IIE Bachelor of Engineering in Civil Engineering

Faculty of Science & Technology

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).

DEGREE	CONTACT	FULL-TIME

www.iiemsa.co.za

IIE MSA is an educational brand of The Independent Institute of Education (Pty) Ltd.

IIE Bachelor of Engineering in Civil Engineering

4 OR 5 YEARS FULL-TIME | NQF LEVEL 8 | MINIMUM 480 Credits | SAQA ID: 118321

Curriculum

MODULES					
YEAR 1					
Code	**Module Name**	**Credits**	**Code**	**Module Name**	**Credits**
CIED5111	Civil Engineering Design 1A	12	CIED5112	Civil Engineering Design 1B	12
ECHE5111	Engineering Chemistry 1A	14	EMEC5112	Engineering Mechanics 1B	14
EMTH5111	Engineering Mathematics 1A	18	EMTH5112	Engineering Mathematics 1B	18
EPHY5111	Engineering Physics 1A	14	ESCI5112	Earth Sciences 1B	14
SAPR5111	Society and Practice 1A	12	SAPR5112	Society and Practice 1B	12
YEAR 2					
Code	**Module Name**	**Credits**	**Code**	**Module Name**	**Credits**
CIED6211	Civil Engineering Design 2A	12	CIED6212	Civil Engineering Design 2B	12
EMAT6211	Engineering Materials 2A	14	GEOT6212	Geotechnical Engineering 2B	12
EMEC6211	Engineering Mechanics 2A	14	RUIN6212	Rural and Urban Infrastructure 2B	12
EMTH6211	Engineering Mathematics 2A	14	SAPR6212	Society and Practice 2B	12
SAPR6211	Society and Practice 2A	12	STRU6212	Structural Engineering 2B	12
			WAEN6212	Water Engineering 2B	12
YEAR 3					
Code	**Module Name**	**Credits**	**Code**	**Module Name**	**Credits**
CIED7311	Civil Engineering Design 3A	12	CIED7312	Civil Engineering Design 3B	12
GEOT7311	Geotechnical Engineering 3A	12	GEOT7312	Geotechnical Engineering 3B	12
RUIN7311	Rural and Urban Infrastructure 3A	12	RUIN7312	Rural and Urban Infrastructure 3B	12
SAPR7311	Society and Practice 3A	12	SAPR7312	Society and Practice 3B	12
STRU7311	Structural Engineering 3A	12	STRU7312	Structural Engineering 3B	12
WAEN7311	Water Engineering 3A	12	WAEN7312	Water Engineering 3B	12
YEAR 4					
Code	**Module Name**	**Credits**	**Code**	**Module Name**	**Credits**
SAPR8411	Society and Practice 4A	18	DEPC8412	Design Project for Civil Engineering	36
STRU8411	Structural Engineering Design 4A	18	REPC8412	Research Project for Civil Engineering	36
INFD8411	Infrastructure Design 4A	18	EGAC8412	Engineering Graduate Attribute Competence (Civil)	0
WAED8411	Water Engineering Design 4A	18			

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Curriculum (Extended Programme)

MODULES					
YEAR 1					
Code	**Module Name**	**Credits**	**Code**	**Module Name**	**Credits**
ECHE5111	Engineering Chemistry 1A	14	EMTH5112	Engineering Mathematics 1B	18
EMTH5111	Engineering Mathematics 1A	18	EMEC5112	Engineering Mechanics 1B	14
EPHY5111	Engineering Physics 1A	14	ESCI5112	Earth Sciences 1B	14
YEAR 2					
Code	**Module Name**	**Credits**	**Code**	**Module Name**	**Credits**
CIED5111	Civil Engineering Design 1A	12	CIED5112	Civil Engineering Design 1B	12
EMTH6211	Engineering Mathematics 2A	14	RUIN6212	Rural and Urban Infrastructure 2B	12
SAPR5111	Society and Practice 1A	12	SAPR5112	Society and Practice 1B	12
			WAEN6212	Water Engineering 2B	12
YEAR 3					
Code	**Module Name**	**Credits**	**Code**	**Module Name**	**Credits**
CIED6211	Civil Engineering Design 2A	12	CIED6212	Civil Engineering Design 2B	12
EMAT6211	Engineering Materials 2A	14	GEOT6212	Geotechnical Engineering 2B	12
EMEC6211	Engineering Mechanics 2A	14	SAPR6212	Society and Practice 2B	12
SAPR6211	Society and Practice 2A	12	STRU6212	Structural Engineering 2B	12
YEAR 4					
Code	**Module Name**	**Credits**	**Code**	**Module Name**	**Credits**
CIED7311	Civil Engineering Design 3A	12	CIED7312	Civil Engineering Design 3B	12
GEOT7311	Geotechnical Engineering 3A	12	GEOT7312	Geotechnical Engineering 3B	12
RUIN7311	Rural and Urban Infrastructure 3A	12	RUIN7312	Rural and Urban Infrastructure 3B	12
SAPR7311	Society and Practice 3A	12	SAPR7312	Society and Practice 3B	12
STRU7311	Structural Engineering 3A	12	STRU7312	Structural Engineering 3B	12
WAEN7311	Water Engineering 3A	12	WAEN7312	Water Engineering 3B	12
YEAR 5					
Code	**Module Name**	**Credits**	**Code**	**Module Name**	**Credits**
SAPR8411	Society and Practice 4A	18	DEPC8412	Design Project for Civil Engineering	36
STRU8411	Structural Engineering Design 4A	18	REPC8412	Research Project for Civil Engineering	36
INFD8411	Infrastructure Design 4A	18	EGAC8412	Engineering Graduate Attribute Competence (Civil)	0
WAED8411	Water Engineering Design 4A	18			

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Career Opportunities

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

NQF 5 Higher Certificate

NQF 7 Bachelor's Degree (360 credits)

NQF 8 Bachelor's Degree (480 credits)

NQF 9 Master's Degree

Admission Requirements

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

Minimum Admission Requirements: 4-year programme

National Senior Certificate (NSC)

Bachelor pass with English 50%, Mathematics 70% and Physical Science 60%

Alternate Admission : English 40-49% If achieved 50% min in final Grade 11 results. (Should the English requirement not be met at NSC Grade 12, then entrance may be granted if the English requirement is met based in the final Grade 11 mark)

National Certificate (Vocational) (NC(V))

Bachelor pass with English 50% (3), Mathematics 70% and Physical Science 60%

SC: Endorsement with

Bachelor pass with English 50%, Mathematics 70% and Physical Science 60%

Senior Certificate (Amended) (SC(a)

Bachelor pass with English 50%, Mathematics 70% and Physical Science 60%

International

An USAf Exemption Certificate with 70% or equivalent for Maths AND 50% or equivalent for English AND 60% or equivalent is also required for either Physical Science or both Physics and Chemistry.

Minimum Admission Requirements: 5-year programme

National Senior Certificate (NSC)

Bachelor pass with English 50%, Mathematics 60% and Physical Science 50%

Alternate Admission : English 40-49% If achieved 50% min in final Grade 11 results. (Should the English requirement not be met at NSC Grade 12, then entrance may be granted if the English requirement is met based in the final Grade 11 mark)

Where applicants have not met the minimum entry requirements, but have obtained at least 45-49% in English, 55 -59% in Mathematics and 45-49% 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. Only ONE attempt at each relevant proficiency test is permitted per intake. Compulsory tutorial sessions must also be attended.

National Certificate (Vocational) (NC(V))

Bachelor pass with English 50%, Mathematics 60% and Physical Science 50%

SC: Endorsement with

Endorsement with English 50%, Mathematics 60% and Physical Science 50%

Senior Certificate (Amended) (SC(a)

Bachelor pass with English 50%, Mathematics 60% and Physical Science 50%.

International Requirements for 5-year programme

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 any cognate 240 credit Diploma OR an Advanced Certificate OR 360 credit Diploma OR an appropriate IIE MSA Foundation Programme may satisfy the minimum admission requirements to degree studies.

NOTE: A student may not proceed to the next year if all the stipulated pre- and co-requisites have not been satisfied because he/she will require these requisites to be able to undertake the level of study required in the next year.

SHAPE YOUR DEGREE. YOUR FUTURE. YOUR CAREER.

THE INDEPENDENT INSTITUTE OF EDUCATION

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BAC ACCREDITED

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