



**Nelson Mandela
Metropolitan
University**

for tomorrow

How to complete the BSc (Construction Studies)

© Professor John Smallwood, 10 February 2011



The BSc Construction Management degree program offered at the NMMU

- **BSc (Construction Studies) – 3 years:**
 - Prepare construction managers to manage projects and to pursue other careers
- **BSc (Honours) (Construction Management) – 1 year**
- **Total of 4 years – completing Honours is important to:**
 - Prepare construction managers to manage the business of construction and to pursue other careers
 - Register with the South African Council for the Project and Construction Management Professions (SACPCMP)



Content of the program

3 Main fields - Construction Science and Technology; Construction Economics, and Construction Management:

- **Construction Science and Technology:**
 - **Materials and Methods; Environment and Services; Structures; Surveying; Physics; Mathematics, and Computer Science**
- **Construction Economics:**
 - **Production Analysis; Statistics; Economics; Building Economics, and Property Economics**
- **Construction Management:**
 - **Organisational Behaviour; Accounting; Business Management; Construction Management; Project Management; Commercial Law Company Law; Industrial Law, and Professional Practice**



Subjects per year (1)

- **First year of study:**
 - **Building Science (Material & Methods) 1**
 - **Building Science (Environment & Services) 1**
 - **Building Science (Structures) 1**
 - **Mathematics (Special) 1**
 - **Physics (Special) 1**
 - **Geometric Drawing 1**
 - **Basic Surveying 1**
 - **Computer Science (End User Computing)**
 - **Production Analysis 1**
 - **Information Technology for Building Disciplines 1**



Subjects per year (2)

- **Second year of study:**
 - **Building Science (Material & Methods) 2**
 - **Building Science (Environment & Services) 2**
 - **Building Science (Structures) 2**
 - **History of the Construction Industry 1**
 - **Organisational Behaviour 2**
 - **Statistics 2**
 - **Business Management 1**
 - **Production Analysis 2**
 - **Introduction to Micro Economics (Special) 1**
 - **Information Technology for Building Disciplines 2**



Subjects per year (3)

- **Third year of study:**
 - **Building Science (Material & Methods) 3**
 - **Building Science (Environment & Services) 3**
 - **Building Science (Structures) 3**
 - **Production Analysis 3**
 - **Building Economics 3**
 - **Construction Management 3**
 - **Accounting 1**



The philosophy behind the degree (1)

- **The program content is based upon:**
 - Research findings
 - Industry input
 - Accreditation bodies' input
 - Experience
- **All subjects are important, including the challenging ones:**
 - Geometric Drawing – a graduate must be able to communicate graphically with a range of stakeholders: semi-skilled workers to interior designers
 - Quantities:
 - Although Quantity Surveyors measure and estimate.....
 - Quantity Surveying is a Construction Management skill



The philosophy behind the degree (2)

- Construction Managers measure to determine the quantities for estimating, programming purposes, determining the amount of labour and supervision required, ordering materials, ordering plant and equipment, payment of co-contractors, cost control, and work study
- Organisational behaviour is important:
 - Understanding how people behave in organisations is important as ‘construction entails managing the minds of people’
 - Prepares students for Construction Management 3 and 4



How to complete a subject successfully

- **Attend 100% of lectures**
- **Record notes during the lecture**
- **Review the key points every evening**
- **Purchase the text book**
- **Read the recommended texts**
- **Peruse construction magazines / journals and identify and read related articles / papers**
- **Plan your assignment**
- **Prepare in advance for assessments / tests / exams – the ‘night before’ should be solely for final reviewing**



How to complete a subject successfully (2)

- **If you have a problem speak to your Class Representative and / or Lecturer**
- **Thereafter speak to the HoD or Acting HoD**
- **Thereafter visit the Unit for Student Counselling**