

# BACCALAUREUS TECHNOLOGIAE: ENGINEERING: CIVIL: CONSTRUCTION MANAGEMENT

Qualification code: BTKG02 - NQF Level 7

Campus where offered: Pretoria Campus

## Important notification to new applicants:

Students who intend to enrol for this qualification should take note that no new applications will be accepted as from 2020. Potential students are advised to consult the University's website for possible new qualifications which are aligned with the newly-implemented Higher Education Qualification Sub-Framework.

## REMARKS

a. *Admission requirement(s):*

- A National Diploma: Engineering: Civil or a NQF Level 6 (old NQF and the new HEQF) qualification in Civil Engineering (or a closely related field), obtained from an accredited South African university. Preference will be given to candidates with an average of 60% or more.
- Candidates who do not meet the 60% requirement will be evaluated by the Department and may be requested to provide a portfolio of relevant work experience (excluding P1 and P2) in order to be considered for selection.
- Apart from meeting the above requirements, a candidate must have obtained a minimum of 60% in Management: Civil I and II.

National Diploma students at TUT who are busy with their final semester (P2) and do not have more than one theoretical subject outstanding may also apply for admission and may be considered, based on the average of their completed theoretical subjects, but admission will be subject to the successful completion of the National Diploma and the Faculty's Student Enrolment Plan (SEP).

Holders of any other equivalent South African or international qualifications may also be considered, but will have to apply at least six months in advance for the recognition of such qualifications. Candidates will be required to submit an evaluation of their qualifications by the South African Qualifications Authority (SAQA) with their application forms for admission. The University and/or Faculty reserves the right to assess these qualifications and the applicant's suitability and/or competence for admission to the programme. Depending on the nature of such an equivalent qualification, the completion of certain additional subjects may be required. Proof of English proficiency may be required.

b. *Selection criteria:*

Due to capacity constraints, candidates will be selected based on academic performance and/or work experience. Selection will be done after the closing date for applications. Please note that meeting the minimum requirements does not guarantee admission.

c. *Minimum duration:*

One year.

d. *Presentation:*

Block-mode classes. Subjects are offered over a period of two years. Classes and assessments may take place on Friday afternoons and/or Saturdays.

e. *Intake for the qualification:*

January and July.

f. *Exclusion and readmission:*

See Chapter 2 of Students' Rules and Regulations.

g. *Recognition of Prior Learning (RPL), equivalence and status:*

See Chapter 30 of Students' Rules and Regulations.



- h. *Accreditation by professional body:*  
This qualification has been accredited by the Engineering Council of South Africa (ECSA).
- i. *Subject credits:*  
Subject credits are shown in brackets after each subject.

## CURRICULUM

### **Please note:**

Students must pass eight subjects. A minimum of five compulsory subjects in their particular field of specialisation should be taken, with the balance made up of subjects offered in the other fields of specialisation. Optional/elective subjects taken from the other fields must be closely related/relevant to the qualification. Subjects are offered as determined by the Head of the Department. The total credits of the Level IV subjects may not be less than 0,500.

Students who register for the subject Construction Materials Technology IV are not permitted to register for Asphalt Technology IV or Concrete Technology IV.

### ATTENDANCE

CODE	SUBJECT	CREDIT
<b>FIRST SEMESTER (2018)</b>		
IRN201B	Industrial Relations and Negotiation II	(0,125)
MPP401B	Management Principles and Practice IV	(0,125)
<b>SECOND SEMESTER (2018)</b>		
CCN401T	Concrete Technology IV	(0,125)
ENN401T	Environmental Management for Engineers: Civil IV	(0,125)
<b>FIRST SEMESTER (2019)</b>		
CLC101T	Commercial Law: Civil	(0,125)
FMN301T	Financial Management III	(0,125)
<b>SECOND SEMESTER (2019)</b>		
AHT401T	Asphalt Technology IV	(0,125)
PJG401T	Project Management: Civil IV	(0,125)
TOTAL CREDITS FOR THE QUALIFICATION:		<b>1,000</b>

### SUBJECT/MODULE INFORMATION (OVERVIEW OF SYLLABUS)

The syllabus content is subject to change to accommodate industry changes. Please note that a more detailed syllabus is available at the Department or in the study guide that is applicable to a particular subject. On 13 October 2017, the syllabus content was defined as follows:

#### **A**

#### **ASPHALT TECHNOLOGY IV (AHT401T)**

**1 X 4-HOUR PAPER**

*(Subject custodian: Department of Civil Engineering)*

Rehabilitation. Applications and design. Influence of the traffic and the environment. Project. (Total tuition time: ± 32 hours)



**C**

**COMMERCIAL LAW: CIVIL (CLC101T)** **1 X 3-HOUR PAPER**  
(*Subject custodian: Department of Law*)

Introduction to law of contracts. Sale agreements and building contracts. Insolvency law. Insurance law. Dispute resolution. Companies. Close corporations and partnerships. Securities. Agency and representation. (Total tuition time: ± 42 hours)

**CONCRETE TECHNOLOGY IV (CCN401T)** **1 X 3-HOUR PAPER**  
(*Subject custodian: Department of Civil Engineering*)

Properties and materials. Production and supply. Special applications. Testing. (Total tuition time: ± 32 hours)

**E**

**ENVIRONMENTAL MANAGEMENT FOR ENGINEERS: CIVIL IV (ENN401T)** **1 X 3-HOUR PAPER**  
(*Subject custodian: Department of Civil Engineering*)

ISO 14000, environmental impact assessment, integrated environmental management, environmental audits, case studies and project. (Total tuition time: ± 32 hours)

**F**

**FINANCIAL MANAGEMENT III (FMN301T)** **1 X 3-HOUR PAPER (OPEN BOOK)**  
(*Subject custodian: Department of Civil Engineering*)

Tasks and terrain of the financial manager. The capital structure of the business. Capital budgeting and time management for money. Working capital policy. The budgetary policy. Financial analysis and planning. Inflation and its effects on financial decision-making. Taxation and its effects on financial decision-making. Dividend policy. Acquisitions, mergers, prediction of business failure. Issues and concepts in financial management. (Total tuition time: ± 32 hours)

**I**

**INDUSTRIAL RELATIONS AND NEGOTIATION II (IRN201B)** **1 X 3-HOUR PAPER**  
(*Subject custodian: Department of Civil Engineering*)

Industrial relations. Strike management. Negotiation and dispute handling in the following: 1. Contractor/client and contractor/subcontractor relations. 2. Contractor/professional team relations. 3. Management/personnel relations. 4. Project manager/other parties relations. (Total tuition time: ± 32 hours)

**M**

**MANAGEMENT PRINCIPLES AND PRACTICE IV (MPP401B)** **1 X 3-HOUR PAPER (OPEN BOOK)**  
(*Subject custodian: Department of Civil Engineering*)

Management approaches. The business environment. The functions of management. Decision-making and problem-solving. Strategic management. Management by objectives. Corporate communication. Small business management. International management. Politics, ethics and social responsibility. Case studies. (Total tuition time: ± 32 hours)

**P**

**PROJECT MANAGEMENT: CIVIL IV (PJG401T)** **1 X 3-HOUR PAPER (OPEN BOOK)**  
(*Subject custodian: Department of Civil Engineering*)

Planning of projects (civil and building). Project management. Quality and time management. Management systems. Computer applications. Project. (Total tuition time: ± 32 hours)

