

Standard Occupational Classification 2020

Volume 1 Structure and
descriptions of unit groups

MAJOR GROUP 2

PROFESSIONAL OCCUPATIONS

This major group covers occupations whose main tasks require a high level of knowledge and experience in the natural sciences, engineering, life sciences, social sciences, humanities and related fields. The main tasks consist of the practical application of an extensive body of theoretical knowledge, increasing the stock of knowledge by means of research and communicating such knowledge by teaching methods and other means.

Most occupations in this major group will require a degree or equivalent qualification, with some occupations requiring postgraduate qualifications and/or a formal period of experience-related training.

Occupations in this major group are classified into the following sub-major and minor groups:

21 SCIENCE, RESEARCH, ENGINEERING AND TECHNOLOGY PROFESSIONALS

- 211 NATURAL AND SOCIAL SCIENCE PROFESSIONALS**
- 212 ENGINEERING PROFESSIONALS**
- 213 INFORMATION TECHNOLOGY PROFESSIONALS**
- 214 WEB AND MULTIMEDIA DESIGN PROFESSIONALS**
- 215 CONSERVATION AND ENVIRONMENT PROFESSIONALS**
- 216 RESEARCH AND DEVELOPMENT (R&D) AND OTHER RESEARCH PROFESSIONALS**

22 HEALTH PROFESSIONALS

- 221 MEDICAL PRACTITIONERS**
- 222 THERAPY PROFESSIONALS**
- 223 NURSING PROFESSIONALS**
- 224 VETERINARIANS**
- 225 OTHER HEALTH PROFESSIONALS**

23 TEACHING AND OTHER EDUCATIONAL PROFESSIONALS

- 231 TEACHING PROFESSIONALS**
- 232 OTHER EDUCATIONAL PROFESSIONALS**

24 BUSINESS, MEDIA AND PUBLIC SERVICE PROFESSIONALS

- 241 LEGAL PROFESSIONALS**
- 242 FINANCE PROFESSIONALS**
- 243 BUSINESS, RESEARCH AND ADMINISTRATIVE PROFESSIONALS**
- 244 BUSINESS AND FINANCIAL PROJECT MANAGEMENT PROFESSIONALS**
- 245 ARCHITECTS, CHARTERED ARCHITECTURAL TECHNOLOGISTS, PLANNING OFFICERS, SURVEYORS AND CONSTRUCTION PROFESSIONALS**
- 246 WELFARE PROFESSIONALS**
- 247 LIBRARIANS AND RELATED PROFESSIONALS**
- 248 QUALITY AND REGULATORY PROFESSIONALS**
- 249 MEDIA PROFESSIONALS**

MINOR GROUP 245

ARCHITECTS, CHARTERED ARCHITECTURAL TECHNOLOGISTS, PLANNING OFFICERS, SURVEYORS AND CONSTRUCTION PROFESSIONALS

Architects, Chartered architectural technologists, town planners and surveyors conduct surveys to determine the exact position of natural and constructed features, design, provide technical solutions and plan the layout of buildings for commercial, residential, industrial and other uses, prepare bills of quantities for construction projects, manage major construction projects and provide architectural design services

Occupations in this minor group are classified into the following unit groups:

2451 ARCHITECTS

**2452 CHARTERED ARCHITECTURAL TECHNOLOGISTS, PLANNING OFFICERS AND
CONSULTANTS**

2453 QUANTITY SURVEYORS

2454 CHARTERED SURVEYORS

2455 CONSTRUCTION PROJECT MANAGERS AND RELATED PROFESSIONALS

2451 ARCHITECTS

Architects plan and design the construction and development of buildings and land areas with regard to functional and aesthetic requirements.

TYPICAL ENTRY ROUTES AND ASSOCIATED QUALIFICATIONS

Entrants require a professional qualification in architecture that will encompass an accredited degree and postgraduate qualification, and at least two years practical experience.

TASKS

- liaises with client and other professionals to establish building type, style, cost limitations and

landscaping requirements

- studies condition and characteristics of site, taking into account drainage, topsoil, trees, rock formations, etc.
- analyses site survey and advises client on development and construction details and ensures that proposed design blends in with the surrounding area
- prepares detailed scale drawings and specifications for design and construction and submits these for planning approval
- monitors construction work in progress to ensure compliance with specifications

RELATED JOB TITLES

Architect

Chartered architect

Landscape architect

2452 CHARTERED ARCHITECTURAL TECHNOLOGISTS, PLANNING OFFICERS AND CONSULTANTS

Job holders in this unit group direct or undertake the planning of the layout and the co-ordination of plans for the development of urban and rural areas, provide architectural design services, and negotiate and manage the development from conception to completion of construction projects and lead on a variety of technical functions and solutions in the design of buildings and the layout of urban and rural areas.

TYPICAL ENTRY ROUTES AND ASSOCIATED QUALIFICATIONS

Entrants possess a variety of qualifications including GCSEs/S grades, a BTEC/SQA award, an Honours or Masters degree. Membership of professional institutions may be required for some posts. To gain professional status an accredited Honours degree or postgraduate qualification is usually required, as well as continuing professional development. Chartered Architectural Technologists must join the Chartered Institute of Architectural Technologists and satisfy its' education, practice and professional standards to qualify via an accredited honours degree or equivalent, monitored and assessed practical experience and pass a professional interview. Town planners are also required to complete at least two years of work experience.

TASKS

- analyses information to establish the nature, extent, growth rate and likely development requirements of the area
- examines and evaluates development proposals, consults statutory bodies and other interested parties to ensure that local interests are catered for and recommends acceptance, modification or rejection drafts and presents graphic and narrative plans affecting the use of public and private land, housing and transport facilities
- develops construction project briefs and design programmes and advises clients on methods project procurement, environmental, regulatory, legal and contractual issues and assesses environmental impact
- monitors compliance with design, statutory, and professional requirements, administers contracts and certification, carries out design stage risk assessments and manages health and safety
- evaluates and advises on refurbishment, recycling and deconstruction of buildings
- prepares designs, building plans and drawings for use by contracts and investigates proposed design with regard to practicality, cost and use
- surveys land uses and prepares report for planning authority and issues development permits as authorised
- liaises with engineers and building contractors regarding technical construction problems and attends site meetings, as the lead consultant or as part of the team.
- provides expert advice on issues related to planning and development, including practical, regulatory, legal and statutory matters
- Chartered architectural technologists specialise in design, underpinned by building science, engineering and technology applied to architecture within projects.

RELATED JOB TITLES

Architectural consultant
Chartered architectural technologist
Construction planner
Planning officer (building construction)
Town planner

2453 QUANTITY SURVEYORS

Quantity surveyors advise on financial and contractual matters relating to, and prepare bills of quantities for, construction projects and provide other support functions concerning the financing and materials required for building projects.

TYPICAL ENTRY ROUTES AND ASSOCIATED QUALIFICATIONS

Entry is through professional training and membership of an appropriate professional organisation. Entry to professional examinations will require a degree or equivalent qualification. Apprenticeships are also available. Candidates usually undertake a period of probationary training and professional assessment.

TASKS

- liaises with client on project costs, formulates detailed cost plan and advises contractors and engineers to ensure that they remain within cost limit
- examines plans and specifications and prepares details of the material and labour required for the project
- prepares bills of quantities for use by contractors when tendering for work
- examines tenders received, advises client on the most acceptable and assists with preparation of a contract document
- measures and values work in progress and examines any deviations from original contract
- measures and values completed contract for authorisation of payment

RELATED JOB TITLES

Quantity surveyor
Survey technician
Surveyor (quantity surveying)

2454 CHARTERED SURVEYORS

Chartered surveyors conduct surveys related to the measurement, management, valuation and development of land, natural resources, buildings, other types of property, and infrastructure such as harbours, roads and railway lines.

TYPICAL ENTRY ROUTES AND ASSOCIATED QUALIFICATIONS

Entrants usually possess an accredited degree, equivalent qualification and/or postgraduate qualification. Entrants must also have successfully completed a probationary training period and professional assessment. Entry requirements to professional bodies vary.

TASKS

- surveys, measures and describes land surfaces to establish property boundaries and to aid with construction or cartographic work
- surveys mines, prepares drawings of surfaces, hazards and other features to control the extent and direction of mining
- surveys buildings to determine necessary alterations and repairs
- measures shore lines, elevations and underwater contours, establishes high and low water marks, plots shore features and defines navigable channels

RELATED JOB TITLES

Building surveyor
Chartered surveyor
Hydrographic surveyor
Land surveyor
Topographer

2455 CONSTRUCTION PROJECT MANAGERS AND RELATED PROFESSIONALS

Job holders in this unit group manage and oversee major construction and civil engineering projects and major building contracts for quality of work, safety, timeliness and completion within budget, forecast travel patterns and develop strategies for managing the impact of traffic-related demand.

TYPICAL ENTRY ROUTES AND ASSOCIATED QUALIFICATIONS

Entrants normally possess a degree in a relevant subject or equivalent qualification and/or substantial work experience at an appropriate level. Further Continuing Professional Development is available in some areas.

TASKS

- draws up budgets and timescales for new construction projects based on clients' requirements
- briefs project team, contractors and suppliers
- assembles information for invoicing at the end of projects
- plans work schedules for construction projects based on prior discussion with architects, Chartered architectural technologists, surveyors etc.
- hires and may supervise site staff, establishes temporary site offices, takes delivery of materials
- regularly inspects and monitors progress and quality of work, ensures legal requirements are met
- identifies defects in work and proposes corrections
- records, monitors and reports progress
- forecasts the impact on traffic and transport of new developments (e.g. shopping centre)
- assesses schemes to manage traffic such as congestion charging and parking controls
- examines accident 'blackspots' to improve road safety
- writes reports for funding bids and planning authorities and acts as expert witness

RELATED JOB TITLES

Contract manager (building construction)
Project manager (building construction)
Transport modeller
Transport planner