

Engineering Electronics

180 credits

Högskoleingenjör i elektronik

6IELK

Valid from: 2015 Spring semester

Determined by

Board of Studies for Electrical
Engineering, Physics and Mathematics

Date determined

Entry requirements

Degree in Swedish

Högskoleingenjör och Teknologie kandidat, 180 hp

Curriculum

Semester 4 (Spring 2017)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|--|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TSTE93 | Analog Circuits | 6* | G2X | 1 | C |
| TBMT32 | Perspectives on Biomedical Engineering | 2* | G1X | 3 | E |
| TDIU11 | Operating Systems | 6 | G2X | 3 | E |
| TMEI01 | Electrical Engineering | 6 | G1X | 3 | E |
| TSEI10 | Filters | 6 | G2X | 2 | E |
| TSIU04 | Automatic Control, Advanced Course | 4 | G2X | 4 | E |
| Period 2 | | | | | |
| TSTE93 | Analog Circuits | 6* | G2X | 1 | C |
| TBMT32 | Perspectives on Biomedical Engineering | 2* | G1X | 3 | E |
| TDDI11 | Embedded Software | 6 | G2X | 2 | E |
| TFEI02 | Wave Physics | 4 | G1X | 4 | E |
| THIU01 | English | 4 | G1X | 1 | E |
| TMIU02 | Man, Technology and Organization | 4 | G1X | 2 | E |
| TPTE06 | Industrial Placement | 6 | G1X | - | E |
| TSEI07 | Digital Filters | 6 | G2X | 3 | E |

Specialisation: Biomedical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|--------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TSEI10 | Filters | 6 | G2X | 2 | E |
| Period 2 | | | | | |
| TFEI02 | Wave Physics | 4 | G1X | 4 | E |

Specialisation: Electronic Design

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|-----------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TSEI10 | Filters | 6 | G2X | 2 | E |
| Period 2 | | | | | |
| TSEI07 | Digital Filters | 6 | G2X | 3 | E |

Specialisation: Electronics and Energy

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|------------------------------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TMEI01 | Electrical Engineering | 6 | G1X | 3 | E |
| TSIU04 | Automatic Control, Advanced Course | 4 | G2X | 4 | E |

Specialisation: Embedded Systems

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|------------------------------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TDIU11 | Operating Systems | 6 | G2X | 3 | E |
| TSIU04 | Automatic Control, Advanced Course | 4 | G2X | 4 | E |
| Period 2 | | | | | |
| TDDI11 | Embedded Software | 6 | G2X | 2 | E |

Semester 5 (Autumn 2017)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|---|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TSIU03 | System Design | 8 | G2X | 4 | C |
| TADI02 | Numerical Algorithms | 6 | G2X | 2 | E |
| TAIU08 | Calculus in Several Variables | 6 | G1X | 3 | E |
| TBME04 | Anatomy and Physiology | 6 | G2X | 3 | E |
| TMMI44 | Thermodynamics | 6 | G1X | 2 | E |
| TMMI69 | Fluid Mechanics and Heat Transfer | 6 | G1X | 3 | E |
| TSEA29 | Microcomputer, Project Laboratory | 8* | G2X | 3 | E |
| TSEI03 | Digital Circuits | 4 | G2X | 2 | E |
| TSKS02 | Telecommunication | 6* | G2X | 1 | E |
| TSTE25 | Power Electronics | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TAMS11 | Probability and Statistics, first course | 6 | G2X | 4 | E |
| TBME03 | Biochemistry and Cell Biology | 6 | G2X | 2 | E |
| TDDI07 | Distributed Embedded Software and Networks | 4 | G2X | 1 | E |
| TEIO29 | Leadership and Organisation | 6 | G1X | 4 | E |
| TGTU49 | History of Technology | 6 | G1X | 3 | E |
| TKMJ24 | Environmental Engineering | 6 | G1X | 3 | E |
| TSEA29 | Microcomputer, Project Laboratory | 8* | G2X | - | E |
| TSKS02 | Telecommunication | 6* | G2X | 2 | E |
| TSTE26 | Powergrid and Technology for Renewable Production | 6 | A1X | 3 | E |

Specialisation: Biomedical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|-------------------------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TBME04 | Anatomy and Physiology | 6 | G2X | 3 | E |
| Period 2 | | | | | |
| TBME03 | Biochemistry and Cell Biology | 6 | G2X | 2 | E |

Specialisation: Electronic Design

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|---|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TSEI03 | Digital Circuits | 4 | G2X | 2 | E |
| TSTE25 | Power Electronics | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TSTE26 | Powergrid and Technology for Renewable Production | 6 | A1X | 3 | E |

Specialisation: Electronics and Energy

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|---|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TMMI44 | Thermodynamics | 6 | G1X | 2 | E |
| TMMI69 | Fluid Mechanics and Heat Transfer | 6 | G1X | 3 | E |
| TSTE25 | Power Electronics | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TSTE26 | Powergrid and Technology for Renewable Production | 6 | A1X | 3 | E |

Specialisation: Embedded Systems

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|---|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TSEA29 | Microcomputer, Project Laboratory | 8* | G2X | 3 | E |
| TSKS02 | Telecommunication | 6* | G2X | 1 | E |
| TSTE25 | Power Electronics | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TDDI07 | Distributed Embedded Software and Networks | 4 | G2X | 1 | E |
| TSEA29 | Microcomputer, Project Laboratory | 8* | G2X | - | E |
| TSKS02 | Telecommunication | 6* | G2X | 2 | E |
| TSTE26 | Powergrid and Technology for Renewable Production | 6 | A1X | 3 | E |

Semester 6 (Spring 2018)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|-------------------------------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TSIU09 | Introduction to Bachelor Thesis | 4 | G2X | 2 | C |
| TATA83 | Calculus, several variables | 6 | G1X | 1 | E |
| TBMT02 | Medical Imaging | 6 | A1X | 3 | E |
| TBMT09 | Physiological Pressures and Flows | 6 | A1X | 1 | E |
| TDDI08 | Embedded Systems Design | 4 | G2X | 1 | E |
| TGTU01 | Technology and Ethics | 6 | G1X | 1 | E |
| TKMJ15 | Environmental Management Strategies | 6 | G1F | 3 | E |
| TSEI12 | Analog Circuits, second course | 6 | G2X | 3 | E |
| TSFS04 | Electrical Drives | 6 | G2X | 4 | E |
| Period 2 | | | | | |
| TQXX11 | Degree project - Bachelor's Thesis | 16 | G2X | - | C |

Specialisation: Biomedical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|-----------------------------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TBMT02 | Medical Imaging | 6 | A1X | 3 | E |
| TBMT09 | Physiological Pressures and Flows | 6 | A1X | 1 | E |

Specialisation: Electronic Design

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|--------------------------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TSEI12 | Analog Circuits, second course | 6 | G2X | 3 | E |
| TSFS04 | Electrical Drives | 6 | G2X | 4 | E |

Specialisation: Electronics and Energy

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|-------------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TSFS04 | Electrical Drives | 6 | G2X | 4 | E |

Specialisation: Embedded Systems

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|-------------------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TDDI08 | Embedded Systems Design | 4 | G2X | 1 | E |

ECV = Elective / Compulsory / Voluntary

*The course is divided into several semesters and/or periods