JÖNKÖPING UNIVERSITY
School of Engineering

COURSE SYLLABUS

From Data to Digital Product Passport: Practice and Implementation for Industry, 2.5 credits

Från data till digitalt produktpass: praktik och implementering för industrin, 2,5 högskolepoäng

Course Code:	T2FDTD	Education Cycle:	Second-cycle level
Confirmed:	Sep 01, 2025	Disciplinary domain:	Technology
Revised:	Nov 12, 2026	Subject group:	Computer Technology
Valid From:	Jan 18, 2027	Specialised in:	A1N Second cycle, has only first-cycle course/s as entry requirements
		Main field of study:	Product Development

Intended Learning Outcomes (ILO)

On completion of the course the student shall:

Knowledge and Understanding

- demonstrate comprehension of required architecture, infrastructure and cybersecurity challenges for implementing DPPs, including data models, interoperability standards, identifiers, and metadata structures.

Skills and Abilities

- demonstrate the ability to theorise and model product lifecycle information and connect it to a DPP structure.

Judgement and Approach

- demonstrate the ability to plan a practical implementation pathway for DPPs in an organisation's digital infrastructure.

Content

This course provides a practical introduction to the implementation of Digital Product Passports (DPPs) in an industrial setting. Participants learn how product lifecycle information can be modelled, structured, secured, and connected to DPP solutions. The course covers technical architectures, data models, identifiers, interoperability standards, and cybersecurity requirements. Through demonstrations and hands-on exercises, participants work with DPP-related data and explore how such information can be integrated into existing IT systems and digital infrastructures used in industry.

The course includes the following elements:

- Technical architecture for Digital Product Passports
- Data models, identifiers, metadata structures, and interoperability standards
- Cybersecurity in DPPs: data integrity, authentication, and secure lifecycle management
- Modelling and structuring product lifecycle information
- Connecting lifecycle data to a DPP structure
- Integrating DPP-related data into existing IT systems or architectures
- Practical demonstrations and hands-on exercises based on an industry-inspired prototype

Type of Instruction

The course consists of lectures, demonstrations, and practical exercises. Instruction is blended, with theoretical components delivered online and technical workshops conducted either on campus or digitally.

Language of instruction is English.

Entry Requirements

Academic degree of at least 180 ECTS credits within Engineering and/or Technology or passed courses of at least 40 credits in the main field of study within Engineering and/or Technology and at least 1 year of work experience in the manufacturing industry or at least 4 years of work experience in the manufacturing industry.Proof of English proficiency is required.

Examination and Grades

The course is graded Pass (G) or Fail (U).

Registration of examination:

Name of the Test	Value	Grading
Assignment	2.5 credits	G/U

Course Literature

Please note that the course literature may be revised up to eight weeks before the start of the course.

Additional literature included in the course is provided free of charge and will be specified in the course syllabus (course PM).