

SYLLABUS

Work place analysis 7.5 credits A7012A

Arbetsplatsanalys

Course syllabus admitted: Autumn 2023 Sp 1 - Present

DECISION DATE
2022-02-11

Work place analysis 7.5 credits A7012A

Arbetsplatsanalys

Second cycle, A7012A

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Arbetsvetenskap	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: Ergonomics 1 (A0015A) 7,5 credits and Industrial Production Environment (A0011A) 7,5 credits, or equivalent knowledge.

Selection

The selection is based on 30-285 credits

Course Aim

The course objective is to give students opportunities to acquire knowledge, understanding and skills in advanced methods for the analysis of industrial work and workplaces. Students will also be able to develop good assessment skills in the area and a critical and self-critical approach. The aim is that they in their professions as engineers will be able to effectively improve safety, working methods and working places from a holistic and sustainable view. People's needs and abilities will be put in focus and safety against work related accidents and musculoskeletal injuries must be good.

A student who has passed the course shall be able to independently perform relevant analyzes and critically evaluate the obtained results. Based on the result of the analysis, the student should be able to develop feasible solutions to problems relating to technology and work organization. The student should be able to present their findings orally and in writing in a manner adapted to the management and personnel at the studied workplace.

Contents

The course introduces theories and tools for work analysis and how they can be used to assess risk and improve working conditions (for example SAM, Systematic Work Environment Management – especially risk assessment, PHA, Preliminary Hazard Analysis, Deviation Analysis, Energy Analysis, HAZOP analysis, Ergonomic value stream mapping, Time and method studies and Systematic solution work).

Realization

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

The course includes theories, methods and analysis tools appropriate for risk assessment of work and workplaces in the field of health and safety in industrial production. The students will be able to practically test and exercises some of the methods and tools in laboratory lessons. Parallel to this, the students are to carry out individual studies of complementary scientific papers. This is reported in a separate report and at a seminar.

In addition, the students carry out projects (group work) where relevant analyses are performed in real industrial contexts. Results are presented orally and in writing to management and if possible personnel at the studied company. During the project work the teachers offer supervision and their guidance is adjusted to students' individual needs.

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. Students are examined through a critical review of the following assignments and through supervision during the project work. Attendance is compulsory during seminars, laboratory sessions and project presentations.

- Individual written laboratory report
- Individual written review of research literature
- Individual project work, oral presentation and written project report

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 to the courses themselves or contact the ETKS educational administration not later than three days after the quarter commences. Failure to do so can result in the place being lost. This also applies to the students with a place guarantee. Contact: ETKS educational administration eduetks@ltu.se.

Course offered by

Department of Social Sciences, Technology and Arts

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0003	Project report	G U 3 4 5	5	Mandatory	A14	
0005	Seminars and laboratory sessions	U G#	0.5	Mandatory	A18	
0006	Literature assignement	G U 3 4 5	2	Mandatory	A18	

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

by Director of Undergraduate Studies Bo Jonsson, Department of Business Administration, Technology and Social Sciences 2014-02-14