

## Electrical and Computer Engineering (180 CP)

|                                |  | CHOICE / CORE / CAREER <span style="float: right;">3 x 45 = 135 CP</span>              |  |   |  | CONSTRUCTOR Track <span style="float: right;">45 CP</span>                                       |   |
|--------------------------------|--|--|--|---|--|--|---|
| 3 <sup>rd</sup> Year<br>CAREER | Bachelor Thesis / Seminar <span style="float: right;">m, 15 CP</span>          |  |  | Summer Internship / Start-Up (after 2 <sup>nd</sup> year) <span style="float: right;">m, 15 CP</span> |  | Argumentation, Data Visualization and Communication** <span style="float: right;">m, 5 CP</span> | Agency, Leadership & Accountability OR Community Impact Project <span style="float: right;">me, 5 CP</span> |
|                                | Specialization I <span style="float: right;">me, 5 CP</span>                   | Specialization II <span style="float: right;">me, 5 CP</span>                          | Specialization III <span style="float: right;">me, 5 CP</span>                             |   |  |  | Linear Model and Matrices OR Complex Problem Solving <span style="float: right;">me, 5 CP</span>            |
| 2 <sup>nd</sup> Year<br>CORE   | Digital Signal Processing <span style="float: right;">m, 7.5 CP</span>         | Information Theory <span style="float: right;">me, 5 CP</span>                         | PCB design and measurement automation <span style="float: right;">m, 5 CP</span>           | Wireless Communication <span style="float: right;">m, 5 CP</span>                                     | Numerical Methods <span style="float: right;">m, 5 CP</span>                       | Causation / Correlation** <span style="float: right;">m, 2.5 CP</span>                           |   |
|                                | Signals and Systems <span style="float: right;">m, 7.5 CP</span>               | Electromagnetics <span style="float: right;">m, 5 CP</span>                            | Electronics <span style="float: right;">m, 5 CP</span>                                     | Communications Basics <span style="float: right;">m, 5 CP</span>                                      | Probability and Random Processes <span style="float: right;">m, 5 CP</span>        | Logic** <span style="float: right;">m, 2.5 CP</span>   |   |
| 1 <sup>st</sup> Year<br>CHOICE | General Electrical Engineering II <span style="float: right;">m, 7.5 CP</span> | Digital Systems and Computer Architecture <span style="float: right;">m, 7.5 CP</span> | Foundations of Communications and Electronics <span style="float: right;">m, 7.5 CP</span> |   | Matrix Algebra and Advanced Calculus II <span style="float: right;">m, 5 CP</span> | German / Humanities <span style="float: right;">me, 2.5 CP</span>                                |   |
|                                | General Electrical Engineering I <span style="float: right;">m, 7.5 CP</span>  | Programming in C and C++ <span style="float: right;">m, 7.5 CP</span>                  | Classical Physics <span style="float: right;">m, 7.5 CP</span>                             |   | Matrix Algebra and Advanced Calculus I <span style="float: right;">m, 5 CP</span>  | German / Humanities <span style="float: right;">me, 2.5 CP</span>                                |   |

Minor Option in ECE (30 CP)

CP: Credit Points

m: mandatory

me: mandatory elective

Study abroad Option in 5<sup>th</sup> Semester (22.5 CP)

\*\*Different module perspectives available