

**SYLLABUS**

# **Advanced Production Design 15 credits A7005A**

**Avancerad produktionsdesign**

**Course syllabus admitted: Autumn 2023 Sp 1 - Present**

**DECISION DATE  
2022-02-11**

# Advanced Production Design 15 credits A7005A

## Avancerad produktionsdesign

### Second cycle, A7005A

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Industriell produktionsmiljö	Work Science and Ergonomics

## Entry requirements

Completed courses of at least 120 credits, with at least the grade Pass. This must include the following courses: Production Visualization (A7011A) 7,5 credits, Logistics 1 (T0002N) 7,5 credits, Production and Work Organisation (A7008A) 7,5 credits, Industrial planning (A7010A) 7,5 credits and Work place analysis (A7012A) 7,5 credits, or equivalent knowledge.

## Selection

The selection is based on 30-285 credits

## Course Aim

A student that has passed the course shall be able to actively and independently participate in project groups that work with industrial production development at pre projecting and projecting levels. After a completed course the student shall be able to screen, analyse, design, simulate and evaluate extensive and essential parts of whole productions systems that function well from a holistic perspective regarding human, technology, organisation and environment. Human prerequisites and needs shall be highlighted in this work. The student shall be able to report results in proper English, orally and in writing.

## Contents

The students shall in groups investigate and specify requirements and design proposals for significant parts of well functioning production systems. Special attention shall be paid to:

- Project planning and work in project groups
- Independent literature studies
- Theoretical framework and methodology
- Holistic thinking with regard to human, technology, organisation and environment
- Elaborated and broad specification of requirements
- Creativity and realism during work with solutions
- Elaborated and broad evaluation of solutions
- Simulation and analysis of ergonomics
- Simulation and analysis of production flows
- Analysis of environmental effects
- Calculation and analysis of investments
- Reporting in English

## Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Lectures and lessons regarding theory and methodology. Supervision during project work. The students are trained in screening, analysis, design and reporting work in real and sharp development projects in direct cooperation with industrial companies.

## Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. For a passed mark the student needs to perform a passed project work, a passed oral and visual presentation of the examination task and a passed project report written in English. Attendance at seminars and presentations is compulsory.

## Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

## Remarks

Students must register for the courses themselves, or contact ETKS educational administration [eduetks@ltu.se](mailto:eduetks@ltu.se), not later than three days after the quarter commences. Failure to do so can result in the place being lost. This rule also applies to students with a guaranteed place.

## Course offered by

Department of Social Sciences, Technology and Arts

## Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Project work, oral and visual presentation	G U 3 4 5	15	Mandatory	S09	

## Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

## Last revised

by Director of Undergraduate Studies Daniel Örtqvist, Department of Social Sciences, Technology and Arts 2022-02-11

## Syllabus established

The syllabus has been approved by the Dept. of Human Work Sciences 2007-12-04.