![Jönköping University - School of Engineering logo]

COURSE SYLLABUS

Front-End Application Development, 7.5 credits

Frontend-applikationsutveckling, 7.5 högskolepoäng

Course Code:	TFAK16	Education Cycle:	First-cycle level
Confirmed:	Sep 01, 2025	Disciplinary domain:	Technology
Valid From:	Aug 31, 2026	Subject group:	Informatics/Computer and Systems Sciences
		Specialised in:	G1F First cycle, has less than 60 credits in first-cycle course/s as entry requirements
		Main field of study:	Informatics

Intended Learning Outcomes (ILO)

On completion of the course the student shall:

Knowledge and understanding

- display knowledge of the core principles of modern JavaScript front-end frameworks
- display comprehension of working within the Node.JS environment, including dependency management
- display knowledge of the deployment process of front-end applications

Skills and abilities

- demonstrate the ability to develop web applications using a JavaScript front-end framework
- demonstrate the ability to create reusable components and manage state across a web application
- demonstrate the ability to create a single-page application (SPA) with routing and navigation

Judgement and approach

- demonstrate the ability to suggest and motivate an architecture for a web application

Content

The course introduces students to a modern JavaScript front-end framework. Students learn how to build a dynamic, component-based web application and will learn about state management, routing, and API integration.

The course includes the following elements:

- The core principles of a modern JavaScript front-end framework
- Work within the Node.JS environment and use dependency management
- Build and use reusable components and manage state across a web application
- Implement routing and navigation in Single-Page application (SPA)
- Implement Server-Side Rendering (SSR)
- Fetch and display data from an external API
- Deployment of front-end applications

Type of instruction

Lectures, workshops, assignments, and project work.

Language of instruction is English.

Entry requirements

General entry requirements and taken courses in Foundations of Programming 7,5 credits, Front-end Fundamentals 7,5 credits and Web Design Project 7,5 credits (or the equivalent).

Examination and grades

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

Registration of examination:

Name of the Test	Value	Grading
Examination [1]	5 credits	5/4/3/U
Assignment	2.5 credits	G/U

[1]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.