Programme syllabus

Degree Programme in Electrical Engineering and Economics
Högskoleingenjörsutbildning i elektroteknik och ekonomi

180.0 credits

Valid for students admitted to the education from autumn 07 (HT - Autumn term; VT - Spring term).

This is a translation of the Swedish, legally binding, programme syllabus.

Programme objectives

Knowledge and understanding

Skills and abilities

Ability to make judgements and adopt a standpoint

Extent and content of the programme

Eligibility and selection

Implementation of the education

Courses
The programme is course-based. Lists of courses are included in appendix 1.

Grading system
Courses in the first and the second cycle are graded on a scale from A to F. A-E are passing grades, A is the highest grade. The grades pass (P) and fail (F) are used for courses under certain circumstances.

Appendix 1 - Course list
Appendix 2 - Programme syllabus descriptions
Appendix 1: Course list

Degree Programme in Electrical Engineering and Economics (TIEEA), Programme syllabus for studies starting in autumn 2007

**Electronics, Robotics and Mechatronics (EROS)**

**Year 1**

**Mandatory courses (60.0 credits)**

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HE1004</td>
<td>Digital Electronics</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HE1005</td>
<td>Computer Engineering</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HE1006</td>
<td>Design Methods</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HE1007</td>
<td>Mechatronics</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HH1802</td>
<td>Business Finance and Organizational Structures</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HI1900</td>
<td>Computer Programming, Basic Course</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HN1001</td>
<td>Applied Mathematics</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HN1901</td>
<td>Mathematics I</td>
<td>7.5</td>
<td>First cycle</td>
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**Year 2**

**Mandatory courses (60.0 credits)**

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HE1008</td>
<td>Analogue Technology</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HE1009</td>
<td>Applied Electronics</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HE1010</td>
<td>Sensors and Measurement Technology</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HE1011</td>
<td>Control Systems</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HE1012</td>
<td>Mechatronics 2, Project</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HE1017</td>
<td>Dynamics</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HH1800</td>
<td>Industrial Business Economics</td>
<td>7.5</td>
<td>First cycle</td>
</tr>
<tr>
<td>HN1902</td>
<td>Environmental Science and Work Science</td>
<td>7.5</td>
<td>First cycle</td>
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</tbody>
</table>
### Year 3

**Mandatory courses (30.0 credits)**

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HE1013</td>
<td>EMC Electronics</td>
<td>7.5</td>
<td>First cycle</td>
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<tr>
<td>HE102X</td>
<td>Degree Project in Mechatronics and Robotics, First Cycle</td>
<td>15.0</td>
<td>First cycle</td>
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<td>ML1301</td>
<td>Object Oriented Programming</td>
<td>7.5</td>
<td>First cycle</td>
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Appendix 2: Specialisations

Degree Programme in Electrical Engineering and Economics (TIEEA), Programme syllabus for studies starting in autumn 2007

**Electronics, Robotics and Mechatronics (EROS)**