Design-driven Innovation Development

Exchange Program for Industrial Engineering Students
(Campus St.Gallen)

OST – Eastern Switzerland University of Applied Sciences is a visionary university with about 3500 students in six schools at three locations (Rapperswil, Buchs and St.Gallen). Campus St.Gallen is situated in a new, modern building in the middle of St.Gallen and is proud to be part of a large network of knowledge with local industry. Our Bachelor degree in Industrial Engineering includes an innovative industrial project program for Swiss companies to develop new products and business services. In addition to the standard program for our own students, we offer a special program for incoming students. This gives you the opportunity to apply and test your acquired knowledge in a real setting, perfectly combining theoretical knowledge with practical expertise.

You will

- gain a greater understanding of a Swiss corporation and its business environment
- work on a real case for a real company
- learn to apply different methods within a design-driven development process
- use modern prototyping tools and equipment
- work in an international team context and experience innovation culture
- live in a marvelous region and historic city; a safe and pleasant environment

Become part of a small team of international students: work for one semester on an industrial product development project provided by a Swiss corporation, benefit from the support of different coaches, and gain important experience for both your professional and personal development.
The exchange industrial program is divided into the following five sequences:

**Kick Off:**
Become acquainted with your team, your coaches and the customer company. Take part in teambuilding activities and receive information about all the program details, timetable, etc.

**Analysis:**
Become familiar with relevant methods and tools and then analyze the customer potential to define possible new directions of impact and rank them to find a favored one.

**Ideation:**
Learn appropriate methods to define requirements and develop product ideas for the chosen direction of impact. Generate concept alternatives and perform risk analysis to rank your suggested concepts and prepare a decision in favor of a preferred concept.

**Experimentation:**
Identify critical hypothesis around the intended value proposition and develop plans to test them. Receive instructions on different prototyping methods, such as 3D-printing and laser cutting, to realize and test your Minimum Viable Product (MVP).

**Prototyping:**
Develop a functional prototype of your product and carry out additional user experiments to gain an improved understanding of the future product and its critical elements and factors. Provide proof of concept to release it for finalization and production.

**Business Development:**
Learn about possible business models to evaluate an appropriate business case for your new product. Calculate and plan serial production and market entry strategies to define the business plan for the first years of your product’s life cycle.

**Final presentation:**
Write a documentation about your industrial project development and give a final presentation to introduce your new product and have the chance to discuss it with the customer, the coaches and other guests.

Throughout the entire semester, you will be supported by, and given advice from, different experts:

- **Project Owner / Customer:**
  Your project case will be provided by a Swiss corporation, represented by a corporate project leader.

- **Coaches:**
  Each sequence is led by several coaches. They support you with theoretical input, consulting, and as sparring partners. Additionally, during your stay you are also supported by an Intercultural Coach.
In a nutshell:

- **Program type:** exchange semester (1 semester)
- **Target group:** BSc students with a background in Industrial Engineering or similar
- **Objectives:** You will gain important experience for both your professional and personal development
- **Teaching methods:** Theoretical input, guided self-study, direct adaption of theory to a Swiss company
- **Fall semester dates:** beginning of September until the week before Christmas
  **Spring semester dates:** beginning of February until the 1st week of June
- **No. of ECTS:** 27-30 for the entire program (with the possibility of additional optional courses)
- **Prerequisite:** Good knowledge of English, completed basic studies

Contact

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