JÖNKÖPING UNIVERSITY
School of Engineering

COURSE SYLLABUS – THIRD-CYCLE EDUCATION

Product Platforms, 7,5 higher education credits

Produktplattformar, 7,5 högskolepoäng

Education cycle:	Third-cycle education
Disciplinary domain:	Industrial Product Realisation
Subject area:	Machine design
Syllabus valid from:	Course syllabus reviewed by RUF 2015-12-19, established 2016-01-28 by the dean (vd-beslut 2016/008)

Intended Learning Outcomes

On completion of the course, the doctoral student must:

Knowledge and understanding
- Demonstrate broad knowledge of the theoretical foundation of product platforms
- Display knowledge of product platforms and related platforms in industrial practice
- Demonstrate comprehension of the business opportunities and challenges associated with implementing and sustain a product platform strategy
- Demonstrate knowledge of product platform lifecycle information management (e.g. PLM and BIM)

Skills and abilities
- Demonstrate ability to plan, design and analyse product platforms
- Demonstrate ability to selecting and applying models, methods, and tools that can be used in product platform development

Judgement and approach
- Demonstrate ability to judge what aspects of product platforms that form viable topics for scientific research
- Demonstrate an understanding of the characteristics of product platforms and outline suitable approaches for different applications

Content

In the course, product platforms are studied from both theoretical and practical perspectives. This includes fundamental concepts together with current research and industrial practise in the area. Different support for planning, developing and analysing product 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 in product platform theory
- Product platforms and related platforms in industrial practice
- Business opportunities and challenges associated with implementing and sustain a product platform strategy
- Product platform lifecycle information management (e.g. PLM and BIM)
- Means to plan, design and analyse product platforms
- Models, methods, and tools used in product 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

The course is based on lectures and seminars where concepts, methods, tools, applications etc. are introduced and discussed. Computer tutorials will support hands-on experience of modelling methods and assignments supports an in-depth understanding and judgment. The course is taught in Swedish or English according to the needs of the participants.

Prerequisites

Admitted to third-cycle program or equivalent.

Examination and grades

The course grade is Pass or Fail. The examination is based on compulsory lectures, seminars and assignments.

Examination format	Extent	Scale
Compulsory lectures and seminars	3 hec	F/P
Assignments	4,5 hec	F/P

Course literature

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