



Programme syllabus

[An accessible version of the syllabus can be found in the Course and programme directory.](#)

Degree Programme in Electrical Engineering 180 credits

Högskoleingenjörsutbildning i elektroteknik, Södertälje

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 (TIELE)

Electronics, Robotics and Mechatronics (EROS)

Year 1

Mandatory courses (60.0 Credits)

Code	Name	Credits	Edu. level
HE1004	Digital Electronics	7.5 hp	First cycle
HE1005	Computer Engineering	7.5 hp	First cycle
HE1006	Design Methods	7.5 hp	First cycle
HE1007	Mechatronics	7.5 hp	First cycle
HI1900	Computer Programming, Basic Course	7.5 hp	First cycle
HN1001	Applied Mathematics	7.5 hp	First cycle
HN1900	Engineering and Information Skills	7.5 hp	First cycle
HN1901	Mathematics I	7.5 hp	First cycle

Year 2

Mandatory courses (60.0 Credits)

Code	Name	Credits	Edu. level
HE1008	Analogue Technology	7.5 hp	First cycle
HE1009	Applied Electronics	7.5 hp	First cycle
HE1010	Sensors and Measurement Technology	7.5 hp	First cycle
HE1011	Control Systems	7.5 hp	First cycle
HE1012	Mechatronics 2, Project	7.5 hp	First cycle
HE1017	Dynamics	7.5 hp	First cycle
HN1902	Environmental Science and Work Science	7.5 hp	First cycle
HU1900	Business Economics and Organizational Behaviour	7.5 hp	First cycle

Year 3

Mandatory courses (37.5 Credits)

Code	Name	Credits	Edu. level
HE1015	Robotics	7.5 hp	First cycle
HE1024	Real Time Systems	7.5 hp	First cycle
HE102X	Degree Project in Mechatronics and Robotics, First Cycle	15.0 hp	First cycle
HU1901	Engineering Practice and Development	7.5 hp	First cycle

Conditionally elective courses

Code	Name	Credits	Edu. level
HE1013	EMC Electronics	7.5 hp	First cycle
HE1014	PLC Programming	7.5 hp	First cycle
ML1301	Object Oriented Programming	7.5 hp	First cycle



Appendix 2: Specialisations

Degree Programme in Electrical Engineering
(TIELE)

Electronics, Robotics and Mechatronics (EROS)

No information entered.