



KURSPLAN

Platforms and Configuration, 9 högskolepoäng

Platforms and Configuration, 9 credits

Kurskod:	TPFS29	Utbildningsnivå:	Avancerad nivå
Fastställd av:	VD 2019-06-01	Utbildningsområde:	Tekniska området
Gäller fr.o.m.:	2019-08-01	Ämnesgrupp:	BY1
Version:	1	Fördjupning:	A1F
		Huvudområde:	Produktutveckling

Lärandemål

After a successful course, the student shall

Kunskap och förståelse

- 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

Färdighet och förmåga

- 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

Värderingsförmåga och förhållningssätt

- 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

Innehåll

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:

- Fundamentals 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

Undervisningsformer

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.

Undervisningen bedrivs på engelska.

Förkunskapskrav

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, 7,5 credits and the course Parametric Design and GIS, 7,5 credits.

Examination och betyg

Kursen bedöms med betygen 5, 4, 3 eller Underkänd.

Poängregistrering av examinationen för kursen sker enligt följande system:

Examinationsmoment	Omfattning	Betyg
Projekt ¹	6 hp	5/4/3/U
Obligatoriska seminarier	3 hp	U/G

¹ Bestämmer kursens slutbetyg vilket utfärdas först när samtliga moment godkänts.

Kurslitteratur

The literature list for the course will be provided one month before the course starts.

The literature will be provided during the course and will be available in digital form.