COURSE SYLLABUS

Platforms, Configuration and Optimization, 9 credits

Platforms, Configuration and Optimization, 9 högskolepoäng

Course Code:	TPFS28	**Education Cycle:**	Second-cycle level
Confirmed by:	Dean Apr 6, 2018	**Disciplinary domain:**	Technology
Valid From:	Aug 1, 2018	**Subject group:**	BY1
Version:	1	**Specialised in:**	A1F
		Main field of study:	Product Development

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding
-Demonstrate comprehension of the purpose of platforms, configuration and modularisation
-Display knowledge of the business opportunities and challenges related to the implementation of a platform strategy

Skills and abilities
-Demonstrate the ability to evaluate, select and apply models, methods, and tools that can be used in platform development
-Demonstrate the ability to plan, design and analyse platforms for a specific industrial sector

Judgement and approach
-Demonstrate a sound judgement of modularisation, module drivers and interfaces related to platform development
-Demonstrate an understanding of the scientific aspects of platforms that form viable topics for research

Contents

The introductory segment of the course presents the purpose of platforms, modularisation and configuration. The course also processes different models, methods, and tools that can be used in platform development, for example module drivers and interfaces. The impact on business processes of different platform strategies are discussed as well as their use in different sectors and applications.

The remainder of the course is focused on project assignment aiming at the development of platforms, which should be related to opportunities, challenges and the current research and industrial practise in the area.

The course includes the following elements:

-Fundaments in platforms, configuration and optimization theory
-Business opportunities and challenges associated with implementing and sustain a platform strategy
-Models, methods, and tools used in platform architecting and development
-Modularisation, module drivers and interfaces
-Means to plan, design and analyse platforms
-State of the art and the use of product platform strategies in different sectors and applications

Type of instruction

The course is based on seminars where the different theoretical concepts are introduced and discussed, which is necessary to be successful in the project execution. The teaching is conducted in English.

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Prerequisites

Passed courses 180 credits in first cycle, at least 90 credits within construction engineering or civil engineering and 15 credits Mathematics, and completed the course BIM - Requirements and Specifications, 6 credits and the course Parametric Design and GIS, 7,5 credits.

Examination and grades

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

Registration of examination:

Name of the Test	Value	Grading
Project[1]	6 credits	5/4/3/U
Compulsory seminars	3 credits	U/G

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

Course literature

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