

Your presenter
today

Prof Gerrit Crafford

School of the Built
Environment and Civil
Engineering



School of the Built Environment and Civil Engineering Departments

- Department of Building and Human Settlement Development
- Department of Construction Management
- Department of Quantity Surveying
- Department of Civil Engineering



Building and Human Settlement Development Qualifications

- The department offers the following qualifications:
 - **Diploma: Building**
 - (Three years of full-time study)
 - **Advanced Diploma: Construction Management**
 - (One year of full-time study)
 - **Advanced Diploma: Quantity Surveying**
 - (One year of full-time study)
 - **Bachelor of Human Settlements Development**
 - (Four years of full-time study)



Construction Management Qualifications

- The department offers the following qualifications:
 - Bachelor of Science Construction Management
 - (Three years of full-time study)
 - Bachelor of Science (Honours) Construction Management
 - (One year of full-time study)
 - Bachelor of Science (Honours) Construction Health and Safety Management
 - (One year of full-time study)
 - Master of Science Construction Management (Research)
 - Master of Science (Built Environment) (Coursework)
 - Project Management
 - Construction Management
 - Construction Health and Safety Management
 - PhD Construction Management (Research)



Quantity Surveying Qualifications

- The department offers the following qualifications:
 - Bachelor of Science Construction Economics
 - (Three years of full-time study)
 - Bachelor of Science Honours in Quantity Surveying
 - (One year of full-time study)
 - Master of Science Construction Economics (Research)
 - Master of Science in the Built Environment (Coursework)
 - Facilities Management
 - Property Economics and Valuation
 - PhD Construction Economics (Research)



Civil Engineering Qualifications

- The department offers the following qualifications:
 - Bachelor of Engineering Technology in Civil Engineering
 - (Three years of full-time study)
 - Bachelor of Engineering Technology Honours in Civil Engineering
 - (One year of full-time study)
 - Master of Engineering (Civil) Research (Part-time/full-time)



NELSON ● MANDELA
UNIVERSITY

Diploma: Building
(Three years of full-time study)

Purpose

- The Building and Construction Industry is a dynamic industry with many opportunities for self-motivated and dedicated hard-working people. The industry is becoming technically more sophisticated and computerized which has resulted in a growing demand for suitably trained professionals. The environment demands that the professional managers have specialised skills regarding the latest construction methods and techniques being applied throughout the world.



Admission requirements



First Year Outline

- The following is an outline of the subjects for the first year:
 - Applied Building Science 1
 - Communications 1
 - Computer Applications 1
 - Construction Management 1
 - Construction Technology 1
 - Quantity Surveying 1
 - Site Surveying 1

Career Opportunities

- This is a broad based qualification intended to prepare learners for supervisory and middle management level employment in the building industry and for technical and support level in the quantity surveying profession. Persons achieving this qualification will be competent to support supervisors, managers, building surveyors and quantity surveyors.

Stamp of Approval

- The Qualification is accredited by:





**Bachelor of Human Settlements Development
(Four years of full-time study)**

Purpose

- The purpose of the qualification is to provide learners with specialist knowledge, skills, competencies and attitudes necessary to accelerate Human Settlement Development in South Africa and create, upgrade and maintain sustainable human settlements. This will prepare them to fulfil the primary responsibilities of managing all the processes involved in Human Settlement Development and Management and co-ordinating the stakeholders in the Human Settlement Sector.



Admission requirements



First Year Outline

- The following is an outline of the subjects for the first year:
 - Human Settlement Management
 - Public Administration
 - Economics
 - Computer Literacy
 - Accounting
 - Sociology
 - Political Studies
 - Law

Career Opportunities

- Upon completion of studies graduates are likely to secure employment within:
 - The national and provincial government departments
 - Municipalities
 - Public entities
 - Private sector companies involved in human settlements development
 - Non-governmental organisations including establishing own human settlements business enterprises



Bachelor of Science Construction Management (Three years of full-time study)

Purpose

- The purpose of the qualification is to develop an appreciation and understanding of the management of the business of construction and projects (the physical process) within the built environment. This includes the co-ordination, administration and management of resources and an understanding of management, economics, and science and technology as it pertains to the built environment.



Admission requirements



First Year Outline

- The following is an outline of the subjects for the first year:
 - Geometric Drawing
 - Introduction to Micro-economics (Special)
 - Introduction to Macro-economics (Special)
 - Mechanics and Thermodynamics
 - Commercial Law
 - Building Science (Structures)
 - Building Science (Environment and Services)
 - Building Science (Materials and Methods)
 - Basic Surveying
 - Production Analysis Accounting 1 (Special)

Characteristics of a Construction Manager

- The following personal characteristics and interests are important:
 - Initiative and individuality
 - Enjoy challenges and variety
 - Enjoy indoor and outdoor work
 - Be a group leader
 - Enjoy working with people
 - Can work in a team
 - Honesty and integrity

Stamp of Approval

- The Qualification is accredited by:





Bachelor of Science Construction Economics
(Three years of full-time study)

Purpose

- Quantity Surveyors work closely with architects, consulting engineers, project managers, planners and contractors on construction projects as the financial consultant. Their training and experience qualify them to advise on cost and contractual documents for different types of projects.



Admission requirements



First Year Outline

- The following is an outline of the subjects for the first year:
 - Quantities
 - Quantity Surveying
 - Introduction to Micro and Macro-economic
 - Commercial Law
 - Building Science (Environment & Services)
 - Building Science (Materials & Methods)
 - Building Drawings
 - Computing Fundamentals

Career Opportunities

- On completion of the degree, employment opportunities exist mostly with:
 - Quantity surveying firms
 - Public sector
 - Local authorities
 - Construction companies

Stamp of Approval

- The Qualification is accredited by:





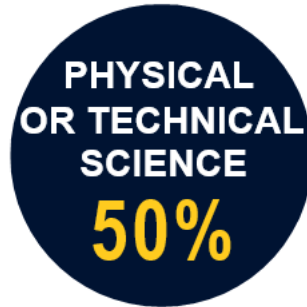
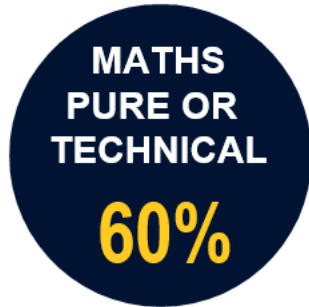
Bachelor of Engineering Technology in Civil
Engineering
(Three years of full-time study)

Purpose

- Civil Engineering is the practice of improving and maintaining the built and natural environments to increase the quality of life for present and future generations. Civil Engineering Technologists design, construct and maintain infrastructure such as structural components of buildings, containing structures (e.g. dams), pipelines and transportation infrastructure (e.g. roads, railways, airports, harbours, bridges, sewerage, water and storm water).



Admission requirements



Alternatively: A Higher Certificate in Mechatronics Engineering qualification with an average of 60% or above and a minimum of 60% for Mathematics (MAT1011).

First Year Outline

- The following is an outline of the subjects for the first year:
 - Physics IA
 - Physics IB
 - Mathematics IA
 - Mathematics IB
 - Professional Communication Language
 - Professional Communication Computers
 - Engineering Drawing IA
 - Engineering Skills
 - Engineering Programming Civil
 - Construction I

Stamp of Approval

- The Qualification is accredited by:



Engineering Council of South Africa

- Professional Registration with ECOSA as Pr Tech Eng (Professional Engineering Technologist)

<i>Bachelor of Engineering Technology in Civil Engineering</i>	<i>Professional Engineering Technologist</i>
<i>Bachelor of Engineering Technology Honours in Civil Engineering</i>	<i>Professional Engineering Technologist</i>
<i>Master of Engineering (Civil)</i>	<i>Professional Engineering Technologist</i>

Contact us

Admissions:

mandela.ac.za/study-at-mandela/application

Financial Aid:

finaid.mandela.ac.za

Residence: studenthousing.mandela.ac.za

Change the World

mandela.ac.za