

History of Technology

Programme course

6 credits

Teknikhistoria

TGTU49

Valid from: 2017 Spring semester

Determined by

Board of Studies for Computer Science
and Media Technology

Date determined

2017-01-25

Main field of study

History

Course level

First cycle

Advancement level

G1X

Course offered for

- Engineering Electronics
- Chemical Analysis Engineering, B Sc in Engineering
- Computer Science and Engineering, M Sc in Engineering
- Design and Product Development
- Energy-Environment-Management
- Electronics Design Engineering, M Sc in Engineering
- Information Technology, M Sc in Engineering
- Chemical Biology, M Sc in Engineering
- Biomedical Engineering, M Sc in Engineering
- Computer Science and Software Engineering, M Sc in Engineering
- Mechanical Engineering, M Sc in Engineering
- Applied Physics and Electrical Engineering - International, M Sc in Engineering
- Applied Physics and Electrical Engineering, M Sc in Engineering
- Chemical Biology
- Engineering Biology, M Sc in Engineering

Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Intended learning outcomes

This course provides fundamental knowledge and understanding of the long and complex historical process that has led to today's high technological society. Of particular significance is how the technological development constantly influences and is influenced by society's socio-economic development. In this way the course contributes to creating a bridge between the two scholarly traditions from technology and the natural sciences and those from humanities and the social sciences.

Course content

A general introduction is followed by a chronological presentation of developments from pre-historical times to the Industrial Revolution. The last two centuries are primarily dealt with thematically. Here follow examples of areas that are treated in lectures and seminars: pre-historic technical developments; the ancient world stagnation or progress?; the Middle Ages dark or dynamic?; early forms of transmission of technology; technology and natural sciences in the early modern era; the mobilisation of new sources of power; development of the infrastructure: the Swedish mining and manufacturing communities; the growth of large, new technical systems; and the modern technological debate. The focus is on western development but with an eye towards (a glance at) other cultures.

Teaching and working methods

Lectures alternate with seminars on problem-oriented texts

Examination

HEM1 Written examination 6 credits U, 3, 4, 5

Grades are given as 'Fail' or 'Pass'.

To receive the grade Pass, in addition to passing the written examination, active attendance at all seminars is required. If a student is absent from a seminar, a written analysis of the text for that seminar must be submitted

Grades

Four-grade scale, LiU, U, 3, 4, 5

Department

Institutionen för Tema

Director of Studies or equivalent

Maria Eidenskog

Examiner

Björn Wallsten

Course website and other links

Education components

Preliminary scheduled hours: 30 h

Recommended self-study hours: 130 h

Course literature

Additional literature

Books

Edgerton, David, (2008) *The shock of the old – Technology and global history since 1900*

Hansson, Staffan, (2002) *Den skapande människan – Om människan och tekniken under 5000 år*

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.