

# Student competence for IPC

## **Programme: Product Development and Design**

Programme Manager: olof.granath@ju.se

In business, product development is one of the most important activities. Developing products that meet costumers' wishes and expectations is a necessity for achieving market success. This program aims to develop the knowledge and skills required to participate in designing and constructing products from need, requirement formulation, idea generation to conceptualization and detailed constructions with choice of materials and manufacturing methods. The program develops engineers with overall knowledge who can work as a product developer with expertise in design, industrial design or manufacturing.

Before the industrial placement course during semester 4, the students will have taken the following courses:

### **Introductory Engineering**

- Product development methods
- Construction
- Design
- Project Management Group Dynamics

### **Mechanical Engineering**

- Introduction to Engineering Design
- Mechanics 1
- Solid Mechanics
- Engineering Materials

#### **Mathematics**

- Single Variable Calculus
- Linear Algebra

### **Industrial Engineering**

- CAD
- Industrial Design
- Industrial Surface Modelling
- Thermodynamics
- Manufacturing