

## Structure of Studies

The studies for a Bachelor's Degree in Mechanical Engineering comprise 240 ECTS. According to the curriculum, the work load for one academic year is 60 ECTS which is approximately 1600 hours of student's work. It consists, among others, of contact lessons in class, distance and independent learning, e-learning, project working and practical training. R&D activities are included in the studies.

| Type of studies             | Extent   | Description of studies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Basic Studies</b>        | 60 ECTS  | Basic studies consist of compulsory courses that provide the student with a solid foundation for mechanical engineering and guide him/her to business and economic thinking in a multicultural environment. In addition, the studies give essential skills needed for personal learning, career planning and professional studies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Professional Studies</b> | 120 ECTS | Professional studies provide students with good knowledge of industrial processes and engineer's basic competencies in mechanical engineering. These studies provide students also with good knowledge and understanding of product development and manufacturing. Students get professional skills in project management to be applied in projects during their studies and beyond. Specialized studies deepen students' theoretical understanding and practical skills in an engineer's work and make students learn to apply theories into practical cases. Students get professional skills in planning, machine design, production development, mechatronics, system development, management, maintenance and other industrial-related activities.                                                                                                       |
| <b>Internship</b>           | 30 ECTS  | The aim of the internship is to introduce the student to the practical work assignments and to the choice and use of different working methods, as well as to the application of knowledge and skills in the situations of the working life. The student learns to improve the quality of his/her tasks and to create new problem- solving methods in a customer-oriented way. The internship prepares the student for the working life as it deepens his/her professional competence, skills and knowledge, and enhances his/her employment opportunities.                                                                                                                                                                                                                                                                                                   |
| <b>Thesis</b>               | 15 ECTS  | <p>The thesis is a working life- oriented learning process for the student as it is supervised, guided and evaluated by professionals. The aim of the thesis is to improve the viability of the client and at the same time to deepen the professional skills and knowledge of the student in the chosen subject. A thesis can be practical or research-based or it can involve a subjective expression of a creative assignment. In the thesis process the student is responsible</p> <ul style="list-style-type: none"><li>- for finding a thesis topic integrated with working life</li><li>- increasing his/her knowledge of the subject field and creating the framework for the assignment</li><li>- carrying out the assignment and reporting on the process and outcomes</li><li>- finalizing the thesis and drafting information material.</li></ul> |

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|                         |          | The thesis offers a flexible way of entering the working life and a good opportunity for networking.                                                                                                                                                                                                                                                                                                                   |
| <b>Elective Studies</b> | 15 ECTS  | Elective studies support the development of the student's professional skills and expertise and are chosen according to his/her interests in the focus areas of the degree programme. The student can also choose to take courses that are arranged by other faculties of Savonia UAS or other schools and universities. Studies carried out elsewhere have to correspond to the level of studies in higher education. |
| <b>Total</b>            | 240 ECTS |                                                                                                                                                                                                                                                                                                                                                                                                                        |