



# IIE Bachelor of Engineering in Civil Engineering

School of Engineering

**DEGREE**

**CONTACT:  
FULL-TIME**

The IIE Bachelor of Engineering in Civil Engineering is an integrated curriculum designed by top engineers. It equips you with a solid scientific foundation in modern civil engineering design and the skills to create physical and social environments for the 21st Century.

Based on contemporary sustainability theory, the degree will introduce you to issues like the fundamental mathematical and physical sciences in theory and practice, the application of engineering sciences to civil engineering projects and key expertise in geotechnical, hydraulic, structural and transportation engineering. This is a degree for people who want to build a better world.

This professional degree is endorsed by the Engineering Council of South Africa (ECSA).

## Career opportunities

The programme prepares graduates to assume engineering positions within the construction sector, structural design, environmental, hydraulic engineering, transportation and geotechnical engineering fields.

## Curriculum

Year 1					
Semester 1			Semester 2		
Code	Module Name	Credits	Code	Module Name	Credits
EMTH5111	Engineering Mathematics 1A	18	EMTH5112	Engineering Mathematics 1B:	18
EPHY5111	Engineering Physics 1A	14	EMEC5112	Engineering Mechanics 1B	14
ECH5111	Engineering Chemistry 1A	14	ESCI5112	Earth Sciences 1B	14

Year 2					
Semester 3			Semester 4		
Code	Module Name	Credits	Code	Module Name	Credits
EMTH6211	Engineering Mathematics 2A	14	WAEN6212	Water Engineering 2B	12
SAPR5111	Society and Practice 1A	12	RUIN6212	Rural and Urban Infrastructure 2B	12
CIED5111	Civil Engineering Design 1A	12	SAPR5112	Society and Practice 1B	12
			CIED5112	Civil Engineering Design 1B	12
			XBCV5112	Work Integrated Learning 1	2

Year 3					
Semester 5			Semester 6		
Code	Module Name	Credits	Code	Module Name	Credits
EMEC6211	Engineering Mechanics 2A	14	STRU6212	Structural Engineering 2B	12
EMAT6211	Engineering Materials 2A	14	GEOT6212	Geotechnical Engineering 2B	12
SAPR6211	Society and Practice 2A	12	SAPR6212	Society and Practice 2B	12
CIED6211	Civil Engineering Design 2A	12	CIED6212	Civil Engineering Design 2B	12
			XBCV6212	Work Integrated Learning 2	2

Year 4					
Semester 7			Semester 8		
Code	Module Name	Credits	Code	Module Name	Credits
STRU7311	Structural Engineering 3A	12	STRU7312	Structural Engineering 3B	12
GEOT7311	Geotechnical Engineering 3A	12	GEOT7312	Geotechnical Engineering 3B	12
WAEN7311	Water Engineering 3A	12	WAEN7312	Water Engineering 3B	12
RUIN7311	Rural and Urban Infrastructure 3A	12	RUIN7312	Rural and Urban Infrastructure 3B	12
SAPR7311	Society and Practice 3A	12	PSYC7324	Society and Practice 3B	12
CIED7311	Civil Engineering Design 3A	12	CIED7312	Civil Engineering Design 3B	12
			XBCV7312	Work Integrated Learning 3	2

Year 5					
Semester 9			Semester 10		
Code	Module Name	Credits	Code	Module Name	Credits
STRU8411	Structural Engineering Design 4A	18	DPRO8412	Design Project 4B	36
WAED8411	Water Engineering Design 4A	18	RPRO8412	Research Project 4B	36
INFD8411	Infrastructure Design 4A	18			
SAPR8411	Society and Practice 4A	18			

## Admission requirements

Minimum Admission Requirements	NSC: Bachelor pass with	English 50%, Mathematics 60% and Physical Science 50%
	NC (V): Bachelor pass with	English 50%, Mathematics 60% and Physical Science 50%
	SC: Endorsement	English 50%, Mathematics 60% and Physical Science 50%
	SC(a): Bachelor pass with	English 50%, Mathematics 60% and Physical Science 50%
	International	<p>Where applicants have not met the minimum entry requirements, but have obtained at least 45% in English, 55% in Mathematics and 45% in Physical Science, they may be admitted if they pass a proficiency test in the subject(s) where they have not met the minimum entry requirements.</p> <p>InternationalUSAf exemption certificate with 70% or equivalent for Maths and 50% or equivalent for English AND 60% or equivalent for Physical Science or both Physics and Chemistry.</p> <p>A cognate Higher Certificate OR cognate 240 credit Diploma OR an Advanced Certificate OR 360 credit Diploma may satisfy the minimum admission requirements to degree studies.</p>

Should you have any other school leaving qualification not mentioned above, please contact a student advisor.

**THE IIE IS ACCREDITED AS AN INDEPENDENT HIGHER EDUCATION INSTITUTION BY THE BRITISH ACCREDITATION COUNCIL.**

Details are correct at the time of printing V2 25 August 2023

