Emeris

IIE Bachelor of Engineering in Civil Engineering

Faculty of Science & Technology
School of Engineering, Science & Health

5 Years Full-Time Degree | NQF Level 8
576 Credits | SAQA ID: 118321 | BECV0801

- Newlands, Cape Town
- Westville
- Ruimsig

Qualification description

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).

Who is this qualification aimed at?

This qualification is aimed at individuals who want to shape the infrastructure and environments that support modern society. It is ideal for school leavers and aspiring engineers who are passionate about designing and building sustainable, functional, and innovative structures.

The programme suits those interested in careers in construction, urban development, transportation, water management, and environmental engineering. Students seeking a strong scientific foundation, coupled with practical design skills to address the needs of the 21st century, will find this Degree an excellent pathway into the civil engineering profession.

CONTACT FULL-TIME

Admission Requirements

Minimum Admission Requirements		English	Mathematics	Physical Science	Notes
	NSC: Bachelor's Degree pass with	50%	60%	50%	**Alternate Admission:** Should the English requirement not be met at NSC Grade 12, entrance may be granted if the English requirement is met based on the final Grade 11 mark.
	NC(V): Bachelor's Degree pass with	50%	60%	50%	
	SC: Endorsement with	50%	60%	50%	
	SC(a): HC pass with	50%	60%	50%	
	International	USAf Exemption Certificate with 60% or equivalent for Maths AND 50% or equivalent for English AND 50% or equivalent is also required for either Physical Science or both Physics and Chemistry.			
	A cognate Higher Certificate or cognate 240 credit Diploma OR an Advanced Certificate OR 360 credit Diploma OR Degree may satisfy the minimum admission requirements to degree studies.				

Scan the QR Code to learn more about Alternate Admission requirements for:
RPL| Mature Age Exemptions | USAf International Students | One module outstanding from a Higher Certificate

Curriculum Structure

Year 1							
Semester 1				Semester 2			
Code	Module Name	NQF	Credits	Code	Module Name	NQF	Credits
EMTH5111	Engineering Mathematics 1A	5	18	EMTH5112*	Engineering Mathematics 1B	5	18
EPHY5111	Engineering Physics 1A	5	14	EMEC5112*	Engineering Mechanics 1B	5	14
ECHE5111	Engineering Chemistry 1A	5	14	ESCI5112*	Earth Sciences 1B	5	14
Year 2							
Semester 3				Semester 4			
Code	Module Name	NQF	Credits	Code	Module Name	NQF	Credits
EMTH6211*	Engineering Mathematics 2A	6	14	WAEN6212*	Water Engineering 2B	6	12
SAPR5111	Society and Practice 1A	5	12	RUIN6212*	Rural and Urban Infrastructure 2B	6	12
CIED5111	Civil Engineering Design 1A	5	12	SAPR5112*	Society and Practice 1B	5	12
				CIED5112*	Civil Engineering Design 1B	5	12
Year 3							
Semester 5				Semester 6			
Code	Module Name	NQF	Credits	Code	Module Name	NQF	Credits
EMEC6211*	Engineering Mechanics 2A	6	14	STRU6212*	Structural Engineering 2B	6	12
EMAT6211*	Engineering Materials 2A	6	14	GEOT6212*	Geotechnical Engineering 2B	6	12
SAPR6211*	Society and Practice 2A	6	12	SAPR6212*	Society and Practice 2B	6	12
CIED6211*	Civil Engineering Design 2A	6	12	CIED6212*	Civil Engineering Design 2B	6	12

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Year 4							
Semester 7				Semester 8			
Code	Module Name	NQF	Credits	Code	Module Name	NQF	Credits
STRU7311*	Structural Engineering 3A	7	12	STRU7312*	Structural Engineering 3B	7	12
GEOT7311*	Geotechnical Engineering 3A	7	12	GEOT7312*	Geotechnical Engineering 3B	7	12
WAEN7311*	Water Engineering 3A	7	12	WAEN7312*	Water Engineering 3B	7	12
RUIN7311*	Rural and Urban Infrastructure 3A	7	12	RUIN7312*	Rural and Urban Infrastructure 3B	7	12
SAPR7311*	Society and Practice 3A	7	12	SAPR7312*	Society and Practice 3B	7	12
CIED7311*	Civil Engineering Design 3A	7	12	CIED7312*	Civil Engineering Design 3B	7	12
Year 5							
Semester 9				Semester 10			
Code	Module Name	NQF	Credits	Code	Module Name	NQF	Credits
STRU8421*	Structural Engineering 4A	8	18	DEPC8412*	Design Project for Civil Engineering	8	36
WAEN8411*	Water Engineering 4A	8	18	REPC8412*	Research Project for Civil Engineering	8	36
RUIN8411*	Rural and Urban Infrastructure 4A	8	18	EGAC8412*	Engineering Graduate Attribute Competence (Civil)	8	0
SAPR8411*	Society and Practice 4A	8	18				

*There are prerequisites for this programme that must be met in order to progress through the qualification.

Further Study Pathways

Currently there are no postgraduate study opportunities in civil engineering at Emeris. However, graduates from this programme will be able to pursue postgraduate studies at other South African and international universities that offer postgraduate programmes, subject to meeting the admission requirements.

Career Opportunities

This degree will open the door to a wide range of rewarding career opportunities; it is an ideal foundation for a diverse and impactful professional journey in the civil engineering and related sectors.

Career paths include, but are not limited to becoming a:

- Design Engineer (Structural, Geotechnical, Water, Transportation, or Infrastructure)
- Site Engineer (Construction Implementation)
- Government Policy-Maker
- Industry Regulator
- University Lecturer or Researcher
- Research and Development Specialist (CSIR, SABS, etc.)
- Entrepreneur in Civil Engineering and Beyond
- Finance, Investment, and Insurance Strategist
- Engineering Project Manager

Timetables

This qualification is aimed at students who wish to complete full-time face-to-face studies for the duration of their qualification. This means that students are expected to be available Mon-Fri 8:00 - 17:00 throughout the day for class in the academic year depending on how the timetable is structured.

Students must also note that timetables remain subject to change throughout the academic year.

Graduation and Completion Requirements for This Qualification

In order to be awarded this qualification, you must have achieved a minimum final year mark of fifty percent (50%) for all 40 modules in the curriculum.

As a contact student, this qualification is structured to be completed over 5 years. The maximum time for completing a qualification full-time is double the minimum time associated with the qualification.

Apply Online

After your application is submitted, we will review your documentation and provide an outcome regarding your chosen study.

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