



Programme: 3D technology, 120 credits

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The development within the manufacturing industry is constantly progressing. Both traditional subcontracting and the production of complete products are increasingly exposed to competition from low-cost countries. Competing solely on price is no longer sufficient. Companies face significant challenges, and the work with product development and design must continuously become more efficient. The need for designers with both theoretical knowledge and practical craftsmanship skills is growing. This program provides both knowledge and skills in design, simulation, sustainable development, quality, production economics, and teamwork, meeting the industry's competency needs in the field.

The program aims to create an understanding of, and provide practical knowledge about, how to design products and components to meet technical specifications as well as requirements for functionality and sustainability. Throughout the education, students develop subject-specific technical knowledge, craftsmanship skills, and the ability to work within a results-driven work model. The program is based on the latest technology in product development and production, primarily focusing on the needs of small and medium-sized enterprises.

Before the IPC at the end of the 3rd semester, students will have received instruction in the following subjects:

Technical Calculations

- Mathematics for technical calculations
- Mechanics
- Strength of materials
- Finite Element Method

Production

- Production preparation
- Manufacturing methods
- Tolerances and measurement technology
- Cost analysis

Design

- CAD and technical drawing
- Engineering materials
- Product development

Communication

- Project-based work
- Presentation techniques
- Group dynamics