<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
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<tbody>
<tr>
<td>1.</td>
<td>Elective Modules</td>
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<td></td>
<td>Language Skills</td>
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<tr>
<td></td>
<td>12 LP</td>
</tr>
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<td>2.</td>
<td>Specialization Electrical Engineering</td>
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<tr>
<td></td>
<td>18 LP</td>
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<td>3.</td>
<td>Master Thesis Electrical Engineering</td>
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<td>30 LP</td>
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<td>4.</td>
<td>Elective Modules Specialization</td>
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<td></td>
<td>60 LP</td>
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</tbody>
</table>

LP: credit point according to ECT system (Unit for learning, preparation and post-processing effort, 1 credit point corresponds to about 30 hours)

Light blue: mandatory modules, blue: elective modules specialization, orange: elective modules out of specialization

for course of studies with start in the summer semester see www.ief.uni-rostock.de/?L=1 – section „Studies“
**Electrical Engineering (M.Sc.)**

**Degree**
Master of Science (M.Sc.)

**Type of Program**
grahduate (with a second academic degree)
one major subject degree (not combinable)
language: English, single modules in German
The entire course may be completed in English language.

**Duration**
4 semesters

**Start Date**
in the winter semester (Oct. 1st)
in the summer semester (Apr. 1st)

**Start-up support**
Assistance during the start of studies and orientation in Germany with the help of mentoring from students for students

**Fields of Study**
Electrical Engineering

**Formal Requirements**
- Completion of a first academic degree in Electrical Engineering with at least 180 credit points or equivalent qualification; with at least 85% of the CGPA (Cumulative Grade Point Average) or a comparable grade or Graduate Aptitude Test in Engineering (GATE) with at least 500 points
- proof of profound knowledge: Electromagnetic Fields and Waves (at least 3 credit points), Mathematics (at least 18 credit points), Programming / Practical Computer Science (at least 6 credit points)
- Mother tongue English or proof (not older than two years) of sufficient English language skills with TOEFL IBT with at least 90 points or IELTS with at least 6.5 points

**Advanced Qualification Options**
graduate to Dr.-Ing.

**Purpose and Objective**
In the English-language master’s degree program Electrical Engineering, you deepen your knowledge acquired in the bachelor program in one of this specializations
- Power Engineering or
- Information Technology.

**Power Engineering** includes the generation, transmission, conversion and application of electrical energy. Besides the basics, the subject area comprises the energy production from renewable sources, such as bioenergy and wind power plants, construction, operation and control of electrical drive systems and the associated high temperature electronics.

**Information Technology** is primarily concerned with the processing and transmission of digital information. Here, the spectrum ranges from digital signal processing and data transmission to circuit design, embedded systems and multi-processor systems as well as mobile and wireless communication systems.

**Premises for the Study**
You have good knowledge in mathematics and natural sciences as well as special interest in scientific, technical, engineering, and research-based work.

**Content of Master Program**
In the first two semesters, you select modules according to your specialization from the module catalogue, which are refined in the third semester. Finally, the fourth semester is reserved for the master thesis. In addition, there are compulsory German courses for both specializations.

**Special Features**
The course is offered in English language and is therefore equally suitable for English-speaking international students and for German-speaking students who want to develop and apply their English language skills.

**Career Prospects**
The university master’s degree in Electrical Engineering offers best possibilities for a leading or researcher position in the field of engineering in Germany and abroad or to enter a doctoral program. The ever-growing demand for engineers opens up prospects for the future with good job offers and excellent career opportunities.

University of Rostock