

## COURSE SYLLABUS

### Product and Production Platforms, 7.5 credits

*Produkt- och produktionsplattformar, 7.5 högskolepoäng*

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Course Code: TPDS22	Education Cycle: Second-cycle level
Confirmed: Oct 25, 2023	Disciplinary domain: Technology
Valid From: Jan 18, 2027	Subject group: Mechanical Engineering
	Specialised in: A1F Second cycle, has second-cycle course/s as entry requirements
	Main field of study: Production Systems, Product Development

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### Intended Learning Outcomes (ILO)

On completion of the 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.

### Content

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:

- Fundamentals 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.

Language of instruction is English.

## Entry requirements

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 U.

Registration of examination:

Name of the Test	Value	Grading
Examination <sup>1</sup>	2.5 credits	5/4/3/U
Exercises	1 credit	G/U
Assignment	3 credits	G/U
Seminars	1 credit	G/U

<sup>1</sup>Determines the final grade of the course, which is issued only when all course units have been passed.

## Course literature

Please note that changes may be made to the reading list up until eight weeks before the start of the course.

Scientific articles will be handed out during the course.