COURSE SYLLABUS
Industrial Product Realization, Process - Methods - Leadership, 9 credits

Industriell produktframtagning, process - metod - ledarskap, 9 högskolepoäng

Course Code:	TIFR26	**Education Cycle:**	Second-cycle level
Confirmed by:	Dean Mar 1, 2016	**Disciplinary domain:**	Technology (95%) and social sciences (5%)
Valid From:	Aug 1, 2016	**Subject group:**	TE9
Version:	1	**Specialised in:**	A1N
Reg number:	JTH 2016/601-313	**Main field of study:**	Production Systems, Product Development

Intended Learning Outcomes (ILO)

After completing the course, the student shall

Knowledge and understanding
- Demonstrate an understanding of the content, working methods and environment conditions of different parts of the product realization process
- Demonstrate knowledge of different fields of scientific theory
- Demonstrate an understanding of research methods used in the product realization process and how these are linked
- Demonstrate knowledge of the key theories in the field of leadership and group dynamics.
- Have knowledge of how the leader and the participant can contribute to the development of a team and a business

Skills and abilities
- Demonstrate the ability to explain different methods of data collection and analysis, and its impact on the result
- Demonstrate the ability to search and find published scientific works through appropriate search strategies, and to critically examine and evaluate the works
- Demonstrate the ability to analyze the strengths and weaknesses of different forms of leadership - their own and others'.
- Demonstrate the ability to identify,recongnize and handle the influence of multi-cultural aspects in communication and work.
- Demonstrate the ability to identify and analyze roles in relation to study orientation, cultural identity and context.

Judgement and approach
- Demonstrate an insight of how different skills in the product realization process contributes to the entire process
- Demonstrate an insight of how personal and cultural differences contribute to the outcome of

development work.

Contents

The course covers the different parts of the product realization process' regarding their content, operation, management and methods of development and research. The course provides a theoretical, organizational and scientific contextual framwork to the own master program's focus and the contribution of each program field to the product realization process is introduced.

The course includes the following topics:
- Product realization process parts
- Methods relevant to product development as well as development of production, industrial design and information technology
- Scientific methods used for development of knowledge in the different parts of the process
- Group dynamics, leadership and communication in the different parts of the product realization process
- Intercultural aspects like intercultural fear management, worldview, value dimensions, culture shock adaptation, religion, non-verbal communication at work and in an education context.

Type of instruction

Lectures, seminars, exercises, individual assignments and project work in groups.

The teaching is conducted in English.

Prerequisites

The applicant must hold the minimum of a bachelor's degree (ie. the equivalent of 180 ECTS credits at an accredited university) with at least 90 credits within the major subject Informatics, Computer Engineering, Interaction Design (with relevant courses in web programming), Mechanical Engineering, Industrial Engineering and Management or Civil Engineering or equivalent. Proof of English proficiency is required.

Examination and grades

The course is graded 5,4,3 or Fail.

The grade is weighted from the results of the written exam and the individual assignments. Passed grade for all tests are required.

Registration of examination:

Name of the Test	Value	Grading
Written examination - Research Methods 1	1.5 credits	5/4/3/U
Written examination - Research Methods 2	1.5 credits	5/4/3/U
PingPong examination of leadership/group-dynamics	1.5 credits	5/4/3/U
Division assignment, multicultural teams	1.5 credits	5/4/3/U
Team Project	3 credits	U/G

Other information

Exemption from entry requirement allowed according to the selection groups of the program, where the course is included.

Course literature

Literature
The literature is preliminary until one month before the course starts.

Title: Research Methods for Students and Professionals
Author: Williamson, K. (2002)
Publisher: Centre for Information Studies, Wagga wagga, NSW
ISBN: 1876938420, ISSN: 1030-5009

Title: A very short, fairly interesting and reasonably cheap book about studying leadership, second edition
Author: Jackson, B; Parry, K. (2011)
Publisher: Sage, London
ISBN: 978-1-84920-738-6

Articles
Compendium (digital, pdf-format)