Bachelor of Engineering in Electrical and Electronic Engineering

The Independent Institute of Education (The IIE)

The shortage of skilled engineers has a widespread effect on South Africa and the African continent at large, affecting the country’s functioning in the globalised business environment and economy. Upon graduating with this degree, your skills will be in high demand, making you sought after by potential employers.

You will be well-prepared to enter into the industry upon graduating. Unlike traditional engineering programmes, the IIE Bachelor of Engineering programme will expose you to the role of engineering in the real world as early as the first year of the programme. Our programme ensures that you are equipped with first-hand experience of the value that engineering adds to improving the quality of lives in communities.

This qualification will provide you with the basic skills, knowledge and insights to reach a deeper understanding of managing the built environment, through the application of the principles learnt throughout the programme.

The programme is offered in two streams; namely the four-year mainstream programme and the five-year extended programme. The purpose of the extended programme is to offer students the opportunity to complete the first two years of the mainstream programme over a period of three years. The credit allocation for the first two years of the programme will therefore be spread over three years and allow the student to make a smooth transition into tertiary education.

What is this Degree’s accreditation status?

The IIE Bachelor of Engineering in Electrical and Electronic Engineering programme offered at IIE MSA is accredited by the CHE and is registered by the South African Qualifications Authority (SAQA) on the National Qualifications Framework (NQF) as a 604-credit qualification on level 8 (SAQA ID: 101433).

In addition, this qualification is endorsed by the Engineering Council of South Africa (ECSA). The Engineering Council of South Africa is the only signatory in Africa to the Washington Accord, therefore allowing for global recognition.
Who is the Bachelor’s degree aimed at?

This IIE Bachelor of Engineering in Electrical and Electronic Engineering degree is aimed at students who want to understand how things work, and who look for ways to improve their environment. These students typically enjoy mathematics and physics, and relish solving all kinds of problems. Engineering students are generally analytical and pay attention to details. The Electrical and Electronic Engineering degree is particularly focused on students who are interested in all kinds of electrical and electronic components, from high voltage power supplies, transformers, electrical motors and controllers to the digital circuit boards found in computers and consumer devices.

What entry requirements will I need to study this Bachelor’s degree?
To be registered you must have satisfied the admission requirements as set out below:

Minimum Admission Requirements: 4-year programme

<table>
<thead>
<tr>
<th>Criteria</th>
<th>APS</th>
<th>English</th>
<th>Maths</th>
<th>Physical Science</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSC: Bachelor pass with</td>
<td>31</td>
<td>50% (4)</td>
<td>70% (6)</td>
<td>60% (5)</td>
<td>IIE MSA makes provision for bonus points for above average achievements in English, Mathematics or Physical Science</td>
</tr>
<tr>
<td>NC (V): Bachelor pass with</td>
<td>31</td>
<td>50% (3)</td>
<td>70% (4)</td>
<td>60% (3)</td>
<td>+ 1 APS points for 60% to 69% for English, Maths or Physical Science</td>
</tr>
<tr>
<td>SC: Endorsement with</td>
<td>31</td>
<td>50% (D)</td>
<td>70% (8)</td>
<td>60% (C)</td>
<td>+ 2 APS points for 70% and above for English, Maths or Physical Science</td>
</tr>
<tr>
<td>SC(a): Bachelor pass with</td>
<td>31</td>
<td>50%</td>
<td>70%</td>
<td>60%</td>
<td>A total of 4 additional APS points are permitted</td>
</tr>
<tr>
<td>International</td>
<td>31</td>
<td>An USAf Exemption Certificate to degree studies with 70% or equivalent for Maths, 60% or equivalent for Physical Science AND 50% or equivalent for English or requisite English test e.g. TOEFL, IELS</td>
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Applicants who have not met the above admission requirements may be considered for admission to an extended programme.
Minimum Admission Requirements: 5-year Extended programme

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<tr>
<td>NSC: Bachelor pass with</td>
<td>28</td>
<td>50% (4)</td>
<td>60% (5)</td>
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<td>An USAf Exemption Certificate to degree studies with 60% or equivalent for Maths, 50% or equivalent for Physical Science AND 50% or equivalent for English or requisite English test e.g. TOEFL, IELS.</td>
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*Please note, requirements for entry to this qualification are correct at the time of printing, however, these may change.*

**How is this Bachelor’s degree structured at IIE MSA?**

The IIE Bachelor of Engineering in Electrical and Electronic Engineering degree is a four-year degree, which may also be completed over five years on the Extended programme. The academic year runs from February to November. The modules are delivered on a full-time basis with lectures and tutorials being scheduled during the day from Monday to Friday.

Please note that in line with academic practice, The IIE’s curriculum is reviewed annually thus changes may occur in module structure and sequence in order to ensure that the qualification remains relevant. The exit level outcomes of the programme do not change. Registered students receive an updated programme curriculum on an annual basis.

**What about timetables?**

Our full-time programmes are aimed at students wishing to dedicate themselves to full-time face-to-face studies for the duration of their qualification. This means that students are expected to be available throughout the day for class during the academic year depending on how the timetable is
structured. Students may also be required to write assessments or submit coursework or assignments outside of normal class-time.

Students must understand that timetables remain subject to change throughout the year. Unfortunately, we cannot guarantee that timetable structures will remain the same during each year of your studies with us. In addition, where students are repeating modules, these modules may be offered in the evenings or on weekends. Students are required to attend classes in order to remain up to date with the academic programme. Students who would like to pursue part-time employment opportunities outside of the academic programme must prioritise their studies and avoid committing to work schedules until after they have received their timetables and academic calendar from the institution.

What must I pass in order to graduate with this Bachelor’s degree?

In order to be awarded this qualification, you must have achieved a minimum final mark of fifty per cent (50%) for each module of the programme.

How long do I have to complete this qualification?

Students have a maximum of 8 years to complete this qualification if they are enrolled on the 4-year mainstream programme, and a maximum of 10 years to complete the qualification if they are enrolled on the 5-year extended programme.

With what qualification will I graduate?

You will graduate with The IIE Bachelor of Engineering in Electrical and Electronic Engineering degree (SAQA ID: 101433).

Career opportunities: what career areas can I pursue once I have completed this Bachelor’s degree?

The programme prepares graduates to assume engineering positions within private consultation firms, development laboratories and large and small private enterprises involved with the design, development, production, and marketing of Electrical and Electronic systems, subsystems and components of products. Graduates may also choose to pursue a career in academia, either as a discipline-specific lecturer or researcher.

Opportunities may also be available in government and non-profit organisations. Private consulting positions or creating opportunities in an entrepreneurial role are further options. Through further study, your opportunities may expand to include registration as a professional engineer, progression toward the Government Certificate of Competency.
Would it be possible to study further and obtain a postgraduate qualification once I have completed The IIE Bachelor of Engineering in Electrical and Electronic Engineering degree?

The IIE Bachelor of Engineering in Electrical and Electronic Engineering degree is accredited by the Council on Higher Education (CHE) and is registered by the South African Qualifications Authority (SAQA) on the National Qualifications Framework (NQF) at level 8 - the same level as other equivalent professional undergraduate degrees at both private and public South African institutes of higher education. The opportunity to apply for a postgraduate certificate/diploma or Master’s degree at any South African university or higher education institution exists subject to meeting their specific programme entrance criteria.

It is important to remember that your academic results remain a key factor when applying for further studies.

Call the IIE MSA campus to discuss your career options with one of our Student Advisors.
Tel: +27 11 950 4009 or email enquiries@iiems.co.za

Disclaimer: Please note that this fact sheet is accurate at the time of publication. The Independent Institute of Education (The IIE) reserves the right to alter any of the content prior to commencement of registration due to changes in regulation, policy, market requirements or any other valid reason.

British Accreditation Council

The IIE is not only accredited in South Africa but its dedication to providing quality education also led to it being accredited by the British Accreditation Council (BAC) in 2014. The British Accreditation Council is an independent authority in the United Kingdom that accredits private providers globally, including Greece, Switzerland, Singapore, India, Mauritius and the United Arab Emirates. In 2017 The IIE had its accreditation status confirmed by the BAC as an Independent Higher Education Institution confirming our confidence in the international comparability of our standards.

“South African students need to know, when they select a private higher education institution, that the standards offered are equivalent to those of a public University. Our students get this from our extensive local accreditation and registration. The students also benefit from knowing that we meet international standards too. The IIE is accredited as an Independent Higher Education Institution by the British Accreditation Council. Locally and internationally we have demonstrated the quality of what we offer,” said Dr Coughlan, Director, The Independent Institute of Education.

IIE MSA students can be confident that their IIE learning experience meets international best practice standards.”