COURSE SYLLABUS

Product and Production Platforms, 7.5 credits

Produkt- och produktionsplattformar, 7,5 högskolepoäng

Course Code:	TPDS22	**Education Cycle:**	Second-cycle level
Confirmed by:	Dean Mar 1, 2021	**Disciplinary domain:**	Technology
Revised by:	Director of Education Oct 25, 2023	**Subject group:**	MT1
Valid From:	Jan 1, 2025	**Specialised in:**	A1F
Version:	4	**Main field of study:**	Production Systems, Product Development

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding
- display broad knowledge of the theoretical foundation of product and production platforms
- display knowledge of product and production platforms in industrial practice
- demonstrate comprehension of the business opportunities and challenges associated with implementing platform strategies
- display knowledge of product and production platforms lifecycle information management

Skills and abilities
- demonstrate the ability to plan, design and analyse product and production platforms
- demonstrate the ability to select and apply models, methods, and tools that can be used in product and production platform development

Judgement and approach
- demonstrate an understanding of the characteristics of product and production platforms and outline suitable approaches for different applications.

Contents

The course applies both theoretical and practical perspectives. This includes fundamental concepts together with current research and industrial practise in the area. Different means for planning, developing and analysing product and production platform design are introduced and practised. The impact on business processes of different platform strategies are discussed as well as their use in different sectors and applications.

The course includes the following elements:
- Fundaments of product and production platforms theory
- Product platforms and related platforms in industrial practice
- Business opportunities and challenges associated with implementing and managing platform strategies

- platform lifecycle information management
- Means to plan, design and analyse product and production platforms
- Models, methods, and tools used in product and production platform architecting and development
- State of the art and the current industrial practise in general
- The use of product platform strategies in different sectors and applications

Type of instruction

Lectures, seminars, and exercises.

The teaching is conducted in English.

Prerequisites

Passed courses 180 credits in first cycle, at least 90 credits within the major subject Mechanical Engineering, Industrial Engineering and Management, Civil Engineering, Construction Engineering, Architecture Engineering, Built Environment, Product Development (with relevant courses in Lighting Design) or equivalent, and 15 credits in Mathematics or passed courses at least 150 credits from the programme Industrial Product Realisation. Completed course Integrated Product Realization 7,5 credits, or BIM – Requirements and Specifications 7,5 credits or equivalent. Proof of English proficiency is required.

Examination and grades

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

Registration of examination:

Name of the Test	Value	Grading
Examination[I]	2.5 credits	5/4/3/U
Exercises	1 credit	U/G
Assignment	3 credits	U/G
Seminars	1 credit	U/G

[I] Determines the final grade of the course, which is issued only when all course units have been passed.

Course literature

The literature list for the course will be provided 8 weeks before the course starts.

Scientific articles will be handed out during the course.