Operates and monitors machines which heat and seal pre-cut or pre-designed plastic materials or firms to form book-covers, eye glass cases, bulky plants, tubing and other plastic coated products.

Example of occupational title classified here is:-

- Machine-operator, plastic book-cover production

**835-99 Rubber and Plastic Products Makers n.e.c**

Included here are those who operate hydraulic presses to emboss, laminate or draw plastic sheets and those who operate machines to make foam blocks and moulded foam products. Also included are those who are engaged in producing rubber rollers and those who knit and cement fabric cord or wire around rubber hoses for reinforcement.

Machine operators for the fabrication of latex articles, cold vulcanization process, grind, buff, burr, polish, drill and otherwise specialized equipment for fabrication particularly of rubber or plastic products or finishing plastics are also included.

Examples of occupational titles classified here are:-

- Machine-operator, plastic buffing
- Machine-operator, plastic curving

- Machine-operator, plastic cutting
- Machine-operator, plastic drilling
- Machine-operator, plastic etching
- Machine-operator, plastic finishing
- Machine-operator, plastic grinding
- Machine-operator, plastic products casting

**SUB-MAJOR GROUP 84: CHEMICAL-PROCESSING PLANT AND CHEMICAL PRODUCTS MACHINE OPERATORS.**

Chemical Processing Plant and chemical products Machine Operators operate and monitor industrial plant and machinery for processing a variety of chemicals and other ingredients to produce pharmaceuticals, toiletries, explosives, photographic or other chemical products.

The tasks usually include: operating and monitoring industrial plant and machines which mould, filter, ferment, mix, blend and otherwise process chemicals and other materials to give them the desired properties for further industrial production or to make finished products. Supervision of other workers may be included.

Occupations in this sub-major group are classified into nine minor groups, namely:-

- 841 Chemical Crushing, grinding and Mixing Machine Operators**
- 842 Chemical Heat-treating plant Operators**
- 843 Filtering and Separation Equipment Operators**
- 844 Chemical still and Reactor Operators**
- 845 Petroleum Refining Plant Operators**
- 846 Pharmaceutical and Toiletry Products Machine Operators**
- 847 Ammunition and Explosive Products Machine Operators**
- 848 Photographic Products Machine Operators**
- 849 Other Chemical Processing Plant and Machinery Operators**

**MINOR GROUP 841: CRUSHING, GRINDING AND CHEMICAL MIXING PLANT OPERATORS**

Crushing, grinding and chemical mixing plant operators operate and monitor machinery which crushes, grinds, mixes and blends chemicals and other materials used in chemical and related processes.

Skill Level: Trade Certificate

**841-11 Crusher Operator (Chemical and Related Processes)**

Operates and monitors crushing machines which reduce solid chemicals and related materials to suitable size for further processing.

Example of occupational title classified here is:-

- Operator, crusher/chemical process

**841-12 Grinder Operator (Chemical and Related Processes)**

Operates and monitors mills which grind solid chemicals and related materials to powder for further processing.

Examples of occupational titles classified here are:-

- Operator, grinder/chemical process
- Operator, mill/chemical process

**841-13          Mixing Machine Operator (Chemical and Related Processes)**

Tends machines that blend liquid or slurry for use in manufacturing chemical products. Transfers materials to work area, weighs cut material according to formula or proportion tables and dumps material into mixer chamber and starts machine. Determines when mixing is complete or stops machine after specified time.

Example of occupational title classified here is:-

- Machine-operator, mixing/chemical process

**841-14          Furnace-man (Chemical and Related Processes)**

Operates and monitors furnaces to heat chemical substances into refined chemical products.

Example of occupational title classified here is:-

- Furnace-man, chemical process

**MINOR GROUP 842: CHEMICAL HEAT-TREATING PLANT OPERATORS**

Chemical heat-treating plant operators operate and monitor machinery and equipment which cook, roast and provide other types of heat treatment in chemical and related processes.

**842-11          Cooker Operator (Chemical and Related Processes)**

Operates and monitors machinery and equipment which cook materials in order to purify, mix or compound them, give them special properties or effect chemical changes in them.

Example of occupational title classified here is:-

- Operator, cooker/chemical process

**842-12          Roasting Machine Operator (Chemical and Related Process)**

Operates and monitors ovens, kilns or similar devices which heat substances in order to dry them, give them special properties or effect chemical changes in them. Controls rotor type kilns and auxiliary equipment such as conveyors, fledgers, and dust collectors to calcine chemicals, raw ground stone, gypsum, slate or clay or cement slurry. Records data or kiln temperature, and full consumption of lining. May use tripod mounted shot gun to blast clinkers from kiln walls.

Example of occupational title classified here is:-

- Machine-operator, roasting/chemical process

**842-13          Drier Machine Operator (Chemical and Related Processes)**

Operates and monitors driers for the processing of chemicals and related materials.

Example of occupational title classified here is:-

- Machine-operator, drier/chemical process

**MINOR GROUP 843: FILTERING AND SEPARATION PLANT OPERATORS**

Filtering and separation plant operators operate and monitor machines and equipment which filter and separate chemicals and related materials

Skill level: Trade Certificate

**843-11 Filter Press Operator**

Operates and monitors equipment in which solutions are forced, under pressure through a filtering unit.

Example of occupational title classified here is:-

- Operator, filter press

**843-12 Rotary Drum Filterer Operator**

Operates and monitors equipment in which solutions are vacuum-drawn through filtering media fitted to a rotating drum.

Example of occupational title classified here is:-

- Operator, rotary drum filterer

**843-13 Centrifugal Separator Operator**

Operates and monitors machines which separate substances by centrifugal force.

Example of occupational title classified here is:-

- Operator, centrifugal separator

**843-14 Crude Oil Treatment Machine Operator**

Operates and monitors equipment which remove sediment and water from crude oil.

Example of occupational title classified here is:-

- Machine-operator, crude oil treatment

**MINOR GROUP 844: CHEMICAL STILL AND REACTOR OPERATORS**

Chemical still and reactor operators operate and monitor equipment which distill and refine chemicals.

Skill level: Trade Certificate

**844-11 Batch-still Operator (Chemical Process except Petroleum)**

Operates and monitors equipment in which crude liquid chemicals are treated to refine or separate them into their chemical constituents.

Examples of occupational titles classified here are:-

- Operator, batch-still/chemical process except petroleum

**844-12 Continuous Still Operator (Chemical Processes except Petroleum)**

Operates and monitors equipment which performs a sequence of operations in a chemical reaction process.

Examples of occupational titles classified here are:-

- Operator, continuous still/chemical process except Petroleum

**844-13 Converter Reactor Operator (Chemical Processes except Petroleum)**

Operates equipment to control reaction of soda ash and milk of lime to make caustic soda. Draws samples of mixtures from a tank and measures its gravity with hydrometer. Conducts similar tests and filtrations to determine salt contents and concentration.

Example of occupational title classified here is:-

- Operator, converter reactor/chemical process except petroleum

**844-14 Evaporator Operator**

Operates and monitors evaporation tanks, vacuum pans or similar devices to concentrate chemical solutions and suspensions.

Example of occupational title classified here is:-

- Operator, evaporator

**MINOR GROUP 845: PETROLEUM REFINING PLANT OPERATORS**

Petroleum refining plant operators operate and monitor plant which refines, distils and treats petroleum, petroleum-based products and by-products.

Skill Level: Trade Certificate

**845-11 Desulphurisation Treater (Petroleum Refining)**

Operates and monitors plant which removes sulphur from petroleum and petroleum-based products and by-products.

Example of occupational title classified here is:-

- Treater, desulphurisation/petroleum refining

**845-12 Pumpman (Petroleum Refining)**

Operates and monitors pumps which circulate petroleum products or water and chemical solutions through refinery.

Example of occupational title classified here is:-

- Pumpman, petroleum refining

**845-13 Still-man (Petroleum Refining)**

Operates and monitors stills which distil or refine petroleum products.

Example of occupational title classified here is:-

- Still-man, petroleum refining

**845-14 Control-man (Petroleum Refining)**

Operates control panels to regulate temperature, pressure, rate of flow and tank level in petroleum refining, processing and treating units and petro-chemical units.

Example of occupational title classified here is:-

- Controller, Petroleum Refining

**845-15 Blender Machine Operator (Petroleum Refining)**

Operates and monitors machines which blend petrol with chemicals and other additives.

Example of occupational title classified here is:-

- Machine-operator, blender/petroleum refining

**845-16 Paraffin Plant Operator**

Operates and monitors plant which refines, distills and treats paraffin.

Example of occupational title classified here is:-

- Operator, paraffin plant

## **MINOR GROUP 846: PHARMACEUTICAL AND TOILETRY PRODUCTS MACHINE OPERATORS**

Pharmaceutical and toiletry products machine operators operate and monitor machines which process a variety of chemicals and other ingredients used in the production of pharmaceuticals and toiletries.

Skill Level: Trade Certificate

### **846-10 Pharmaceutical Products Machine Operator**

Operates and monitors machines which mould, filter, ferment, heat, mix, grind, fill and seal materials used in the production of pharmaceutical, toiletry, detergents and related products. Observes machine's operations and adjusts pressure, temperature, tensions, flow and speed of operation and other controls; applies coatings to flavour, colour or preserve or adds medication to products, coats, glazes and sterilises products; cleans and disinfects machines; measures and tests products.

Examples of occupational titles classified here are:-

- Machine-operator, detergent production
- Machine-operator, tablet making
- Machine-operator, toiletries production
- Operator, perfume distilling equipment
- Operator, perfume still
- Operator, pharmaceutical and toiletry products granulation equipment
- Operator, toiletries moulding equipment
- Soap maker
- Suture maker

## **MINOR GROUP 847: AMMUNITION AND EXPLOSIVE PRODUCTS MACHINE OPERATORS**

Ammunition and explosive products machine operators operate and monitor machines which process a variety of chemicals and other ingredients in the production of ammunition and explosives.

Skill Level: Trade Certificate

### **847-10 Explosives Production Machine Operator**

Operates and monitors machines which mix, blend and otherwise process chemicals to produce explosive substances such as nitrocellulose and gelignite and various types of propellants; assembles and loads shells, bombs, rockets, mines and similar devices; makes fuses for explosives and pyrotechnics.

Examples of occupational titles classified here are:-

- Bullet maker
- Fuse maker
- Machine-operator, ammunition production
- Machine-operator, fireworks production
- Machine-operator, match production
- Nitrocellulose maker

## **MINOR GROUP 848: PHOTOGRAPHIC PRODUCTS MACHINE OPERATORS**

Photographic products machine operators operate and monitor equipment which make photographic film and paper and which process exposed photographic film and make prints.

Skill Level: Trade Certificate

### **848-11 Photographic Developing Machine Operator**

Operates and monitors equipment which processes colour and black and white films and plates to obtain negatives or transparent positives.

Examples of occupational titles classified here are:-

- Machine-operator, film developing
- Machine-operator, photographic developing

### **848-12 Photography Enlarging Machine Operator**

Operates and monitors equipment to adjust setting on print-making machines to print enlarged or reduced photographs.

Examples of occupational titles classified here are:-

- Enlarger, photograph
- Machine-operator, photography enlarging

### **848-13 Photographic Plate Production Machine Operator**

Operates and monitors photographic plate production machine for coating and backing photographic paper plates.

Example of occupational title classified here is:-

- Machine-operator, photographic plate production

### **848-14 Motion Picture Developing Machine Operator**

Operates and monitors machines which process exposed photographic still and motion picture films and make photographic prints.

Example of occupational title classified here is:-

- Machine-operator, motion picture developing

### **848-15 Film Paper Production Machine Operator**

Operates and monitors machines which produce rolls of film: sheets of film, cuts and packages photographic film or print paper and ensures correct labeling of film paper.

Examples of occupational titles classified here are:-

- Machine-operator, photographic film production
- Machine-operator, photographic paper production

### **848-16 Photographic Dark Room Operators n.e.c**

This group includes those who operate and check equipment and replenish chemicals, print paper and supply heating and cooling systems; prepare chemical solution for different techniques and effects and those who enlarge photographs to produce prints of non-standard size.

Example of occupational title classified here is:-

- Preparer, photographic chemicals

### **MINOR GROUP 849: OTHER CHEMICAL PROCESSING PLANT AND MACHINE OPERATORS**

Other chemical processing plant and machinery operators include chemical processing plant and chemical products machine operators not classified elsewhere.

Skill Level: Trade Certificate

#### **849-11 Chemical Bleacher Operator**

Operates and monitors plant which treats chemical solutions with bleaching reagents.

Example of occupational title classified here is:-

- Operator, chemical bleacher

#### **849-12 Coke Burner**

Operates and monitors plant which burn coal to produce coke or gas.

Example of occupational title classified here is:-

- Burner, coke

#### **849-12 Synthetic Fibre Maker Machine Operator**

Operates and monitors plant which extrudes or forms natural or synthetic polymers into synthetic fibres.

Example of occupational title classified here is:-

- Machine-operator, synthetic fibre maker

#### **849-13 Chemical Processor (Radio-active Materials)**

Operates and monitors plant which separates and extracts radioactive materials from their ores or processes such materials.

Example of occupational title classified here is:-

- Processor, chemical/radio-active materials

#### **849-14 Linoleum Production Machine Operator**

Operates and monitors machines which treat canvas with powdered cork and oil to produce linoleum.

Examples of occupational titles classified here are:-

- Linoleum maker
- Machine-operator, linoleum production

#### **849-16 Candle Production Machine Operator**

Operates and monitors machines such as cast moulding machine which treat, purify and bleach petroleum wax to produce candles

Examples of occupational titles classified here are:-

- Candle maker
- Machine-operator, candle production

- 849-17 Chlorine Gas Production Machine Operator**  
Operates and monitors machines which make chlorine gas
- Example of occupational title classified here is:-  
- Machine-operator, chlorine gas production
- 849-18 Halogen Gas Production Machine Operator**  
Operates and monitors machines which make halogen gas.
- Example of occupational title classified here is:-  
- Machine-operator, halogen gas production
- 849-21 Hydrogen Gas Production Machine Operator**  
Operates and monitors machines which make hydrogen gas.
- Example of occupational title classified here is:-  
- Machine-operator, hydrogen gas production
- 849-22 Lead Production Machine Operator**  
Operates and monitors machines which make lead products or wood encased pencils
- Examples of occupational titles classified here are:-  
- Machine-operator, lead production  
- Machine-operator, pencil production
- 849-23 Washing Chemicals and Related Materials Production Machine Operator**  
Operates and monitors machines for the production of waterproof textiles with oil.
- Example of occupational title classified here is:-  
- Machine-operator, waterproof textiles production
- 849-24 Battery Production Machine Operator**  
Operates and monitors machines in the production of alkaline and dry-cell batteries.
- Examples of occupational titles classified here are:-  
- Machine-operator, alkaline battery production  
- Machine-operator, dry-cell battery production
- 849-25 Pyrethrum Extract Machine Operator**  
Operates and monitors machines in the production of pyrethrum extract.
- Example of occupational title classified here is:-  
- Machine-operator, pyrethrum extract production
- 849-26 Wattle Extract Machine Operator**  
Operates and monitors machines in the production of wattle extract.
- Example of occupational title classified here is:-  
- Machine-operator, wattle extract production

**849-99 Chemical Processing Machine Operators n.e.c**

This group includes those who operate and monitor plant equipment in the production of petroleum-based products.

Example of occupational title classified here is:-

- Machine-operator, petroleum-based products

**SUB-MAJOR GROUP 85: POWER PRODUCTION PLANT OPERATORS**

Power Production Plant Operators, operate and monitor Industrial Plant for electrical power generating and other purposes.

The tasks usually include: operating and monitoring industrial plants, for generation of electrical power and other purposes. The duties call for the understanding and experience of the industrial plant which is being operated and monitored. Supervision of other workers may be included.

Occupations in this sub-major group are classified into two minor groups, namely:-

**851 Power Generating Plant Operators**

**852 Steam Turbine Boiler and Engine Operators**

**MINOR GROUP 851: POWER GENERATING PLANT OPERATORS**

Power generating plant operators operate and monitor machinery and equipment which produce electric or other power and control its distribution.

Skill Level: Trade Certificate

**851-11 Power Plant Operator (Steam)**

Operates and monitors coal, oil or natural-gas-fired steam-power generating, distribution and transmission plant's equipment.

Example of occupational title classified here is:-

- Operator, steam power plant

**851-12 Hydro-electric Power Station Operator**

Operates and monitors hydro-electric-power-generating, distribution and transmission station's equipment.

Example of occupational title classified here is:-

- Operator, hydro-electric power station

**851-13 Power Reactor Operator**

Operates and monitors nuclear-fuelled steam-power-generating, distribution and transmission plant's equipment.

Example of occupational title classified here is:-

- Operator, power reactor

**851-14 Turbine Operator (Power Station)**

Operates steam or water-powered turbines which drive generators for producing electricity.

Example of occupational title classified here is:-

- Operator, power station turbine

**851-15 Power Switchboard Operator**

Opens and closes power switches to protect safety of crews and to avoid interruptions to service during repairs.

Example of occupational title classified here is:-

- Operator, power switchboard

**851-16 Load Dispatcher (Electric Power)**

Controls the distribution of power over feeder circuits between generating station and sub-stations. Operates instruments to de-energize lines or equipment and to connect alternative circuits to carry loads of de-energized lines.

Example of occupational title classified here is:-

- Dispatcher, electric power load

**851-17 Power Station Operator**

Operates equipment to produce electric power and controls its distribution. Controls steam power-generating plant consisting of boilers, turbines, generators and associated equipment.

Example of occupational title classified here is:-

- Operator, power station

**MINOR GROUP 852: STEAM TURBINE, BOILER AND ENGINE OPERATORS**

Steam turbine, boiler and engine operators operate and monitor steam engines, turbines and boilers on land and at sea.

Skill Level: Trade Certificate

**852-11 Boiler Operator**

Tends one or more boilers which produce steam for heat or power.

Examples of occupational titles classified here are:-

- Fireman, boiler
- Operator, boiler

**852-12 Ship's Fireman**

Operates and monitors coal or oil-fired steam-engines or boilers on board ship.

Example of occupational title classified here is:-

- Fireman, ship

**852-13 Railway Steam Engine Fireman**

Fires and attends to boiler of steam locomotive.

Example of occupational title classified here is:-

- Fireman, Steam Engine Railway

## **SUB-MAJOR GROUP 86: FOOD AND RELATED PRODUCTS MACHINE OPERATORS**

Food and related products machine operators operate and monitor machines which process foodstuffs and manufacture food and related products for human and animal consumption.

The tasks usually include: operating and monitoring machines for slaughtering animals and cutting carcasses and fish into pieces for storage or sale; manufacturing meat and fish products; processing milk and cream and manufacturing dairy products; crushing and grinding grain, spices or similar foodstuffs, making bread, pasta and related products; processing fruit, nuts and vegetable; processing and refining sugar; processing tea, coffee and cocoa, or producing beer, wine, spirits and other beverages or tobacco products. Supervision of other workers may be included.

Occupations in this sub-major group are classified into nine minor groups, namely:-

- 861 Meat and Fish Processing Machine Operators**
- 862 Dairy Products Machine Operators**
- 863 Grain and Spice-milling Machine Operators**
- 864 Baked Goods, Cereal and Chocolate Products Machine Operators**
- 865 Fruit, Vegetable and Nut Processing Machine Operators**
- 866 Sugar Production Machine Operators**
- 867 Tea, Coffee and Cocoa Processing Machine Operators**
- 868 Brewers, Wine and Other Beverage Machine Operators**
- 869 Tobacco Production Machine Operators**

### **MINOR GROUP 861: MEAT AND FISH PROCESSING MACHINE OPERATORS**

Meat and fish processing machine operators operate and monitor machines used to slaughter animals, trim carcasses, prepare standard meat or fish cuts, and manufacture meat and fish products.

Skill Level: Trade Certificate

#### **861-11 Fish Canning Machine Operator**

Operates and monitors machines used to produce canned fish.

Example of occupational title classified here is:-

- Machine-operator, fish canning

#### **861-12 Meat Canning Machine Operator**

Operates and monitors machines used to produce canned meat.

Example of occupational title classified here is:-

- Machine-operator, meat canning

#### **861-13 Fish Processing Machine Operator**

Operates and monitors machines used for fish slaughter and cutting into standard pieces for processing and for manufacture of fish products such as smoked fish, mince and mix fish.

Examples of occupational titles classified here are:-

- Machine-operator, fish processing
- Machine-operator, fish products

**861-14 Meat Processing Machine Operator**

Operates and monitors machines which are used to slaughter animals and cut carcasses into standard sizes for processing and manufacture of various meat products such as sausages, smoked meat; mince and mix meat.

Examples of occupational titles classified here are:-

- Machine-operator, meat processing
- Machine-operator, meat products

**861-14 Meat Curing Machine Operator**

Operates and monitors machines which cure meat through rubbing salt into meat, immersing in brine solution and controlling salinity; withdraws meat when salting is completed.

Examples of occupational titles classified here are:-

- Machine-operator, meat pickling
- Machine operator, meat curing

**861-15 Fish/Meat Sterilising Machine Operator**

Operates machines (pressure cookers) to sterilize meat or fish prior to canning or bottling.

Example of occupational title classified here is:-

- Machine-operator, meat and fish sterilising

**861-17 Meat/fish Freezing Machine Operator**

Operates and monitors machines which freeze fish or meat.

Example of occupational title classified here is:-

- Machine-operator, meat and fish freezing

**861-18 Animal Fats Production Machine Operator**

Operates and monitors machines and equipment in the production of animal fats for human consumption or other purposes.

Example of occupational title classified here is:-

- Machine-operator, animal fats production

**861-21 Animal Feeds Machine Operator (Meat-based)**

Operates and monitors machines in the manufacture of meat-based animal feeds.

Example of occupational title classified here is:-

- Machine-operator, animal feeds production/meat-based

**MINOR GROUP 862: DAIRY PRODUCTS MACHINE OPERATORS**

Dairy products machine operators operate and monitor machines which process milk and cream and make dairy products.

Skill Level: Trade Certificate

**862-11 Dairy Products Machine Operator**

Operates and monitors machines which process milk and cream and make dairy products such as butter, cheese and milk based products.

Examples of occupational titles classified here are:-

- Machine-operator, dairy products
- Saulterer, cheese

**862-12 Powder Milk Production Machine Operator**

Operates and monitors machines which make powdered milk.

Example of occupational title classified here is:-

- Machine-operator, powder milk production

**862-13 Milk Pasteurising Machine Operator**

Operates and monitors pasteurising equipment to remove harmful bacteria from milk and dairy products.

Example of occupational title classified here is:-

- Machine-operator, milk pasteurising

**862-14 Milk Processing Machine Operator**

Operates and monitors machines which homogenise and heat-treat milk and cream.

Example of occupational title classified here is:-

- Machine-operator, milk processing

**862-15 Condensed Milk Vacuum Pan Operator**

Operates and monitors machines which make condensed milk.

Example of occupational title classified here is:-

- Operator, condensed milk vacuum pan

**MINOR GROUP 863: GRAIN AND SPICE-MILLING MACHINE OPERATORS**

Grain and spice milling machine operators operate and monitor machinery used to crush, grind, blend and process grain, spices and related foodstuffs for human or animal consumption.

Skill Level: Trade Certificate

**863-11 Grain Milling Machine Operator**

Operates and monitors milling machines used for processing and grinding grain

Examples of occupational titles classified here are:-

- Machine-operator, grain rolling-mill
- Machine-operator, mustard seed milling

**863-12 Grain Husking/Hulling Machine Operator**

Operates and monitors machines for cleaning, washing and husking grain for milling. Sifts and sorts milled products at various stages.

Example of occupational title classified here is:-

- Machine-operator, grain husking

**863-13 Rice Milling Machine Operator**

Operates and monitors machines for processing rice.

Example of occupational title classified here is:-

- Machine-operator, rice milling

**863-14 Spice Milling Machine Operator**

Operates and monitors milling machine used for processing and grinding spices

Example of occupational title classified here is:-

- Machine-operator, spice milling

**863-15 Animal Feeds Machine Operator (Plant-based)**

Operates and monitors machines in the manufacture of plant-based animal feeds.

Example of occupational title classified here is:-

- Machine-operator, animal feeds production/plant-based.

**MINOR GROUP 864: BAKED GOODS, CEREAL AND CHOCOLATE PRODUCTS MACHINE OPERATORS**

Baked goods, cereal and chocolate products machine operators, operate and monitor mixing, blending, shaping and baking, machines which produce cereals, bread, pastry, pasta, chocolate and related products from flour, cocoa and other ingredients.

Skill Level: Trade Certificate

**864-11 Bread Production Machine Operator.**

Operates and monitors machines which mix and blend flour with other ingredients to prepare dough and which extrude and shape dough for the production of bread. Operates and monitors ovens.

Example of occupational title classified here is:-

- Machine-operator, bread production

**864-12 Chocolate Production Machine Operator.**

Operates and monitors grinding, mixing and other machines to make chocolate.

Examples of occupational titles classified here are:-

- Machine-operator, chocolate coupling
- Machine-operator, chocolate production

**864-13 Confectionery Production Machine Operator**

Operates and monitors machines which mix and blend flour with other ingredients to make cakes, biscuits, pastries, pies and other flour products.

Examples of occupational titles classified here are:-

- Machine-operator, confectionery production
- Machine-operator, pastry production

## **MINOR GROUP 865: FRUIT, VEGETABLE AND NUT PROCESSING MACHINE OPERATORS**

Fruit, vegetable and nut processing machine operators operate and monitor machines which extract juice from fruit and vegetables or oil from oil-bearing seeds, nuts and fruit, and which process fruits, vegetables and nuts by drying, cooking, canning or freezing.

Skill Level: Trade Certificate

### **865-11 Foodstuffs Dehydrating Machine Operator**

Operates and Monitors machines which extract juice from fruit and vegetables by heating or pressing.

Example of occupational title classified here is:-

- Machine-operator, foodstuffs dehydrating

### **865-12 Edible Oils Press Operator**

Monitors and operates machine which extracts oil from oil-bearing seeds, fruits and nuts

Example of occupational title classified here is:-

- Machine-operator, oil-seed milling

### **865-13 Oils and Fats Hydrogenation Equipment Operator**

Operates and monitors equipment which process oils and fats used in making margarine.

Example of occupational title classified here is:-

- Machine-operator, oil and fats Hydrogenation equipment operator

### **865-14 Margarine Processing Machine Operator**

Operates and monitors machines which make margarine and similar products from animal and vegetable oils.

Example of occupational title classified here is:-

- Machine-operator, edible nuts processing

### **865-15 Fruit and Vegetable Freezing Machine Operator**

Operates and monitors machines which freeze vegetables, fruits and other food.

Examples of occupational titles classified here are:-

- Machine-operator, fruit freezing
- Machine-operator, vegetable freezing

### **865-16 Fruit and Vegetable Sterilising Machine Operator**

Operates and monitors machines which sterilize fruits or vegetables prior to canning.

Examples of occupational titles classified here are:-

- Machine-operator, fruit sterilising
- Machine-operator, vegetable and fruit autoclave
- Machine-operator, vegetable sterilizing

**865-17 Oils and Fats Refining Machine Operator**

Operates and monitors machines which refine crude soya bean, cotton seed, peanut and other edible oils.

Example of occupational title classified here is:-

- Machine-operator, oils and fats refining

**865-18 Fruit Press Operator**

Operates and monitors machines which extract juice from fruit pulp using power press.

Example of occupational title classified here is:-

- Operator, fruit pre

**865-21 Fruit/Vegetable/Nut Processing Machine Operator**

Operates and monitors machines which prepare fruit, vegetables and nuts for further processing and which dry, cook, can, freeze or otherwise process fruit, vegetables and nuts.

Examples of occupational titles classified here are:-

- Machine-operator, edible nuts blanching
- Machine-operator, fruit canning
- Machine-operator, fruit juice production
- Machine-operator, fruit preserving
- Machine-operator, fruit processing
- Machine-operator, vegetable canning
- Machine-operator, vegetable preserving
- Machine-operator, vegetable processing
- Machine-operator, vegetable washing
- Operator, food essences evaporation equipment
- Operator, food essences vacuum pan

**MINOR GROUP 866: SUGAR PRODUCTION MACHINE OPERATORS**

Sugar production machine operators operate and monitor machines which process sugar-cane and produce refined sugar.

Skill Level: Trade Certificate

**866-11 Sugar Production Machine Operator**

Operates and monitors machines which are used to process sugar-cane and make refined sugar.

Example of occupational title classified here is:-

- Machine-operator, sugar production

**866-12 Sugar-cane Grinding Machine Operator**

Operates and monitors machines which crush sugar-cane.

Example of occupational title classified here is:-

- Machine-operator, sugar-cane grinding

**866-13 Sugar Refining Carbonation Equipment Operator**

Operates and monitors tanks in which impurities in sugar liquor are precipitated by carbonation process.

Example of occupational title classified here is:-

- Operator, sugar refining carbonation equipment

**866-14 Sugar Crystallization Process Operator**

Operates and monitors tanks used to produce sugar crystals from hot sugar liquor.

Example of occupational title classified here is:-

- Operator, sugar crystallization process

**MINOR GROUP 867: TEA, COFFEE AND COCOA PROCESSING MACHINE OPERATORS**

Tea, coffee and cocoa processing machine operators operate and monitor machines which blend and prepare tea leaves, coffee or cocoa beans.

Skill Level: Trade Certificate

**867-11 Tea Leaf Processing Machine Operator**

Operates and monitors machines used to dry tea leaves, roll withered leaves or dry rolled leaves and blend various grades of tea.

Examples of occupational titles classified here are:-

- Machine-operator, tea blending
- Machine-operator, tea leaf processing

**867-12 Coffee-bean Processing Machine Operator**

Operates and monitors machines which are used to cut coffee, remove and wash off pulp, peel off husks from beans and cure and blend beans; operates and monitors machine which grind coffee.

Examples of occupational titles classified here are:-

- Machine-operator, coffee-bean processing
- Machine-operator, coffee blending
- Machine-operator, coffee roasting equipment

**867-13 Cocoa-bean Processing Machine Operator**

Operates and monitors machines which are used to cut cocoa berries and remove and wash off pulp, peel off husks and cure and blend beans and grind cocoa.

Example of occupational title classified here is:-

- Machine-operator, cocoa-bean processing

**867-14 Cocoa-bean Roasting Equipment Operator**

Operates and monitors machine which roast cocoa beans.

Example of occupational title classified here is:-

- Operator, cocoa-bean roasting equipment

## **MINOR GROUP 868: BREWERS, WINE AND OTHER BEVERAGE MACHINE OPERATORS**

Brewers, wine and other beverage machine operators operate and monitor machines which mix, press, or malt and ferment grains and fruit to make malt liquors, wine and other alcoholic or non-alcoholic beverages, except fruit and vegetable juices.

Skill Level: Trade Certificate

### **868-11 Brewer**

Operates and monitors machines which mix, press, malt and ferment grains and fruits to make malt liquors, wine, juices (except fruit and vegetable) and other alcoholic or non-alcoholic beverages.

Examples of occupational titles classified here are:-

- Machine-operator, beer brewing
- Machine-operator, soft drinks production
- Machine-operator, spirit brewing

### **868-12 Malting (Spirits) Germinating Equipment Operator**

Operates and monitors machines which process and germinate barley or other grains used in making distilled or malt liquors.

Examples of occupational titles classified here are:-

- Machine-operator, spirits malting
- Maltster
- Steeper, malting

### **868-13 Malt Cooking Equipment Operator**

Operates and monitors machines used in cooking malt in water to prepare mash used in making distilled or malt liquor.

Example of occupational title classified here is:-

- Operator, malt cooking equipment

### **868-14 Spirits Malting Kiln Operator**

Operates and monitors machines which process grains through drying of germinated grains used in preparing malt for making distilled and malt liquors.

Example of occupational title classified here is:-

- Operator, spirits malting kiln

### **868-15 Spirits Fermentation Equipment Operator**

Operates and monitors machines which malt and ferment grains to make distilled and malt liquor.

Example of occupational title classified here is:-

- Operator, spirits fermentation equipment

### **868-16 Spirits Blending Machine Operator**

Operates and monitors machines which blend wines and spirits and other liquors to obtain desired tastes and flavours.

Examples of occupational titles classified here are:-

- Machine-operator, spirits blending
- Machine-operator, wine blending

**868-17 Spirits Still Operator**

Operates and monitors machines which still or increase alcoholic contents of alcoholic beverages.

Example of occupational title classified here is:-

- Operator, spirits still

**868-18 Wine Making Plant Operator**

Operates and monitors machines which process grapes and other fruits used in making wines, and controlling the fermentation process.

Example of occupational title classified here is:-

- Operator, wine making plant

**868-21 Vinegar Making Machine Operator**

Operates and monitors machines which extract juices to make vinegar.

Example of occupational title classified here is:-

- Machine-operator, vinegar making

**868-22 Soft Drinks & Carbonated Waters Making Machine Operator**

Operates and monitors machines used in making soft drinks and carbonated waters.

Examples of occupational titles classified here are:-

- Machine-operator, carbonated water making
- Machine-operator, soft drinks making

**868-23 Bottle Washing Machine Operator**

Operates and monitors machines which wash bottles.

Example of occupational title classified here is:-

- Machine-operator, bottle washing

**MINOR GROUP 869: TOBACCO PRODUCTS MACHINE OPERATORS**

Tobacco production machine operators operate and monitor machines which process tobacco and make cigarettes and other tobacco products.

Skill Level: Trade Certificate

**869-11 Tobacco Processing Machine Operator**

Operates and monitors machines which grade, mix, and process tobacco leaves in the manufacture of cigars, cigarettes and tobacco products.

Examples of occupational titles classified here are:-

- Machine-operator, tobacco processing.

**869-12 Tobacco Leaf Cutting Machine Operator**

Operates and monitors machines which cut tobacco leaves into coarse or fine shreds.

Example of occupational title classified here is:-

- Machine-operator, tobacco leaf cutting

**869-13 Tobacco Leaf Stripping Machine Operator**

Operates and monitors machine which remove mid-ribs and stalks from tobacco leaves.

Example of occupational title classified here is:-

- Machine-operator, tobacco leaf striping

**869-14 Tobacco Blending Machine Operator**

Operates and monitors machines which process tobacco by mixing various grades and kinds of tobacco leaves to form blends of distinctive flavours.

Example of occupational title classified here is:-

- Machine-operator, tobacco blending

**869-15 Tobacco Processing Vacuum - Conditioner Operator**

Operates and monitors machines which process tobacco in preparation and manufacturing of cigarettes by exposure of steam moisture to log sheds of tobacco in vacuum conditioner.

Example of occupational title classified here is:-

- Operator, tobacco processing vacuum-conditioner

**869-16 Cigar Production Machine Operator**

Operates and monitors machines which make cigars.

Example of occupational title classified here is:-

- Machine-operator, cigar production

**869-17 Cigarette Production Machine Operator**

Operates and monitors automatic machines which make cigarettes and tobacco products.

Example of occupational title classified here is:-

- Machine-operator, cigarette production

**SUB-MAJOR GROUP 87: ASSEMBLERS**

Assembles components into products according to strictly laid down procedures. The products worked on may be moved from one worker to the next along assembly lines.

The tasks usually include: assembling components into various types of products according to strictly laid down procedures.

Occupations in this sub-major group are classified into six minor groups, namely:-

**871 Mechanical Machinery Assemblers**

**872 Electrical and Electronic Machinery Assemblers**

**873 Metal Products Assemblers**

**874 Plastic and Rubber Products Assemblers**

**875 Wood, Paperboard and Related Products Assemblers**

## **876 Textile and Leather products Assemblers**

### **MINOR GROUP 871: MECHANICAL MACHINERY ASSEMBLERS**

Mechanical machinery assemblers assemble the components or parts of mechanical machinery according to strictly laid down procedures.

**Skill Level: Trade Certificate**

#### **871-11 Agricultural Machinery Assembler**

Assembles the components or parts of mechanical machinery in the manufacturing of agricultural machinery according to strictly laid down procedures.

Example of occupational title classified here is:

- Assembler, agricultural machinery

#### **871-12 Earth Moving Equipment Assembler**

Assembles the components or parts of equipment in the manufacture of earth moving equipment according to strictly laid down procedures.

Example of occupational title classified here is:

- Assembler, earth-moving equipment

#### **871-13 Machine Tool Assembler**

Assembles the components or parts of machinery in the manufacture of metal working machine tools according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, machine tool

#### **871-14 Printing Machinery Assembler**

Assembles the components or parts of machinery in the manufacture of printing machinery according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, printing machinery

#### **871-15 Mining Machinery Assembler**

Assembles the components or parts of machinery in the manufacture of mining machinery according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, mining machinery

#### **871-16 Textile Machinery Assembler**

Assembles the components or parts of machinery in the manufacture of textile machinery according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, textile machinery

#### **871-17 Wood Working Machinery Assembler**

Assembles the components or parts of machinery in the manufacture of woodworking

machinery according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, woodworking machinery

**871-18 Aircraft Assembler**

Assembles the components or parts of aircraft or their engines in the manufacture of aircraft or their engines according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, aircraft engine

**871-21 Internal Combustion Engine(except Ship or Aircraft) Assembler**

Assembles the components or parts of combustion engines in the manufacture of internal combustion engines (except those used for ship or aircraft propulsion) according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, motor vehicle engines

**871-22 Marine Engine Assembler**

Assembles the components or parts of marine engines in the manufacture of marine engines according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, marine engine

**871-23 Turbine (except Aircraft and Marine) Assembler**

Assembles the components or parts of machinery in the manufacture of turbines (except those used in aircraft and ship) according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, turbine

**871-24 Aircraft Assembly Line Machine Operator**

Assembles the components or parts of sheet metal used in the manufacture of aircraft according to strictly laid down procedures.

Example of occupational title classified here is:-

- Machine-operator, aircraft assembly line

**871-25 Steam Engine Assembler**

Assembles the components or parts of engine used in the manufacture of steam engines according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, steam engine

**871-26 Motor Vehicle Assembly Line Machine Operator**

Assembles the components or parts in the assembly of motor vehicles according to strictly laid down procedures.

Examples of occupational titles classified here are:-

- Assembler, motor vehicle
- Machine-operator, motor vehicle assembly line

## **MINOR GROUP 872: ELECTRICAL AND ELECTRONIC MACHINERY ASSEMBLERS**

Electrical and electronic machinery assemblers assemble the components or parts of electrical or electronic equipment, according to strictly laid down procedures.

Skill Level: Trade Certificate

### **872-11 Electrical Equipment Assembler**

Assembles the components or parts of electrical equipment and electrical machinery according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, electrical equipment

### **872-12 Armature Winding Machine Operator/Assembler**

Assembles and winds wire into bobbins or directly onto cores to make components or parts of electrical equipment using machines according to strictly laid down procedures.

Examples of occupational titles classified here are:-

- Machine-operator, armature winding
- Machine-operator, rotor coil winding
- Machine-operator, Starter coil winding
- Machine-operator, transformer coil winding

### **872-13 Electrical Components Assembler**

Assembles the components of electrical equipment according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, electrical components

### **872-14 Audio Visual Equipment Assembler**

Assembles the components or parts of electronic equipment such as radio or television, receivers, according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, electronic and audio visual equipment
- Assembler, radio
- Assembler, television

### **872-15 Micro-electronic Equipment Assembler**

Assembles the components or parts of micro-electronic equipment such as hearing aides according to strictly laid down procedures.

Examples of occupational titles classified here are:-

- Assembler, hearing aid

- Assembler, micro-electronic equipment

**872-16 Clock Assembler**

Assembles the components or parts to make watches or clocks according to strictly laid down procedures.

Examples of occupational titles classified here are:-

- Assembler, chronometer
- Assembler, clock

**MINOR GROUP 873: METAL PRODUCTS ASSEMBLERS**

Metal products assemblers perform limited, specialized tasks in assembling metal components or parts of various types of products according to strictly laid down procedures.

Skill Level: Trade Certificate

**873-11 Metal Products Assembler**

Assembles the metal components or parts of various types of products, according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, metal products

**873-12 Sheet-metal Furniture Assembler**

Assembles the components or metal sheet parts to manufacture sheet - metal furniture according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, sheet-metal furniture

**MINOR GROUP 874: PLASTIC AND RUBBER PRODUCTS ASSEMBLERS**

Plastic and rubber products assemblers assemble plastic or rubber components or parts of various types of products according to strictly laid down procedures.

Skill level: Trade Certificate

**874-11 Plastic Products Assembler**

Assembles the plastic components or parts of various types of products, according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, plastic products

**874-12 Rubber Goods Assembler**

Assembles the rubber components or parts of various types of products, according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, rubber products

## **MINOR GROUP 875: WOOD, PAPERBOARD AND RELATED PRODUCTS ASSEMBLERS**

Wood, paperboard and related products assemblers assemble the components or parts made from wood, paperboard and related materials of various types of products according to strictly laid down procedures.

Skill Level: Trade Certificate

### **875-11 Wood Products Assembler**

Assembles components or parts made from wood or related materials of various types of products according to strictly laid down procedures.

Examples of occupational titles classified here are:-

- Assembler, wood products
- Assembler, wooden furniture

### **875-12 Paper Products Assembler**

Assembles components or parts made from paperboard and related materials for the manufacture of paper products according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, paper products

## **MINOR GROUP 876: TEXTILE AND LEATHER PRODUCTS ASSEMBLERS**

Textile and leather products assemblers assemble the components or parts made from textile, leather and related materials, of various types of products, according to strictly laid down procedures.

Skill Level: Trade Certificate

### **876-11 Textile Products Assembler**

Assembles components or parts made from textile and related materials for the manufacture of textile products according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, textile products

### **876-12 Leather Products Assembler**

Assembles components or parts made from leather and related materials for the manufacture of leather goods such as luggage, handbags, belting and leather novelties according to strictly laid down procedures.

Example of occupational title classified here is:-

- Assembler, leather products

## **SUB-MAJOR GROUP 88: DRIVERS AND MOBILE MACHINERY OPERATORS**

Drivers and mobile machinery operators drive and tend trains and motor vehicles, or drive, operate and monitor mobile industrial and agricultural machinery and equipment, or execute deck duties on board ship and other water-borne craft.

The work mainly calls for experience with an understanding of the machinery and equipment which is being operated and monitored. Also required is the ability to cope with machine-placed operations and to adapt to technological innovations. The tasks usually include: driving and tending trains and motor vehicles; driving, operating and monitoring mobile industrial and agricultural machinery and equipment; carrying out deck duties on board ship and other water-borne craft. Supervision of other workers may be included.

Occupations in this sub-major group are classified into four minor groups, namely:-

**881 Railway Engine Drivers and Related Workers**

**882 Motor Vehicle Drivers**

**883 Agricultural and Materials-handling Machinery Operators**

**884 Ships' Deck Crews and Related Workers**

### **MINOR GROUP 881: RAILWAY ENGINE DRIVERS AND RELATED WORKERS**

Railway engine drivers and related workers drive railway engine or operate railway signals.

Skill Level: Driving licences

#### **881-11 Railway Engine Driver**

Drives or assists in driving railway engines to transport passengers and freight.

Examples of occupational titles classified here are:-

- Driver, locomotive
- Driver, train

#### **881-12 Railway Braker**

Takes charge of and safeguards freight train during runs, controls the movement of railway traffic by operating signals, switches, rolling stock and makes up trains in railway yards, and controls their movement.

Example of occupational title classified here is:-

- Braker, Train

#### **881-13 Railway Signaller**

Controls flow of railway traffic over section of line by operating signals and switches from control tower or signal box. May control opening and closing of level-crossing barriers in addition to operating signals.

Example of occupational title classified here is:-

- Signaller, railway

#### **881-14 Railway Shunter**

Switches rolling-stock in railway yards and sidings in accordance with orders about loading and make-up of trains and couples and uncouples rolling stock. May ride on cars that have been shunted and turns hand wheel to control speed of car or stop it at specified positions.

Example of occupational title classified here is:-

- Shunter, railway

## **MINOR GROUP 882: MOTOR VEHICLE DRIVERS**

Motor vehicle drivers drive and tend motor vehicles to transport materials, goods and passengers.

Skill Level: Driving licence

### **882-11 Motor-cyclist**

Drives and tends motor-cycle or motorised tricycle to transport materials, goods and passengers.

Example of occupational title classified here is:-

- Rider, dispatch

### **882-12 Taxi Driver**

Drives motor car to transport passengers and goods on demand at a charge usually based on a fixed tariff. May keep car clean and in good running order and make minor repairs.

Example of occupational title classified here is:-

- Driver, taxi

### **882-13 Car or Van Driver**

Drives and tends passenger cars or vans to deliver mail and goods.

Examples of occupational titles classified here are:-

- Driver, car
- Driver, Van

### **882-14 Bus Driver**

Drives motor bus, trolley-bus or motor-coach to transport local or long distance passengers. May operate automatic doors and may collect fares, issue tickets and keep simple records.

Example of occupational title classified here is:-

- Driver, bus

### **882-15 Dumper Driver**

Operates motorized tip-wagon dump truck (not intended for transport by road) to transfer bulk materials such as earth, gravel, stone and other minerals from one location to another on a construction site, mining area or dumping site.

Example of occupational title classified here is:-

- Driver, dumper

### **882-16 Lorry Driver**

Drives a motor vehicle, such as heavy truck, light lorry or delivery van to transport freight. Drives truck or similar vehicles between depot and loading points, with due regard to other traffic, traffic regulations and time schedules; may keep vehicle in good running order and makes minor repairs.

Examples of occupational titles classified here are:-

- Driver, lorry

**882-17 Heavy-truck Driver**

Drives and tends heavy motor vehicles, such as tankers to transport liquids, or lorries with trailers to transport goods, or heavy materials over short or long distances.

Examples of occupational titles classified here are:-

- Driver, fuel tanker
- Driver, trailer
- Driver, heavy commercial

**MINOR GROUP 883: AGRICULTURAL AND MATERIALS-HANDLING MACHINERY OPERATORS**

Agricultural and materials-handling machinery operators drive, tend, operate and monitor agricultural and other machinery and equipment for handling materials and heavy objects.

Skill Level: Operating Licence

**883-11 Motorised Farm Equipment Driver**

Drives and tends tractor or self-propelled ploughing, planting, harvesting, baling or other special-purpose farm machinery, or similar tractor-drawn equipment.

Examples of occupational titles classified here are:-

- Driver, harvester
- Driver, tractor

**883-12 Timber Carrier Driver**

Drives and tends tractor or self-propelled clearing, harvesting, timber-carrying or other special purpose forestry machinery.

Example of occupational title classified here is:-

- Driver, timber carrier

**883-13 Excavating Machine Operator**

Operates a power driven machine mounted on wheels or crawler-tracks, equipped with movable shovels, grab bucket or dragwire bucket to excavate and move earth, rock, sand, gravel and similar material.

Example of occupational title classified here is:-

- Machine-operator, excavating

**883-14 Trench Digging Machine Operator**

Operates and monitors machines for digging trenches for sewers, drainage, water, oil, gas or similar pipelines.

Example of occupational title classified here is:-

- Machine-operator, trench digging

**883-15 Bulldozer Operator**

Operates mobile power driven machine equipment with concave steel blade to move, distribute and level earth. May level and clear demolition sites.

Example of occupational title classified here is:-

- Operator, bulldozer

**883-16 Dredge Operator**

Operates and monitors equipment to remove sand, gravel and mud from bottom of body of water in order to deepen harbours and waterways or reclaim earth, fill and excavate or mine.

Example of occupational title classified here is:-

- Operator, dredge

**883-17 Pile Driver Operator**

Operates and monitors machines for hammering wooden, concrete or steel piles into ground.

Example of occupational title classified here is:-

- Operator, pile driver

**883-18 Road Grader and Scraper Operator**

Operates and monitors graders and scrapers to pick up, haul, deposit and level earth, and to spread and level materials in road construction.

Example of occupational title classified here is:-

- Operator, scraper

**883-21 Road-roller Operator**

Operates power driven roller to compact and smooth layer of material such as rock, gravel, earth, concrete and asphalt to construct roads, pavements and runways and for other purposes.

Example of occupational title classified here is:-

- Operator, road roller

**883-22 Concrete Paving-Machine Operator**

Operates and monitors machines to spread and level concrete on areas such as highways, streets and parking areas.

Example of occupational title classified here is:-

- Machine-operator, concrete paving

**883-23 Tar-Spreading Machine Operator**

Operates and monitors machines which spread and smooth bituminous or tar preparations to construct roadways, roads or similar work.

Example of occupational title classified here is:-

- Machine-operator, tar spreading

**883-24 Mobile Crane Operator**

Operates a crane mounted on wheels or crawler tracks which can be moved under its own power in any direction. Drives crane to site, starts crane motor and manipulates controls or positions crane.

Example of occupational title classified here is:-

- Operator, mobile crane

**883-25 Stationary Crane Operator**

Operates stationary crane equipment with a mobile jib (boom). May operate crane in accordance with signals from other workers. May operate crane with mechanical grip attached to lifting tackle.

Example of occupational title classified here is:-

- Operator, stationary crane

**883-26 Hoist Operator**

Operates power-driven equipment to raise and lower mine cages and fills or empties cars.

Example of occupational title classified here is:-

- Operator, hoist

**883-27 Winch Operator**

Operates winches to lift or move materials and equipment in areas such as building sites, factories, mines and sawmills.

Example of occupational title classified here is:-

- Operator, winch

**883-28 Fork-lift Operator**

Operates power driven truck equipment with forklift or lifting platform to lift up, transport and raise or mechanically stack bales, cartons and similar objects in warehouses, storerooms, factory or other establishment.

Example of occupational title classified here is:-

- Operator, fork-lift

**883-29 Lifting-Truck Operator**

Operates and monitors lifting-truck and similar equipment to load and unload, transport, lift and stack goods and pallets in terminals, harbours, warehouses, factories and other establishments.

Example of occupational title classified here is:-

- Operator, lifting truck

**883-99 Other Agricultural and materials-Handling Machinery Operators n.e.c.**

This group of workers include those who operate farm machinery, operating and servicing one or more types of motorised farm machinery and equipment drawn or powered by animals.

Example of occupational title classified here is:-

- Handler, animal drawn plough

**MINOR GROUP 884: SHIPS' DECK CREWS AND RELATED WORKERS**

Ships' deck crews and related workers carry out deck duties on-board ship and similar duties

on-board and other water borne craft.

Skill Level: Operating Licence

**884-11 Boatswain**

Supervises and co-ordinates the activities of workers engaged in performing maintenance and deck tasks aboard ship. Is in charge of a ship's rigging, boats and anchors.

Example of occupational title classified here is:-

- Boatswain

**884-12 Seaman**

Stands lookout watches at sea and when entering or leaving harbour or other narrow waters and alerts officers when other vessels, navigation marks or hazards are sighted. Performs maintenance tasks for the general upkeep of ship's deck equipment, cargo, gear, rigging, life-saving and fire-fighting appliances. Steers vessels as directed, using compasses to maintain course.

Examples of occupational titles classified here are:-

- Sailor
- Seaman
- Sea woman

**884-13 Coxswain**

Performs maintenance and lookout tasks aboard ship or ferry. Steers and is in charge of a ship's boat and its crew.

Example of occupational title classified here is:-

- Coxswain

**884-99 Ship's Deck Ratings, Barge Crew and Boatmen n.e.c.**

Included in this group are those who work on barges and ferries carrying people and goods on rivers and canals or those working on tugs which tow ships into or out of harbour.

Example of occupational title classified here is:-

- Driver, ferry

**SUB-MAJOR GROUP 89: OTHER PLANT AND MACHINE OPERATORS AND ASSEMBLERS**

Other plant and machine operators and assemblers operate and monitor industrial plant for processing of glass and ceramics; operate and monitor machines which prepare fibres and yarns, or hides and pelts, and manufacture or dry-clean textiles or fur and leather articles; operate and monitor various types of plant and machines such as those for incineration, water treatment, gas compression, pumping, heating and cooling systems, packing, labelling of products, packages and containers or assemble products whose component parts are made of a wide range of materials.

The tasks usually include: operating and monitoring industrial plant for processing of glass and ceramics; operating and monitoring machines which prepare fibres and spin and wind yarn and thread, weave and knit, manufacture machine-made garments, or bleach, dye, clean textile

garments or prepare hides, skins, pelts and fur to make leather goods or make footwear and related products; or operating and monitoring various types of plant and machines such as incinerators, water-treatment plant, air and gas compressors, pumping stations, heating and cooling systems, as well as machines which pack, label and if needed, add revenue stamps to products, packages and containers; or assembling according to strictly laid down procedures, products whose component parts are made of a wide range of materials. Supervision of other workers may be included.

Occupations in this sub-major group are classified into seven minor groups, namely;

- 891 Glass and Ceramics Kiln and Related Plant Operators**
- 892 Textile Preparing, Spinning and Winding Machine Operators**
- 893 Weaving, Knitting and Sewing Machine Operators**
- 894 Textile Bleaching, Dyeing and Cleaning Machine Operators**
- 895 Fur and Leather Preparing Machine Operators**
- 896 Shoemaking and Related Machine Operators**
- 899 Plant and Machine Operators and Assemblers Not Elsewhere Classified.**

#### **MINOR GROUP 891: GLASS AND CERAMICS KILN AND RELATED PLANT OPERATORS**

Glass and ceramics kiln and related plant operators operate and monitor kilns, furnaces and other machinery and equipment, used in the manufacture of glass, ceramics, porcelain or bricks.

Skill Level: Form IV

##### **891-11 Glass Making Furnace-man**

Operates and monitors equipment used in manufacture of glass, adds specified additives or dyes and maintains furnace combustion temperature and pressure.

Example of occupational title classified here is:

- Furnace-man, glass making

##### **891-12 Glass Annealing Furnace man**

Operates and monitors glass annealing furnaces to remove or prevent internal stress.

Example of occupational title classified here is:-

- Furnace man, glass annealing

##### **891-13 Glass Temperer Furnace-man**

Operates and monitors tempering furnaces to toughen glass.

Example of occupational title classified here is:-

- Furnace-man, glass temperer

##### **891-14 Pottery and Porcelain Kilns-man**

Operates and monitors kilns which bake pottery and porcelain or which fix glazing and decoration by rebaking. Observes temperatures, controls heating times and ventilation and observes products.

Example of occupational title classified here is:-

- Kilns-man, pottery and porcelain

**891-15 Brick and Tile Kilns-man**

Operates and monitors the operation of Kilns to fire bricks and tiles by observing temperatures, controlling heating times and ventilation and observing products.

Example of occupational title classified here is:-

- Kilns-man, brick and tile

**891-16 Glass Blowing Machine Operator**

Operates and monitors furnaces and other machinery and equipment which shape glass articles by blowing.

Example of occupational title classified here is:-

- Machine-operator, glass blowing

**891-17 Glass pressing Machine Operator**

Operates and monitors machines which shape glass articles by pressure-moulding. Sets screws, air valves, turntable rates, and the timing of plungers in glass-pressing machines.

Example of occupational title classified here is:-

- Machine-operator, glass pressing

**891-18 Glass Drawing Machine Operator**

Operates and monitors machines which make glass rods from molten glass by drawing.

Example of occupational title classified here is:-

- Machine-operator, glass drawing

**891-21 Plate-glass Roller Operator**

Operates and monitors machines which roll molten glass to a continuous sheet of flat metal.

Example of occupational title classified here is:-

- Machine-operator, plate-glass roller
- Roller-man, plate glass

**891-22 Glass-tube Making Machine Operator**

Operates and monitors machines which make glass tubes from molten glass by drawing and blowing.

Example of occupational title classified here is:-

- Machine-operator, glass-tube making

**891-23 Glass Mixing Machine Operator**

Operates and monitors machines which mix ingredients such as silica, for glass making.

Example of occupational title classified here is:-

- Machine-operator, glass mixing

**891-99 Other Glass and Ceramic Kilns and Related Plant Operators**

This group includes those who operate and monitor kilns as part of the production

process for materials such as lime and cement; by breaking down calcium compounds or those who operate machines which extrude molten glass to form fibre glass filaments.

Examples of occupational titles classified here are:-

- Kilns- man, cement production
- Kilns- man, fibreglass filament
- Kilns- man, lime production

### **MINOR GROUP 892: TEXTILE PREPARING, SPINNING AND WINDING MACHINE OPERATORS**

Textile preparing, spinning and winding machine operators operate and monitor machines which prepare fibres, and spin, double, twist and wind yarn thread.

Skill Level: Trade Certificate

#### **892-11 Cotton Gin Operator**

Operates and monitors machinery for separating raw cotton from seeds.

Example of occupational title classified here is:-

- Operator, cotton gin.

#### **892-12 Sisal Fibre Production Machine Operator**

Operates and monitors machines in the production of sisal fibre, cord, rope and twine from raw sisal.

Examples of occupational titles classified here are:-

- Machine-operator, sisal fibre production
- Machine-operator, sisal products

#### **892-13 Thread and Yarn Spinning Machine Operator**

Operates and monitors machines which spin thread and yarn from roving wind two or more strands on to bobbin; twist two or more strands of yarn or thread into single heavier and stronger strand or wind yarn or thread from one package to another.

Example of occupational title classified here is:-

- Machine-operator, thread and yarn spinning

#### **892-14 Synthetic Fibre Spinning Machine Operator**

Operates and monitors machine or machine section that extrudes or forms natural or synthetic polymers into synthetic fibres such as rayon or nylon.

Example of occupational title classified here is:-

- Machine-operator, synthetic fibre spinning

#### **892-15 Thread and Yarn Twisting Machine Operator**

Operates and monitors machines which twist two or more strands of yarn or thread into a single heavier and stronger strand.

Example of occupational title classified here is:-

- Machine-operator, thread and yarn twisting

**892-16 Fibre Preparing Machine Operator**

Operates and monitors machine which prepare wool, cotton, flax, jute, hemp and other natural textile fibres for spinning and winding.

Example of occupational title classified here is:-

- Machine-operator, fibre preparing

**892-17 Textile Fibres Drawing Frame Machine Operator**

Operates and monitors machines e.g drawing frame machine, which combine several slivers into one attenuated strand for regular quality and weight.

Example of occupational title classified here is:-

- Machine-operator, textile fibre drawing frame

**892-18 Thread and Yarn Reeling Machine Operator**

Operates and monitors machines which wind yarn or thread from one package to another possibly to facilitate further processing or transportation.

Examples of occupational titles classified here are:-

- Machine-operator, thread and yarn reeling
- Machine-operator, thread and yarn skeining,
- Machine-operator, thread and yarn spooning,
- Machine-operator, thread and yarn winding

**892-21 Thread and Yarn Doubling Machine Operator**

Operates and monitors machines which wind two or more threads onto bobbin without twisting them.

Example of occupational title classified here is:-

- Machine-operator, thread and yarn doubling

**892-22 Ribbon Lapping Machine Operator**

Operates and monitors machines which combine slivers into one sliver lap or sliver laps into one ribbon lap mostly in preparation to combing.

Examples of occupational titles classified here are:-

- Machine-operator, ribbon lapping
- Machine-operator, sliver lapping
- Machine-operator, textile fibres lapping

**892-23 Textile Fibre Combing Machine Operator**

Operates and monitors machines which clean, fluff and comb textile fibres and delivers long fibres into slivers for first drawing.

Example of occupational title classified here is:-

- Machine-operator, textile fibre combing

**892-24 Textile Fibres Blending Machine Operator**

Monitors and operates machines which mix textile fibres into uniform blends.

Example of occupational title classified here is:-

- Machine-operator, textile fibres blending

**892-25 Textile Fibres Washing Machine Operator**

Operates and monitors machines for washing raw stock fibres other than wool.

Example of occupational title classified here is:-

- Machine-operator, textile fibres washing

**MINOR GROUP 893: WEAVING, KNITTING AND SEWING MACHINE OPERATORS**

Weaving knitting and sewing machine operators operate and monitor weaving, knitting and sewing machines and related equipment used to produce materials and fabrics, make textile, fur or leather garments or embroider ornamental designs on garments or other materials.

Skill Level: Trade Certificates

**893-11 Beam (Textile Weaving) Warping Machine Operator**

Operates and monitors machine which winds gum or thread from bobbins directly into weaver's beam or onto cylinder or reel and then onto beam.

Example of occupational title classified here is:-

- Machine-operator, beam warping/textile weaving

**893-12 Textile Weaving Drawing-in Machine Operator**

Monitors and operates machines which draw warp threads into loom preparing for weaving.

Example of occupational title classified here is:-

- Machine-operator, textile weaving drawing-in

**893-13 Jacquard Card Cutter**

Operates and monitors machines which punch holes in jacquard cards.

Example of occupational title classified here is:-

- Cutter, jacquard card

**893-14 Garment Knitting Machine Operator**

Operates and monitors one or more machines which knit garments, fabrics or other articles from yarn

Example of occupational title classified here is:-

- Machine-operator, garment knitting

**893-15 Knitting Machine Operator**

Operates and monitors one or more standard or specialized power-driven knitting machines to knit garments, fabrics, hosiery or other articles.

Example of occupational title classified here is:-

- Machine-operator, knitting

**893-16 Cloth Production Machine Operator**

Monitor and operates machines except jacquard loom to weave cloth.

Examples of occupational titles classified here are:-

- Machine-operator, cloth production
- Machine-operator, fabrics weaving

**893-17 Crocheting Machine Operator**

Operates and monitors machine which crochets trimmings on knitted garments and other knitted goods.

Example of occupational title classified here is:-

- Machine-operator, crocheting

**893-18 Jacquard Weaving Machine Operator**

Operates and monitors jacquard loom to weave cloth of intricate designs.

Examples of occupational titles classified here are:

- Machine-operator, jacquard weaving
- Operator, jacquard loom

**893-21 Lace Production Machine Operator**

Operates and monitors machines used to weave plain or figured lace for trimming dresses or in preparation for minor adjustments.

Examples of occupational titles classified here are:-

- Machine-operator, lace production
- Machine-operator, lace weaving

**893-22 Embroidery Machine Operator**

Operates and monitors machines which reproduce ornamental designs on garments or other materials by or on several articles or designs at the same time.

Example of occupational title classified here is:-

- Machine operator, embroidery

**893-23 Net Production Machine Operator**

Operates and monitors machines on which yarn or twist is intersected and knotted at regular intervals to form mesh used to make various types of net like mosquito nets and fishing nets.

Example of occupational title classified here is:-

- Machine-operator, net production

**893-24 Carpet Weaving Machine Operator**

Operates and monitors weaving machines used to weave carpets or rugs.

Example of occupational title classified here is:-

- Machine-operator, carpet weaving

**893-25 Hosiery Knitting Machine Operator**

Monitors and operates knitting machines to knit hosiery to shape of foot or leg or required form.

Example of occupational title classified here is:-

- Machine-operator, hosiery knitting

**893-26 Sewing Machine Operator**

Operates and monitors standard or specialised single or multiple -needle sewing machines to make or repair garments, gloves and miscellaneous products in textiles, or leather.

Examples of occupational titles classified here are:-

- Machine-operator, fur sewing
- Machine operator, garment sewing
- Machine-operator, hats sewing
- Machine-operator, sewing
- machine-operator, textile products sewing
- Machine-operator, textile products
- Machine-operator, upholstery sewing.

**893-27 Embroidery Sewing Machine Operator**

Operates and monitors standard or specialised single or multiple-needle sewing machines to embroider ornamental designs on textiles or other materials.

Example of occupational title classified here is:-

- Machine-operator, embroidery sewing

**893-28 Hat Blocking Machine Operator**

Operates and monitors machines which form and make hats out of textiles, fur or leather such as that which stretch felt cones to form hat shopper.

Example of occupational title classified here is:-

- Machine-operator, hat making.

**893-31 Mattress Production Machine Operator**

Operates and monitors machines which make mattress of specific sizes.

Example of occupational title classified here is:-

- Machine-operator, mattress production

**MINOR GROUP 894: TEXTILE BLEACHING, DYEING AND CLEANING MACHINE OPERATORS.**

Textile bleaching, dyeing and cleaning machine operators operate and monitor machines which bleach, dye, wash and treat fibres, yarn or cloth or dry-clean textile, fur and leather articles.

Skill Level: Trade Certificate

**894-11 Textile Bleaching Machine Operator**

Operates and monitors machines which bleach textile fibres or piece goods, using chemical solution, water, steam, heat, pressure or chemical means.

Example of occupational title classified here is:-

- Machine-operator, textile bleaching

**894-12 Bleaching Range Operator**

Operates and monitors machine which feeds end of range and bleaches, washes, dries, greiges cloth, preparatory to printing, dying or finishing. Observes cloth entering machine to detect bad seams or flaws that might course tear-outs; stops range and slams cloth to correct flaws.

Example of occupational title classified here is:-

- Operator, bleaching range

**894-13 Laundering Machine Operator**

Operates and monitors machines which wash or dry-clean textile, fur, or leather products to remove dirt, impurities, excess chemicals or natural gum.

Examples of occupational titles classified here are:-

- Machine-operator, cloth cleaning equipment
- Machine-operator, cloth washing
- Machine-operator, laundry washing
- Machine-operator, textile cleaning equipment
- Machine-operator, yarn washing

**894-14 Laundry Pressing Machine Operator**

Operates and monitors machines which press, stretch or impart lustre, mark, iron, fold, stick, tie, package and roll or unroll flatworm or garments or other type of finish to textiles.

Examples of occupational titles classified here are:-

- Machine-operator, textile cleaning.
- Operator, cleaning equipment/textile

**894-15 Textile Calender Operator**

Operates and monitors machine which impregnates textiles with chemicals to render them waterproof or which press, stretch or give waste or waterproof or other type of finish by means of friction, heating or rolling.

Examples of occupational titles classified here are:-

- Machine-operator, cloth calender
- Machine-operator, water proofing/cloth
- Operator, textile calender

**894-16 Garments Dyeing Machine Operator**

Operates and monitors machines which treat textile products or yarn to make them lighter or to give them specific colour desired.

Examples of occupational titles classified here are:-

- Machine-operator, fabric dyeing.
- Machine-operator, textile fibres dyeing
- Machine-operator, yarn dyeing

**894-17 Silk Degumming Machine Operator**

Operates and monitors machines which treat silk yarn cloth or pieces of goods to remove natural gum.

Example of occupational title classified here is:-

- Machine-operator, silk degumming

**894-18 Textile Fulling-mill Operator**

Operates and monitors machines which cause fibres of wool to interlock and strengthen the cloth for further processing.

Example of occupational title classified here is:-

- Operator, textile fulling-mill

**894-21 Textile Shrinking Machine Operator**

Operates and monitors machines which shrink woven materials to required length and width.

Example of occupational title classified here is:-

- Machine-operator, textile shrinking

**MINOR GROUP 895: FUR AND LEATHER PREPARING MACHINE OPERATORS**

Fur and leather preparing machine operators operate and monitor various machines which prepare leather or treat fur or wool bearing pelts.

Skill Level: Trade Certificate

**895-11 Pelt Finishing Machine Operator**

Operates and monitors machines which remove long course hair from fur pelts, trim hair to even length, and dye, stretch and smooth dressed pelts.

Examples of occupational titles classified here are:-

- Machine-operator, fur preparing
- Machine-operator, pelt processing

**895-12 Hide Dehairing Machine Operator**

Operates and monitors machines which remove residual wool from skins or flesh and hair from hides and which split hides.

Examples of occupational titles classified here are:-

- Machine-operator, hide dehairing
- Machine-operator, hide fleshing
- Machine-operator, hide processing.

**895-13 Pelt Fleshing Machine Operator**

Operates and monitors machines which remove flesh and fat from pelts before curing or other processing.

Example of occupational title classified here is:-

- Machine-operator, pelt fleshing

**895-14 Leather Preparing Machine Operator**

Operates and monitors machines which treat hides and skins in solutions and apply finishing product to convert them into leather; applies dyes and stains to leather.

Example of occupational title classified here is:-

- Machine-operator, leather preparing

**895-15 Leather Staining Machine Operator**

Operates and monitors machines which apply dyes and stains to leather.

Example of occupational title classified here is:-

- Machine-operator, staining

**895-16 Tanning Machine Operator**

Operates and monitors machines which prepare hides and which treat hides and skins to solutions and apply finishing product to convert them into leather.

Example of occupational title classified here is:-

- Machine-operator, tanning

**895-17 Hide Washing Machine Operator**

Operates and monitors machines which wash hides.

Example of occupational title classified here is:-

- Machine-operator, hide washing

**895-18 Leather Cutting Machine Operator**

Operates and monitors machines which cut out leather parts for making a variety of products.

Example of occupational title classified here is:-

- Machine-operator, leather cutting

**895-21 Felthood Forming Machine Operator**

Operates and monitors machines which make hats from fur fibres or woollen belts.

Example of occupational title classified here is:-

- Machine-operator, felthood forming

**MINOR GROUP 896: SHOEMAKING AND RELATED MACHINE OPERATORS.**

Shoemaking and related machine operators operate and monitor machines which produce and repair standard or special footwear, handbags and other accessories, mainly made of leather.

Skill Level: Trade Certificate

**896-11 Footwear Production Machine Operator.**

Operates and monitors machines which mark patterns and cut shoe parts; sew shoe parts together, or edge polish or apply ornaments.

Examples of occupational titles classified here are:-

- Machine-operator, shoe production,
- Machine-operator, sports footwear production.

**896-12 Orthopaedic Footwear Production Machine Operator.**

Operates and monitors machines which make special leather footwear to individual requirements of customers with foot or leg deformities.

Example of occupational title classified here is:-

- Machine-operator, orthopaedic footwear production

**896-13 Special Footwear Machine Operator.**

Operates and monitors machines which are used in making special types of footwear such as mountain boots, riding boots or ballet shoes.

Examples of occupational titles classified here are:-

- Machine-operator, raffia footwear production

**896-14 Handbag Production Machine Operator**

Operates and monitors machines which mark patterns or produce handbags and other accessories.

Example of occupational title classified here is:-

- Machine-operator, handbag production

**896-15 Leather Goods Production Machine Operator.**

Operates and monitors machines which produce luggage belts, and other accessories as well as saddles, collars or harnesses.

Examples of occupational titles classified here are:-

- Machine-operator, leather saddle and harness production

**MINOR GROUP 899: PLANT AND MACHINE OPERATORS AND ASSEMBLERS NOT ELSEWHERE CLASSIFIED**

This minor group covers plant and machine operators and assemblers not elsewhere classified. Included here are those workers who operate and monitor various types of plant, such as incinerators, water-treatment plant, air and gas compressors, pumping stations or heating and cooling systems; or operate and monitor plants and machines which pack, label and if needed, add revenue stamps to products, packages and containers or assemble, according to strictly laid down procedures, products whose component parts are made of a wide range of materials.

Skill Level: Trade Certificate

**899-11 Compressor Operator**

Operates and services compressors which generate and supply compressed air to pneumatic tools, hoists or other equipment.

Example of occupational title classified here is:-

- Operator, compressor

**899-12 Gas Compressor Operator**

Operates equipment such as compressors, scrubbers, evaporators and pumps to transfer natural gas from wellheads to processing stations and from processing stations to distribution systems.

Example of occupational title classified here is:-

- Operator, gas compressor

**899-13 Pumping Machine Operator**

Operates pumping and siphoning machines to transfer liquids, gases, semi-liquids and powdered substances from one location to another.

Example of occupational title classified here is:-

- Operator, pumping machine

**899-14 Water Treatment Plant Operator (Waterworks)**

Operates pumps, valves and gauges to control the flow of water. Regulates flow through stages of treatment such as filtering, the addition of chemicals and aeration. Monitors flow metres and water pressure and level gauges.

Example of occupational title classified here is:-

- Operator, water treatment plant/waterworks

**899-15 Incinerator Plant Operator**

Operates and monitors incinerator machinery and equipment which burn garbage or other waste material. May be responsible for the incineration of dangerous wastes requiring special skills and equipment.

Example of occupational title classified here is:-

- Operator, incinerator plant

**899-16 Refrigeration Systems Operator**

Operates refrigeration and cooling systems by adjusting and controlling refrigeration equipment to maintain required temperatures and conditions, by defrosting, cleaning and lubricating equipment and by keeping records of temperatures and other control readings.

Example of occupational title classified here is:-

- Operator, refrigeration system

**899-17 Heating and Ventilation Equipment Operator**

Operates air-conditioning systems by controlling electric motors, fans, pumps, heaters, compressors, air purification and ventilation equipment, vents and ducts, to provide the required conditions of temperature and air quality.

Examples of occupational titles classified here are:-

- Operator, heating equipment
- Operator, heating and ventilation equipment
- Operator, ventilation equipment

**899-18 Stationary Diesel Engine Operator**

Operates and services various types of stationary engines and related mechanical equipment such as prime movers to drive machinery, compressors, units, pumps, refrigeration and ventilation equipment and similar installations.

Example of occupational title classified here is:-

- Operator, stationary diesel engine

**899-21 Packing Machine Operator**

Operates and monitors machines which wrap and pack various products including liquids for storage or shipment.

Examples of occupational titles classified here are:-

- Machine-operator, bottling
- Machine-operator, capping
- Machine-operator, container filling
- Machine-operator, sealing
- Machine-operator, wrapping

**899-22 Goods Marking Machine Operator**

Operates and monitors machines which wrap by gluing or other methods, label products, packages and various containers or add revenue stamps.

Examples of occupational titles classified here are:-

- Machine-operator, branding
- Machine-operator, labelling

**899-23 Binding Press Operator**

Operates and monitors machines to compress and bind loose materials into bales to facilitate handling.

Example of occupational title classified here is:-

- Operator, binding press

**899-24 Composite Products Assembler**

Assembles according to strictly laid down procedures finished products of electronic equipment.

Example of occupational title classified here is:-

- Assembler, composite products

**899-25 Silicon Chip Production Assembler**

Assembles according to strictly laid down procedures finished products of silicon chips.

Example of occupational title classified here is:-

- Assembler, silicon chip production

**899-26 Cable Splicing Machine Operator**

Operates and monitors machines used for joining, repairing and fitting attachments to wires and lamp cables by splicing.

Example of occupational title classified here is:-

- Machine-operator, cable splicing

**899-27 Cable Installation Machine Operator**

Operates and monitors machines which pull sections of heavy cables at times through underground channels using winches.

Examples of occupational titles classified here are:-

- Machine-operator, cable installation

- Machine-operator, drain installation
- Machine-operator, electrical line installation

**899-28 Insulation Machine Operator**

Operates and monitors power driven machines for blowing and packing insulating materials into cavities between walls, floors and ceilings of buildings.

Example of occupational title classified here is:-

- Machine-operator, insulation

**899-31 Pipe Installation Machine Operator**

Operates and monitor machines used to lay pipes or pipe components or installation.

Example of occupational title classified here is:-

- Machine-operator, pipe installation

**899-32 Merry-go-round Operator**

Operates and monitors roundabout and fair ground equipment.

Example of occupational title classified here is:-

- Operator, merry-go-round

## **MAJOR GROUP 9 ELEMENTARY OCCUPATIONS**

This major group covers occupations which require the knowledge and experience necessary to perform mostly simple and routine tasks, involving the use of simple hand-held tools and in some cases certain physical effort. With few exceptions they may require only limited personal initiative or judgement. The tasks usually include: selling goods in streets and public places, or from door to door; providing various street services; cleaning, washing, pressing; taking care of apartment houses, hotels, offices and other buildings; washing windows and other glass surfaces of buildings; delivering messages or goods; carrying luggage; door keeping and property watching; collecting garbage; sweeping streets and similar places; performing various simple farming, fishing, hunting or trapping tasks; performing simple tasks connected with mining, construction and manufacturing including product-sorting and simple hand-assembling of components; packing by hand; freight handling; pedaling or hand-guiding vehicles to transport passengers and goods, driving animal-drawn vehicles or machinery. Supervision of other workers may be included.

Occupations in this major group are classified into three sub-major groups, namely:-

- 91 Sales and Services Elementary Occupations**
- 92 Agricultural, Fishery and Related Labourers**
- 93 Labourers in Mining, Construction, Manufacturing and Transport**

### **SUB-MAJOR GROUP 91: SALES AND SERVICES ELEMENTARY OCCUPATIONS**

Sales and services elementary occupations mainly consist of tasks connected with street or door-to-door sales or services, or cleaning, property watching and caretaking, delivering goods and messages or carrying luggage.

The tasks usually include: selling goods in streets and public places, or from door to door; providing various street services; cleaning, washing, pressing, sweeping or garbage collecting; door keeping, property watching and building caretaking; washing windows or other glass surfaces; ushering; delivering messages or goods; or carrying luggage. Supervision of other workers may be included.

Occupations in this sub-major group are classified into six minor groups, namely:-

- 911 Street Vendors and Related Workers**
- 912 Shoe Cleaning and Other Street Services Elementary Occupations**
- 913 Cleaners, Launderers and Domestic Workers**
- 914 Building Caretakers**
- 915 Messengers, Porters, Watchmen and Related Workers**
- 916 Other Sales and Service Labourers**

### **MINOR GROUP 911: STREET VENDORS AND RELATED WORKERS**

Street vendors and related workers sell food and other goods in streets and public places, or from door to door, or by telephone.

#### **911-11 Street Food Vendor**

Prepares and sells, or sells previously prepared, hot or cold foods, vegetables, fruit, ice-cream and various drinks, in streets and public places such as stations, cinemas, or

theatres.

Examples of occupations classified here are:-

- Roaster, maize
- Vendor, refreshments/cinema
- Vendor, street/cigarettes
- Vendor, street/food
- Vendor, street/fruit
- Vendor, street/ice cream et.c.

**911-12 Street Non-food products Vendor**

Sells various goods in streets and public places such as stations, cinemas or theatres.

Examples of occupations classified here are:-

- Hawker
- Pedlar
- Seller, street/second hand clothe
- Vendor, street/newspapers and periodicals
- Vendor, street/non-food products

**911-13 Door-to-Door Salesperson**

Solicits business for an establishment by going from door to door. May also make use of the telephone for the same purposes.

Examples of occupations classified here are:-

- Assistant, shopkeeper's/travelling
- Canvasser
- Salesperson, door-to-door

**MINOR GROUP 912: SHOE CLEANING AND OTHER STREET SERVICES  
ELEMENTARY OCCUPATIONS**

Shoe cleaning and other street services elementary occupations consist of providing various on-the-spot street services such as cleaning shoes, washing cars or running errands.

**912-11 Shoe Cleaner**

Cleans and shines shoes on the street. May also sell shoe laces to customers in addition to cleaning shoes.

Examples of occupations classified here are:-

- Shoe-polisher
- Shoe-shiner

**912-99 Street Services Elementary Occupations Workers n.e.c.**

This group includes those who wash car windows by hand, direct motorists to empty spaces for parking and those who run errands or provide other on-the-spot street services.

Examples of occupations classified here are:-

- Errand boy
- Parking boy
- Washer, hand/street (car windows)

## **MINOR GROUP 913: CLEANERS, LAUNDERERS AND DOMESTIC WORKERS**

Cleaners, launderers and domestic workers perform various tasks in offices, hospitals, private households and other establishments, as well as in aircraft, trains, coaches and similar vehicles, in order to keep them clean, or they do hand-laundering and pressing.

### **913-11 Cleaner (except Domestic)**

Performs various cleaning tasks in order to keep clean and tidy, including hotels, offices and other establishments as well as of aircraft, trains and motor vehicles. Washes dishes in hotels and similar establishments.

Examples of occupations classified here are:-

- Chambermaid
- Cleaner, aircraft
- Cleaner, hotel
- Cleaner, office
- Washer, hand/car
- Washer, hand/dishes

### **913-12 Street and Park Sweeper**

Sweeps and cleans streets, parks, airports, stations and other public places.

Examples of occupations classified here are:-

- Sweeper, park
- Sweeper, street

### **913-13 Garbage Collector**

Collects and removes garbage from buildings, yards, streets and other public places and loads garbage into vehicles for disposal.

Examples of occupations classified here are:-

- Collector, garbage
- Collector, refuse
- Handler, refuse

### **913-14 Hand-launderer and Presser**

Launders, presses or dry-cleans linen and other textiles by hand.

Examples of occupations classified here are:-

- Hand-launderer
- Presser, hand/clothing

### **913-14 Domestic Servant**

Attends to employer's personal needs and keeps wardrobe and personal effects in good order. Brushes, cleans, mends, irons and lays out employer's clothing. Assists employer bathing, dressing and making toilets; keeps employer's house tidy; packs and unpacks clothing; and may mix and serve drinks. Carries out house-cleaning duties.

Examples of occupations classified here are:-

- House-boy
- House-girl
- Servant, domestic

- House-help

**913-16 Children's Ayah**

Performs any combination of the following duties, attends children in private homes, observes and monitors play activities, amuses children by reading, playing games with them, prepares meals using formulas, sterilizes feeding equipment used for infants, assists children to dress, taking baths, making outings with them, washes and irons clothes, and keeps children's quarters clean.

Examples of occupational titles classified here are:-

- Ayah, children's
- Maid, children's

**MINOR GROUP 914: BUILDING CARETAKERS**

Building caretakers take care of apartment houses, hotels, offices, churches and other buildings and maintain them in an orderly and clean condition, attending to the operation of an apartment house, office or similar building in clean and orderly condition and operating furnaces or boilers to provide heat and hot water for tenants; taking care of interior and furnishing of churches; performing similar tasks in other establishments.

**914-11 Building Caretaker**

Workers in this group take care of apartment houses, office buildings, churches and other buildings and maintain them in an orderly and clean condition, attending to the operation of an apartment house, office or similar building in clean and orderly condition and operating furnaces or boilers to provide heat and hot water for tenants; taking care of interior and furnishing of churches; performing similar tasks in other establishments.

Examples of occupations classified here are:-

- Caretaker, building
- Janitor

**914-12 Verger**

Carries out various duties in a church such as showing people their seats and carrying a staff before a bishop in a cathedral.

Example of occupational title classified here is:-

- Verger

**MINOR GROUP 915: MESSENGERS, PORTERS, WATCHMEN AND RELATED WORKERS**

Messengers, porters, watchmen and related workers deliver messages or goods, carry luggage, attend parking places and watch private and public properties to prevent illegal entry, theft or fire, perform ushering duties, or operate lifts (elevators)

**915-11 Messenger**

Delivers messages, packages and other items to offices within an establishment or elsewhere; walks or rides vehicles and delivers various items for employer, such as documents, files, packages and messages within an establishment, or to other business concerns elsewhere; carries out other errands as required.

Examples of occupations classified here are:-

- Messenger
- Messenger, office
- Assistant office

**915-12 Porter**

Carries luggage especially at hotels, stations and airports.

Examples of occupations classified here are:-

- Porter
- Porter, airport
- Porter, hotel

**915-13 Watchman**

Guards industrial plants, warehouses or other property against fire, theft and illegal entry. Makes periodic inspection tours about the building and grounds, examining doors, windows, and gates to see that they are properly secured and have not been tampered with, and watches for other irregularities such as broken water pipes and fire hazards; registers at regular stations to record the making of inspection rounds at specified times.

Examples of occupations classified here are:-

- Doorkeeper
- Keeper, gate
- Watchman

**915-14 Lift Operator**

Operates controls of equipment to raise or lower people and supplies in tall office or residential buildings from one floor to another. Tests the operation of equipment before use to ensure safety and carries out safety procedures in emergencies.

Example of occupational title classified here is:-

- Operator, lift

**MINOR GROUP 916: OTHER SALES AND SERVICE LABOURERS**

Other sales and service labourers perform manual tasks in abattoirs; dig graves or perform odd jobs for their employers.

**916-11 Abattoir Attendant**

Performs routine manual tasks in abattoirs and kills livestock and eviscerates carcasses.

Example of occupational title classified here is:-

- Attendant, abattoir

**916-12 Grave Digger**

Uses digging implements to dig graves in a graveyard. May assist in filling or covering graves during burials.

Example of occupational title classified here is:-

- Digger, grave

**916-13 Odd-Jobs Man**

Performs odd jobs for the employer.

Example of occupational title classified here is:-

- Odd-jobs man

## **SUB-MAJOR GROUP 92: AGRICULTURAL, FISHERY AND RELATED LABOURERS**

Agricultural, fishery and related labourers mainly perform simple and routine farming, forestry, fishing, hunting or trapping tasks, requiring the use of simple hand-held tools and very often considerable physical effort.

The tasks usually include; digging, shovelling, loading, unloading, stacking, raking, pitching; spreading manure or fertilizers; watering and weeding; picking fruit, vegetables and various plants; feeding animals; cleaning animal quarters and farm grounds; clearing forest grounds and undergrowth; performing simple tasks connected with aquatic cultivation; gathering seaweed, clams and other mollusca; performing simple tasks connected with hunting and trapping. Supervision of other workers may be included.

Occupations in this sub-major group are classified into three minor groups; namely:-

### **921 Farm-hands and Related Labourers**

#### **922 Forestry Labourers**

#### **923 Fishery, Hunting and Trapping Labourers**

## **MINOR GROUP 921: FARM-HANDS AND RELATED LABOURERS**

Farm-hands and related labourers help with farm work by performing a variety of simple farming tasks.

### **921-11 Farm Labourer**

Performs a variety of simple farming tasks such as digging and shovelling to clear ditches or for other purposes; watering and weeding; picking fruit, vegetables and various plants. Performs routine tasks on livestock stations, cereal, grain, fruit, vegetable, market gardens, orchards or other crop farms.

Examples of occupations classified here are:-

- Farm-hand
- Farm-help
- Labourer, farm

### **921-12 Herdsman**

Looks after cattle in grazing fields to prevent them from straying and destroying crops and other property. Drives herd to watering places and locks them in sheds at the end of the day. Assists cows during delivery of new-born calves and looks after the health and safety of both cow and calf. May perform milking duties.

Example of occupational title classified here is:-

- Herdsman

### **921-13 Groundsman**

Establishes and maintains fine turf, grassed areas, associated plantings and synthetic surfaces used for sport. Performs gardening tasks in the cultivation and maintenance of lawns and plants in private gardens or public areas.

Examples of occupations classified here are:-

- Boy, shamba
- Groundsman

### **MINOR GROUP 922: FORESTRY LABOURERS**

Forestry labourers help with work in natural forests or in forestry plantations by performing a variety of simple forestry tasks.

#### **922-10 Forestry Labourer**

Helps with work in natural forests or in forestry plantations by performing a variety of simple forestry tasks.

Example of occupational title classified here is:-

- Labourer, forestry

### **MINOR GROUP 923: FISHERY, HUNTING AND TRAPPING LABOURERS**

Fishery, hunting and trapping labourers, perform a variety of simple tasks, help with work connected with fish and seafood cultivation, or with hunting and trapping.

#### **923-11 Fishery Labourer**

Performs a variety of simple fishery tasks like helping with work connected with fish and seafood cultivation.

Example of occupational titles classified here are:-

- Labourer, aquacultural
- Labourer, fishery

#### **923-12 Hunting and Trapping Labourer**

Performs a variety of simple tasks connected with hunting and trapping.

Examples of occupations classified here are:-

- Labourer, hunting
- Labourer, trapping

### **SUB-MAJOR GROUP 93: LABOURERS IN MINING, CONSTRUCTION, MANUFACTURING AND TRANSPORT**

Labourers in mining, construction, manufacturing and transport mainly perform simple and routine tasks in connection with mining, construction, manufacturing and transport, requiring the use of simple hand-held tools and very often considerable physical effort. The tasks usually include: digging, shovelling, lifting, moving, carrying, clearing, loading, unloading; cleaning disused workings in mines and quarries; spreading gravel; carrying bricks, and performing similar tasks in the construction of roads, dams, or buildings; working on demolition sites; carrying out simple tasks in manufacturing, including product-sorting and simple hand-assembling of components, where it is not necessary to follow strictly laid-down rules; packing by hand; freight handling; pedalling or hand-guiding vehicles to transport passengers and goods. Supervision of other workers may be included.

Occupations in this sub-major group are classified into four minor groups; namely:-

#### **931 Mining and Quarrying Labourers**

#### **932 Construction and Maintenance Labourers**

#### **933 Manufacturing Labourers**

## **934 Transport Labourers and Freight Handlers**

### **MINOR GROUP 931: MINING AND QUARRYING LABOURERS**

Mining and quarrying labourers perform simple and routine tasks connected with mining and quarrying, requiring the use of simple hand-held tools and often considerable physical effort.

#### **931-11 Mining labourer**

Performs simple and routine tasks in connection with mining

Examples of occupations classified here are:-

- Labourer, mining
- Sand-pit worker

#### **931-12 Quarrying Labourer**

Performs simple and routine tasks in connection with quarrying.

Example of occupational title classified here is:-

- Labourer, quarrying.

### **MINOR GROUP 932: CONSTRUCTION AND MAINTENANCE LABOURERS**

Construction and maintenance labourers perform simple tasks connected with construction and maintenance of structures, requiring the use of simple hand held tools and very often considerable physical effort.

#### **932-11 Roads, Dams and Similar Construction Labourer**

Performs simple and routine tasks in connection with the building and maintenance of roads, dams and similar constructions such as digging and filling holes and trenches, spreading gravel and related materials and performing other tasks related to the building and maintenance of railway tracks and roads; carrying bricks and mortar to bricklayer or helping in other ways in the building of dams and similar construction.

Examples of occupations classified here are:-

- Labourer, construction/roads
- Labourer, maintenance/roads

#### **932-12 Building Construction Labourer**

Performs simple and routine tasks in connection with various aspects of building construction work (including building demolition). Such tasks include clearing various obstructions as instructed and carrying stones, bricks and mortar to the mason or bricklayer on construction site.

Examples of occupations classified here are:-

- Labourer, building construction

### **MINOR GROUP 933: MANUFACTURING LABOURERS**

Manufacturing labourers perform simple and routine tasks connected with manufacturing which require the use of simple hand-held tools and very often considerable physical effort, or they undertake product-sorting and simple hand-assembling of components.

#### **933-11 Assembling Labourer**

Undertakes product-sorting or simple hand-assembling of components. Performs

simple and routine tasks in an assembly line.

Example of occupational title classified here is:-

- Labourer, assembling

**933-12 Hand Packer**

This group includes occupations concerned with assembling containers, pouring and placing materials and products into containers, covering articles or goods with cellophane, paper and other wrapping materials; cleaning, closing, labelling, stencilling and studding articles and containers and operating or tending, filling, packing and wrapping machines.

Example of occupational title classified here is:-

- Packer, hand

**933-13 Labeller**

Glues labels on to containers by hand or hand-held machine.

Examples of occupations classified here are:-

- Labeller, hand
- Labeller, machine

**933-99 Manufacturing Labourers n.e.c**

This group includes those who perform other simple and routine tasks connected with manufacturing for example those who load or remove materials onto or from the conveyer belt during processing and those who cut stone, core, slice, dice and peel fruit before processing.

Example of occupational title classified here is:-

- Labourer, manufacturing

**MINOR GROUP 934: TRANSPORT LABOURERS AND FREIGHT HANDLERS**

Transport labourers and freight handlers propel cycles and similar vehicles; drive animal-drawn vehicles, farm or other machinery, and carry out freight handling by hand.

**934-11 Pedal Cyclist**

Propels by pedalling cycles and similar vehicles to transport passengers or goods.

Example of occupational title classified here is:-

- Cyclist, pedal

**934-12 Hand Cart pusher**

Propels by manually pushing or pulling hand carts to transport goods.

Examples of occupations classified here are:-

- pusher, hand cart
- Pusher, mkokoteni

**934-13 Driver of Animal-drawn Vehicles and Machinery**

Drives animal-drawn vehicles to transport goods, as well as animal-drawn machinery usually in connection with farming.

Example of occupational title classified here is:-

- Driver, animal-drawn vehicle/road.

**934-14 Animal-taxi Rider**

Rides animals such as camels or donkeys to transport passengers and goods.

Examples of occupations classified here are:-

- Rider, camel-taxi
- Rider, donkey-taxi

**934-15 Freight Handler**

Carries out tasks such as packing, carrying, loading and unloading furniture and other household items, or loading and unloading ship and aircraft cargoes and other freight, or carrying and stacking goods in various warehouses.

Examples of occupations classified here are:-

- Handler, freight
- Loader, lorry
- Loader, tanker
- Turn boy
- Dockers

**934-16 Bale-press Operator**

Operates and monitors machines which press and tie with rope or wire, materials such as cotton, wool, hay and clothing into bales.

Example of occupational title classified here is:-

- Operator, bale-press

## **MAJOR GROUP 0 ARMED FORCES**

This is a group of occupations whose main tasks consist of carrying out military operations undertaken as collective defence measures. It also requires skills which enable the process of preparing and training to deter military aggression; surveillance and protection of national territory, airspace and coastal waters. It also involves the art of providing aid to civilian authorities as requested in the event of civil disorder, natural disaster and other. It excludes such groups like police (except military police), customs, border or armed civilian services. Included are regular members of the army, navy, air force and other military services, as well as conscripts enrolled for military training or other service for a specified period. Excluded are persons in civilian employment of government establishments concerned with defence issues; police (other than military police) or other armed civilian services; members of military reserves not currently on active service.

Occupations in this major group are classified into the following groups, namely:-

<b>01</b>	<b>Armed Forces</b>
<b>011</b>	<b>Armed Forces</b>
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<b>Title</b>	<b>Code</b>
Fibre Carder	771-15
Fibre Comber	771-16
Fibre Drawer	771-17
Fibre Grader	771-11
Fibre Picker	771-14
Fibre Preparing Machine Operator	892-16
Field Crop and Vegetable Grower	611-11
Film Paper Production Machine Operator	848-15
Filter Press Operator	843-11
Finance Clerk	413-14
Finance Manager	132-13
Fire Fighter (General)	524-14
Fire Inspector	399-14
Fire Prevention Specialist	399-15
First Aid Officer	321-14
Fish Butcher	751-14

Fish Canning Machine Operator	861-11
Fish Scout	621-12
Fish/Meat Sterilising Machine Operator	861-16
Fisheries Officer	367-11
Fishery Labourer	923-11
Flight Engineer	343-14
Flight Navigator	343-13
Flight Radio Officer	319-15
Floor Layer	712-15
Florist	394-18
Flying Instructor	373-13
Food and Drink Technologist	235-13
Food Processors and Related Workers n.e.c.	758-10
Foodstuffs Dehydrating Machine Operator	865-11
Footwear Production Machine Operator.	896-11
Forest Ranger	641-12
Forest Worker	641-11
Forestry Labourer	922-10
Forestry Scientist	244-13
Forestry Workers n.e.c	641-99
Fork-lift Operator	883-28
Fortune Teller	523-11
Freight Handler	934-15
Fruit and Vegetable Freezing Machine Operator	865-15
Fruit and Vegetable Sterilising Machine Operator	865-16
Fruit Juice Maker	754-11
Fruit Preserver	754-12
Fruit Press Operator	865-18
Fruit, Nut and Related Preservers n.e.c.	754-99
Fruit/Vegetable/Nut Processing Machine Operator	865-21
Fuel Station Pump Attendant (Petroleum)	512-12
Furnace-man (Chemical and Related Processes)	841-14
Furnace-man (Metal Melting)	822-17
Furnaceman (Non-ferrous Metal Converting and Refining)	821-16
<b>Title</b>	<b>Code</b>
Furniture Production Machine Operator	832-13
Game Ranger	651-12
Game Scout	651-13
Game Warden	367-12
Garbage Collector	913-13
Gardener	611-14
Garment Cutter	773-15
Garments Dyeing Machine Operator	894-16
Gas Compressor Operator	899-12
General Office Clerk	417-10
Geographer	273-13
Geologist	211-12
Geophysicist	211-14
Glass Annealing Furnace man	891-12
Glass Blowing Machine Operator	891-16

Glass Cutter	732-16
Glass Drawing Machine Operator	891-18
Glass Engraver and Etcher	732-22
Glass Former	732-14
Glass Lens Moulder	732-15
Glass Making Furnace-man	891-11
Glass Mixing Machine Operator	891-23
Glass Painter	732-23
Glass pressing Machine Operator	891-17
Glass Technologist	236-13
Glass Temperer Furnace-man	891-13
Glass Tube Bender	732-21
Glass-tube Making Machine Operator	891-22
Glazier	712-21
Goods Marking Machine Operator	899-22
Grain Husking/Hulling Machine Operator	863-12
Grain Milling Machine Operator	863-11
Graphic Artist	294-15
Graphic Designer	394-17
Grave Digger	916-12
Grinder Operator (Chemical and Related Process	841-12
Grinding Machine Setter	722-22
Groundsman	921-13
Gunsmith	722-12
Hairdresser	521-11
Halogen Gas Production Machine Operator	849-17
Hand Cart pusher	934-12
Hand Compositor	741-11
Hand Packer	933-12
Handbag Production Machine Operator	896-14
Handicraft Worker in Leather and Related Materials	733-15
Handicraft Worker in Metal	733-11
Handicraft Worker in Stone and Related Materials	733-12
Handicraft Worker in Textile and Related Materials	733-14
Handicraft Worker in Wood and Related Materials	733-13
<b>Title</b>	<b>Code</b>
Handicraft Workers n.e.c.	733-99
Hand-laundrer and Presser	913-14
harmaceutical Products Machine Operator	846-10
Hat Blocking Machine Operator	893-28
Hat Maker	773-13
Head Teacher	133-17
Heating and Ventilation Equipment Operator	899-17
Heating, Ventilation and Refrigeration E	234-14
Heating, ventilation and Refrigeration Technician	313-12
Heavy-truck Driver	882-17
Herbalist	329-12
Herdsmen	921-12
Hide Dehairing Machine Operator	895-12
Hide Washing Machine Operator	895-17

Hides and Skins Flesher and Dehairer	782-12
Hides and Skins Grader	782-11
Hides and Skins Inspector	368-17
High School Teacher	252-11
Highway, Road and Street Construction Engineer	233-13
Historian	274-11
Hoist Operator	883-26
Home Economist	289-14
Horticultural Farmer	611-13
Horticulturist	244-12
Hosiery Knitting Machine Operator	893-25
Hospital Matron	242-11
Hot Roller (Steel)	822-11
Hot-dip Plater	825-12
Hotel/Hospitality Manager	141-17
House Steward	531-11
Housekeeper	531-12
Human Resource/Personnel and Industrial Relations Manager	132-15
Human Resources Specialist	282-15
Hunter	651-11
Hunting and Trapping Labourer	923-12
Hydraulic Engineer	233-17
Hydro-electric Power Station Operator	851-12
Hydrogen Gas Production Machine Operator	849-21
Hydrographic Surveyor	232-14
Hydrologist	211-13
Immigration Officer	361-14
Incinerator Plant Operator	899-15
Industrial Designer	394-15
Industrial Development Officer	369-15
Industrial Diamonds Cutting Machine Operator	813-18
Industrial Machinery & Tools Engineer	234-18
Information Assistant	392-16
Information Technology Manager	132-23
Inland and Coastal Water Fisherman	621-13
Institutional House-Mother	392-14
<b>Title</b>	<b>Code</b>
Instrumentalist (Except Orchestra)	396-12
Instrumentalist (Orchestra)	295-12
Insulation Machine Operator	899-28
Insurance Broker	352-11
Insurance Claims Officer/Assessor	352-14
Insurance Salesman	352-13
Insurance Underwriter	352-12
Interior Decoration Designer	394-13
Internal Combustion Engine(except Ship or Aircraft) Assembler	871-21
Interpreter	275-14
Irrigator	611-16
Islamic Teacher	391-12
Jeweller	731-17

Jewellery Production Machine Operator	824-23
Journalist	293-12
Judge	262-11
Knitter	772-15
Labeller	933-13
Laboratory Technologist	235-14
Labour Officer/Inspector	369-12
Lace Production Machine Operator	893-21
Laminating Plastic Machine Operator	835-22
Land Adjudication Officer/Assistant	368-11
Land Surveyor	232-12
Lathe Operator	824-17
Lathe Setter	722-16
Laundering Machine Operator	894-13
Laundry Pressing Machine Operator	894-14
Lead Production Machine Operator	849-22
Leather and Pelt Dyer	782-18
Leather Cutter	783-18
Leather Cutting Machine Operator	895-18
Leather Goods Maker	783-17
Leather Goods Production Machine Operator	896-15
Leather Preparing Machine Operator	895-14
Leather Products Assembler	876-12
Leather Scourer	782-14
Leather Staining Machine Operator	895-15
Legal Officer	261-13
Lens Grinding-machine Operator	732-17
Lens Polishing-machine Operator	732-18
Levy Inspector	362-14
Librarian/Documentalist	291-13
Library Assistant	392-15
Library Assistant/Clerk	415-11
Licensing Officer	364-11
Lift Operator	915-14
Lifting-Truck Operator	883-29
Linguist	275-13
Linoleum Production Machine Operator	849-15
<b>Title</b>	<b>Code</b>
Linotype Operator	741-12
Lithographic Artist	311-17
Livestock Farmer	612-12
Livestock Officer	368-14
Load Dispatcher (Electric Power)	851-16
Local Authority Askari	524-16
Loom Threader	772-11
Lorry Driver	882-16
Macaroni and Noodle Maker	752-13
Machine Tool Assembler	871-13
Machinery Mechanics and Fitters n.e.c.	723-99
Machine-tool Grinding Machine Operator	824-31

Macro-economist	271-11
Magician	397-14
Magistrate	262-12
Mail Sorting Clerk	415-13
Maintenance Electrician	724-15
Maintenance Engineer	238-13
Malt Cooking Equipment Operator	868-13
Malting (Spirits) Germinating Equipment Operator	868-12
Management Analyst	282-14
Manager in Health Care Services	141-22
Manager in Personal Care, Cleaning and Related Services	141-21
Manager of Business Services	141-25
Manager of Travel Agency	141-24
Managing Director	131-11
Manicurist	521-13
Manipulator (Rolling Mill)	822-16
Manpower Planning Officer/Assistant	366-13
Manufacturer's Agent	354-16
Manufacturing Labourers n.e.c	933-99
Manufacturing Manager	141-13
Margarine Processing Machine Operator	865-14
Marine Engine Assembler	871-22
Marine Engine Fitter-assembler	723-16
Marine Engineer	234-15
Marine Engineering Officer	341-12
Marine Superintendent (Technician)	341-13
Marine Superintendent Officer (Deck)	342-14
Market Master	362-13
Market Research Analyst	289-12
Marketing Officer	365-16
Masseur	521-14
Material recording and Transport Clerks n.e.c.	414-99
Materials Engineer	236-16
Mathematical Statistician	221-14
Mathematician	221-11
Matron (Non-Medical Institution)	531-13
Mattress Maker	781-12
Mattress Production Machine Operator	893-31
<b>Title</b>	<b>Code</b>
Mayor/County Chairman	112-11
Meat and Fish Smoker	751-13
Meat Canning Machine Operator	861-11
Meat Curing Machine Operator	861-15
Meat Inspector/Grader	398-11
Meat Processing Machine Operator	861-14
Meat/fish Freezing Machine Operator	861-17
Mechanical Draughtsman	311-11
Mechanical Engineer (Motors & Engines)	234-12
Mechanical Engineer	234-11
Mechanical Engineering Technician	313-11

Mechanical Products Inspector	399-12
Media Producer	133-21
Medical Assistant	322-11
Medical Doctor	241-11
Medical Laboratory Technician	332-12
Medical Pathologist	243-24
Medical Research Officer	241-12
Medical X-ray and Radiograph Technician	326-15
Member of Parliament/ Chief Whip	111-17
Members of the Armed Forces	011-00
Merry-go-round Operator	899-32
Messenger	915-11
Metal Annealer Machine Operator	823-11
Metal Bending Machine Operator	824-36
Metal Bluing Machine Operator	825-15
Metal Boring Machine Operator	824-22
Metal Buffing and Polishing Machine Operator	825-21
Metal Burnishing Machine Operator	824-28
Metal Cleaning Equipment Operator	825-22
Metal Core Making Machine Operator	824-25
Metal Cutting Machine Operator	824-37
Metal Drilling Machine Operator	824-11
Metal Etching Machine Operator	824-47
Metal Extruder Machine Operator	823-17
Metal Flame- cutting Machine Operator	824-44
Metal Forging Machine Operator	824-26
Metal Former	722-13
Metal Forming Machine Operator	824-34
Metal Hardener Machine Operator	823-12
Metal Honing Machine Operator	824-13
Metal Moulder	721-11
Metal Moulding Machine operator	824-24
Metal Planing Machine Operator	824-21
Metal Pourer	822-18
Metal Press Operator (Except forging)	824-35
Metal Products Assembler	873-11
Metal Sand-blasting Equipment Operator	825-18
Metal Sawing Machine Operator	824-14
Metal Shaping and Lapping Machine Operator	824-16
<b>Title</b>	<b>Code</b>
Metal Spinner	722-25
Metal Spinning Machine Operator	824-33
Metal Spraying Machine Operator	825-14
Metal Tempering Machine Operator	823-14
Metal Welding Machine Operator	824-43
Metallurgical Technician	314-12
Metallurgist	236-14
Metalworking Machine-tool Fitter-assembler	723-18
Metalworking Machine-tool Setter	722-15
Meteorologist	211-15

Meter Reader	413-17
Micro-Bacteriologist	243-17
Micro-economist	271-12
Micro-electronic Equipment Assembler	872-15
Midwife	242-16
Milk Pasteurising Machine Operator	862-13
Milk Processing Machine Operator	862-14
Milling Machine Operator	824-18
Milling Machine Setter	722-17
Miner	711-11
Mineral Crushing Machine Operator	812-14
Mineral Products Machine Operators n.e.c	813-23
Mining Manager	141-12
Mining Engineer	236-11
Mining labourer	931-11
Mining Machinery Assembler	871-15
Mining Technician	314-11
Mining, Blasting, Stone cutting and Related Workers n.e..c	711-99
Minister of Religion	292-11
Missionary and Related Worker	391-14
Mixed-Animal Producer	613-13
Mixed-Crop Farmer	613-12
Mixing Machine Operator (Chemical and Related Processes)	841-13
Mobile Crane Operator	883-24
Money Changer	421-13
Monotype Keyboard Operator	741-13
Motion Picture Developing Machine Operator	848-14
Motor Vehicle Assembly Line Machine Operator	871-26
Motor Vehicle Mechanic	723-11
Motorcycle Mechanic	723-13
Motor-cyclist	882-11
Motorised Farm Equipment Driver	883-11
Music Composer	295-11
Musical Instrument Maker and Tuner	731-16
Net Production Machine Operator	893-23
Non-metallic Mineral Production Machine Operator	813-19
Nuclear Engineer	237-18
Nurse	242-12
Nut Preserver	754-13
Nutrition Technician	329-11
<b>Title</b>	<b>Code</b>
Occupational Analyst	282-13
Occupational Health and Safety Inspector	398-12
Occupational Health Nurse	242-15
Odd-Jobs Man	916-13
Office Machine Mechanic	725-18
Office Machine Operator	412-10
Offset Printing Press Operator	833-13
Oils and Fats Hydrogenation Equipment Operator	865-13
Oils and Fats Refining Machine Operator	865-17

Open Hearth Furnace-man (Steel)	821-12
Operations Research Analyst	221-13
Optical Instrument Maker	731-12
Optometric Technician	324-11
Oracle	523-13
Orchestra Conductor	295-14
Orchestrator	295-13
Organization and Methods Manager	132-16
Orthopaedic Appliances Maker	731-13
Orthopaedic Footwear Production Machine Operator.	896-12
Orthopaedic Technician	326-14
Osteopath	326-12
Other administrators and managers not elsewhere classified	151-11
Other Agricultural and materials-Handling Machinery Operators n.e.c.	883-99
Other Air Traffic Controllers	344-99
Other Artists	294-99
Other Border Inspectors	361-99
Other Broadcasting and Telecommunications Equipment Operators	319-99
Other Engineers Not Elsewhere Classified	237-21
Other Glass and Ceramic Kilns and Related Plant Operators	891-99
Other Government Administrators	121-35
Other Historians and Political Scientists	274-99
Other Information Professionals	291-99
Other Jurists	262-99
Other Lawyer/Legal Practitioner	261-99
Other Machine-tool Operators(related to grinding, polishing and sharpening)	824-39
Other Mechanical Engineering Technicians	313-99
Other Metal Smelting, Converting And Refining Furnace Operators	821-99
Other Mining Plant Operator	812-99
Other Numerical Clerks	413-99
Other Nurses	242-99
Other Personnel and Occupational Professionals	282-99
Other Religious Workers	391-15
Other School/Institutional Principal	131-14
Other Social Workers	279-99
Other Sociologists and Related Professionals	273-99
Other Well Drillers and Borers	811-99
Oxygen Furnace-man (Steel Converting)	821-13
Packing Machine Operator	899-21
Painter	712-22
Panel Beater	721-21
<b>Title</b>	<b>Code</b>
Paper board Products Machine Operator	834-17
Paper Box Production Machine Operator	834-11
Paper Embossing Machine Operator	834-16
Paper Making Machine Operator (Wet End)	831-21
Paper Pulp Preparation Plant Operator	831-24
Paraffin Plant Operator	845-16
Passenger Aircraft Pilot	343-11
Passenger Train Guard	542-11

Pastry-cook	752-12
Pattern Maker	773-16
Paymaster General/Financial Secretary	121-18
Pedal Cyclist	934-11
Pelletising Machine Operator	813-22
Pelt Finishing Machine Operator	895-11
Pelt Fleshing Machine Operator	895-13
Pelt Grader	782-15
Pelt Stretcher	782-17
Pelt Trimmer and Plucker	782-16
Pensions Officer	363-13
Permanent Secretary	121-14
Personnel Assistant	365-11
Personnel Officer	282-11
Pharmaceutical Assistant	328-10
Pharmacist	241-16
Pharmacologist	243-18
Philologist	275-11
Photo Type-setting Machine Operator	741-15
Photo Typesetting Machine Operator	833-17
Photogrammetrist	232-13
Photographer	318-11
Photographic Dark Room Operators n.e.c	848-16
Photographic Developing Machine Operator	848-11
Photographic Plate Production Machine Operator	848-12
Photographic Worker	744-10
Photography Enlarging Machine Operator	848-12
Physical trainer/instructor	393-13
Physicist	211-11
Physics Laboratory Technician	331-12
Physiologist	243-23
Physiotherapist	326-11
Pile Driver Operator	883-17
Pipe Installation Machine Operator	899-31
Planing Machine Setter	722-21
Planning Assistant	366-12
Plant Nursery Worker	611-15
Plastic Compression-moulding Machine Operator	835-23
Plastic Extruding Machine Operator	835-21
Plastic Production Machine Operator	835-25
Plastic Products Assembler	874-11
Plastic Products Fabrication Machine Operator	835-24
<b>Title</b>	<b>Code</b>
Plate-glass Roller Operator	891-21
Platen Letterpress Operator	833-12
Plumber	712-17
Plywood Core-laying Machine Operator.	831-15
Plywood Press Operator	831-16
Podiatrist	326-13
Police Inspector	361-11

Police officer	524-11
Political Scientist	274-12
Pollution Safety and Health Inspector	398-15
Porter	915-12
Postmaster	133-13
Potter	732-11
Pottery and Porcelain Kilns-man	891-14
Poultry Farmer	612-11
Powder Milk Production Machine Operator	862-12
Power Distribution and Transmission Engineer	237-17
Power Generating and Control Engineer	237-16
Power Plant Operator (Steam)	851-11
Power Reactor Operator	851-13
Power Station Operator	851-17
Power Switchboard Operator	851-15
Precipitator (Mineral)	812-15
Precision Metal Grinding Machine Operator	824-12
Precision Sawyer	762-13
Precision Workers in Metal and Related Materials n.e.c	731-99
Pre-primary Education Teacher	372-10
President	111-11
Press/Information Officer	293-14
Price Control Inspector	364-12
Primary Education Teacher	371-10
Principal Immigration Officer	121-25
Printing Engraver and Etcher	743-10
Printing Machinery Assembler	871-14
Printing Maker-up	741-14
Prison Warder	524-12
Probation Officer	363-12
Production and Operations Manager	132-25
Production Clerk	414-12
Production Engineer	238-11
Proof-reading Clerk	416-12
Protective Service Workers n.e.c	524-99
Provincial Commissioner	121-23
Psychiatric Social Worker	392-12
Psychologist	272-10
Public Address Equipment Operator	319-18
Public Health Nurse	242-14
Public Health Technician/Inspector	323-11
Public Prosecutor	261-11
SPublic Relations Manager and Advertising Manager	132-21
<b>Title</b>	<b>Code</b>
Public Relations Officer	289-11
Public Service Commission Secretary	121-15
Pumping Machine Operator	899-13
Pumpman (Petroleum Refining)	845-12
Purchasing Agent	355-11
Pyrethrum Extract Machine Operator	849-25

Quantity Surveyor	231-12
Quarantine Officer	368-15
Quarrying Labourer	931-12
Quarryman	711-12
Radio and Television Announcer	293-15
Radio and Television Announcer/Commentator	395-11
Radio Communications Operator	319-21
Radio-telephone Communication Operator	319-12
Railway Braker	881-12
Railway Construction Engineer	233-14
Railway Engine Driver	881-11
Railway Shunter	881-14
Railway Signaller	881-13
Railway Station Master	133-11
Railway Steam Engine Fireman	852-13
Real Estate Salesman	353-10
Receptionist	422-12
Recreational/Cultural/Sporting Establishment Manager	141-23
Refrigeration and Air-conditioning Fitter	725-16
Refrigeration Systems Operator	899-16
Registry Clerk	415-12
Research Officer (Biology	243-16
Research, Planning and Development Manager	132-24
Reservations Officer/ Travel Consultant	354-17
Retail Trade Manager	141-16
Revenue Officer	362-11
Ribbon Lapping Machine Operator	892-22
Rice Milling Machine Operator	863-13
Rigger	721-24
Riveting Machine Operator	824-46
Road Grader and Scraper Operator	883-18
Road-roller Operator	883-21
Roads, Dams and Similar Construction Labourer	932-11
Roasting Machine Operator (Chemical and Related Process	842-12
Roller (Non-ferrous Metal)	822-14
Roofer	712-18
Rope and Cable Splicer	721-25
Rotary Driller (Oil and Gas Well)	811-12
Rotary Drum Filterer Operator	843-12
Rotary Printing Press Operator	833-18
Rotogravure Printing Press Operator.	833-15
Rubber and Plastic Products Makers n.e.c – Re-entitle	835-99
Rubber Calender Operator	835-13
Rubber Extruding Machine Operator	835-15
<b>Title</b>	<b>Code</b>
Rubber Goods Assembler	874-12
Rubber Milling Machine Operator	835-11
Rubber Moulding Machine Operator	835-14
Rubber Stamp Making Machine Operator	835-17
Saddle and Harness Maker	783-21

Sales and Marketing Manager	132-17
Sales Supervisor	354-13
Sanitary Engineer	233-16
Sausage Maker	751-12
Saw Doctor	722-24
Saw Mill Machine Operator	831-13
Sawmill Sawyer (General)	831-11
School Inspector	369-17
Screening Machine Operator	812-16
Sculptor	294-11
Seaman	884-12
Seamless Pipe and Tube Drawer Operator	823-16
Seamless Pipe and Tube Roller	822-15
Secretary to the Cabinet	111-21
Secretary	411-11
Securities Salesman	351-10
Security Officer	524-15
Senior Official of Employers' Organization	122-12
Senior Official of Humanitarian and Other Special Interest Organization	122-18
Senior Official of Jua Kali Employers Association	122-13
Senior Official of Political Party Organization	122-11
Senior Official of Religious Organization	122-16
Senior Official of Social and Welfare Society	122-17
Senior Official of Sports Club/ Association	122-15
Senior Official of Workers'/ Trade Union /Organization	122-14
Service Aircraft Pilot .....	343-12
sSewage Superintendent/Technician	323-12
Sewing Machine Operator	893-26
Sheet-metal Furniture Assembler	873-12
Sheet-metal Maker	721-15
Sheet-metal Worker	721-14
Sheradizer	825-16
Ship Chief Engineer .....	341-11
Ship Construction Engineer	234-16
Ship Navigating Officer	342-12
Ship pilot	342-13
Ship Radio Officer	319-14
Ship Steward	541-11
Ship's Deck Ratings, Barge Crew and Boatmen n.e.c.	884-99
Ship's Fireman	852-12
Ship's Master (Captain)	342-11
Shoe Cleaner	912-11
Shoe Finisher	783-16
Shoe Pattern Maker	783-13
Shoe Repairer	783-12
<b>Title</b>	<b>Code</b>
Shoe-maker	783-11
Shop Assistant	512-11
Sign Writer	394-16
Silicon Chip Production Assembler	899-25

Silk Degumming Machine Operator	894-17
Silk-screen, Block and Textile Printer	746-10
Singer (Vocalist)	396-13
Sisal Fibre Production Machine Operator	892-12
Sleeping Car Attendant (Train)	541-13
Smith	722-11
Snuff Maker	757-12
Social Planner	279-11
Social Welfare Officer	363-11
Social Welfare Worker (General)	392-11
Sociologist	273-11
Soft Drinks & Carbonated Waters Making Machine Operator	868-22
Soil Mechanics Engine	233-18
Soil Scientist	244-14
Soil Technician	312-15
Solar Equipment Fitter and Installer	727-10
Sole Fitter	783-15
Solicitor General	111-23
Sound Recording Equipment Operator	318-15
Speaker of the National Assembly	111-15
Special Education Teacher	253-15
Special Footwear Machine Operator.	896-13
Specialised Farmers n.e.c	612-99
Spice Milling Machine Operator	863-14
Spirits Blending Machine Operator	868-16
Spirits Fermentation Equipment Operator	868-15
Spirits Malting Kiln Operator	868-14
Spirits Still Operator	868-17
Sports Centre Manager	133-18
Sports Coach	393-12
Sportsperson	393-11
Stall Assistant	512-13
Stationary Crane Operator	883-25
Stationary Diesel Engine Operator	899-18
Statistical Clerk	413-13
Statistical Officer/Assistant	366-11
Statistician	222-11
Steam Engine Assembler	871-25
Stenographer	411-12
Stereotyper	742-11
Stereotypers and Electrotypers n.e.c	742-99
Still-man (Petroleum Refining)	845-13
Stock Clerk	414-11
Stone Engraving Machine Operator	813-17
Stone Finishing Machine Operator	813-11
Stone working Lathe Operator	813-12
<b>Title</b>	<b>Code</b>
Stone, Clay, Cement and Other Mineral Products Machine Operators n.e.c	813-99
Stonemason	712-12
Storeman Woman	365-15

Street and Park Sweeper	913-12
Street Food Vendor	911-11
Street Non-food products Vendor	911-12
Street Services Elementary Occupations Workers n.e.c.	912-99
Structural Engin	233-12
Structural-metal Worker	721-22
Subsistence Agricultural and Fishery Worker	631-10
Sugar Crystallization Process Operator	866-14
Sugar Production Machine Operator	866-11
Sugar Refining Carbonation Equipment Operator	866-13
Sugar-cane Grinding Machine Operator	866-12
Supercalender Operator	831-22
Supplies and Distribution Manager	132-22
Supplies Officer	365-17
Surgical Instrument Maker	731-15
Survey Technician	312-14
Surveyor	232-11
Synthetic Fibre Maker Machine Operator	849-13
Systems Analyst	223-11
Tailor	773-11
Tailors, Dressmakers and Related Workers n.e.c.	773-99
Tanner	782-13
Tanning Machine Operator	895-16
Tar-Spreading Machine Operator	883-23
Tax Assessor	281-14
Tax Officer	362-12
Taxi Driver	882-12
Tea Leaf Processing Machine Operator	867-11
Teacher of the Blind	253-11
Teacher of the Deaf	253-12
Teacher of the Mentally Handicapped	253-13
Teacher of the Physically Handicapped	253-14
Teachers Service Commission Secretary	121-16
Teaching Professionals Not Elsewhere Classified	259-99
Technical College Instructor	252-12
Technical Illustrator	311-16
Technical Salesman	354-15
Technical/Job Instructor	259-11
Telecommunications Engineer	237-13
Telecommunications Engineering Technician	316-12
Telegrapher/Signaller	319-13
Telephone and Telegraph Linesman	726-13
Telephone and Telegraphic Equipment Installer	725-22
Telephone and Telegraphic Equipment Mechanic	725-23
Telephone Switchboard Operator	422-13
Television Camera Operator	318-13
Teller	421-12
<b>Title</b>	<b>Code</b>
Textile Bleaching Machine Operator	894-11
Textile Calender Operator	894-15

Textile Card Grinder	722-27
Textile Fibre Combing Machine Operator	892-23
Textile Fibres Blending Machine Operator	892-24
Textile Fibres Drawing Frame Machine Operator	892-17
Textile Fibres Washing Machine Operator	892-25
Textile Fulling-mill Operator	894-18
Textile Machinery Assembler	871-16
Textile Printing Machine Operator	833-22
Textile Products Assembler	876-11
Textile Shrinking Machine Operator	894-21
Textile Weaving Drawing-in Machine Operator	893-12
Textile/Leather Technologist	238-12
Theatre Producer	133-22
Thread and Yarn Doubling Machine Operator	892-21
Thread and Yarn Reeling Machine Operator	892-18
Thread and Yarn Spinning Machine Operator	892-13
Thread and Yarn Twisting Machine Operator	892-15
Ticket Seller	421-14
Timber Carrier Driver	883-12
Timber Cruiser	641-13
Tinsmith	721-16
Tobacco Blender	757-13
Tobacco Blending Machine Operator	869-14
Tobacco Grader	757-11
Tobacco Leaf Cutting Machine Operator	869-12
Tobacco Leaf Stripping Machine Operator	869-13
Tobacco Prepares and Tobacco Products Makers n.e.c.	757-99
Tobacco Processing Machine Operator	869-11
Tobacco Processing Vacuum - Conditioner Operator	869-15
Tool and Die Maker	722-14
Tool Grinding Machine Operator	824-32
Tool Production Machine Operator	824-27
Tour Guide	543-10
Tourist Officer	367-13
Town Planner	231-13
Town/ County Clerk	121-28
Town/ County Treasurer	121-31
Toy Production Machine Operator	824-48
Trade Broker	354-18
Traditional Liquor Brewer	755-11
Traffic Planner	231-14
Training Officer	365-14
Translator	275-12
Transport Clerk	414-13
Transport Conductor (except bus)	542-13
Transport Operations Manager (Roads)	133-12
Transport/ Storage/Communications Business Manager	141-18
Travel Agency Clerk/Information Clerk	422-11
<b>Title</b>	<b>Code</b>
Tree and Shrub Crop Grower	611-12

Tree Feller	641-14
Trench Digging Machine Operator	883-14
Turbine (except Aircraft and Marine) Assembler	871-23
Turbine Fitter-assembler	723-17
Turbine Operator (Power Station)	851-14
Type Casting Machine Operator	742-13
Type Casting Machine Operator	833-16
Typist	411-13
Tyre Rebuilding Machine Operator	835-16
Tyre Vulcanising Machine Operator	835-12
Under Secretary/Assistant Secretary	121-27
Undertaker	522-11
Underwater Worker	721-26
University and College Lecturer	251-10
University College Principal	131-12
University Registrar	133-15
University Vice Chancellor	131-13
Upholsterer	781-11
Vehicle Electrician	724-16
Veneer Cutter	831-14
Verger	914-12
Veterinarian	241-14
Veterinary Assistant	327-10
Veterinary Pathologist	243-25
Veterinary Research Officer	241-15
Vice President	111-12
Vinegar Making Machine Operator	868-21
Vocal Group Conductor	295-15
Vocational Guidance Counsellor	282-12
Wages Clerk	413-12
Waiter/Waitress	533-11
Wall Paper Printing Press Operator	833-21
Washing Chemicals and Related Materials Production Machine Operator	849-23
Watch and Clock Repairer	731-11
Watchman	915-13
Water Treatment Plant Operator (Waterworks)	899-14
Wattle Extract Machine Operator	849-26
Weavers, Knitters and Related Worker's n.e.c	772-99
Weights and Measures Inspector	364-13
Welder	721-13
Wholesale Trade Manager	141-15
Winch Operator	883-27
Wine and Liquor Taster	756-12
Wine Making Plant Operator	868-18
Wire Drawing Machine Operator	823-15
Wire-coating Machine Operator	825-13
Wood Chipping Machine Operator	831-17
Wood Curving Machine Operator	832-12
Wood Grinder Operator	831-18
<b>Title</b>	<b>Code</b>

Wood Painting Machine Operator	832-15
Wood Products Assembler	875-11
Wood Products Machine Operators n.e.c	832-99
Wood Seasoning Worker	761-11
Wood Treating Worker	761-12
Wood Turner	762-14
Wood Working Machinery Assembler	871-17
Woodcarver (except Handicraft)	761-18
Wooden Model Maker	761-16
Wooden Pattern Maker	761-15
Wood-lathe Setter -operator	762-15
Wood-planing-machine Setter-operator	762-18
Wood-routing-machine Setter-operator	762-17
Wood-shaping-machine Setter-operator	762-16
Woodworking Lathe Operator	832-11
Woodworking Machine Operator	832-14
Woodworking-machine Setter	762-11
Woodworking-machine Setter-operator	762-12
Wool Scourer	771-12
Zoo Keeper	651-14
Zoologist	243-13