JÖNKÖPING UNIVERSITY
School of Engineering

2018-01-26

Student Qualifications for IPC

Program: Logistics and Management, 180 credits

Program Manager: mats.thilen@ju.se

The program provides the students with profound knowledge of how organizations are initiated, managed and improved. It combines business and technical understanding with an insight into human conditions, needs and limitations. The courses are mainly focused on the industrial system and flows of materials, information and finances. Logistics manufacturing systems, operations management as well as quality and work sciences are central subject areas. In addition, knowledge of organization, business, change, project work and leadership is gained. All courses include a sustainability aspect. The program provides a good foundation for student's ability to analyze and improve business processes. The students conduct their Industrial Placement Course during their fourth semester (out of six) at companies, authorities, or organizations.

Before that they have acquired knowledge in the respective courses:

Industrial Management

- Product cost calculation
- Return of investment calculation
- Profitability assessment
- Deviation analysis
- Budget planning and monitoring
- Accounting

Mathematical Applied Statistics

- Basic probability theory
- Descriptive statistics
- Identify correlations
- Examine relations, analyze a dataset, Evaluate the results

Organization-Leadership-Project Management

- Organizational structures
- Leadership and group dynamics
- Behavioral change theories
- Planning and managin projects
- Project as a work model
- Meeting Techniques

Productions and material flows analysis

- Materials supply systems
- Process mapping
- Value flow analysis
- Production layout
- Lean manufacturing tools, 5S
- Production and material analysis

Quality Management

- Statistical process control
- Methods of quality improvement
- Business management system according to ISO 9000 and 14000
- Risk analysis

Business logistics

- Analyzing key performance indicators
- Costs and tied up capital
- Inventory level analysis
- Order quantities
- Basic methods of material control