Introduction to Bachelor Thesis

Introduktion till examensarbete
4 credits

Programme course

TSIU11

Valid from: 2026 Spring semester

Determined by	**Main field of study**	
Board of Studies for Electrical Engineering, Physics and Mathematics	Electrical Engineering	
Date determined	**Course level**	**Progressive specialisation**
2025-08-28	First cycle	G2F
Revised by	**Disciplinary domain**	
	Natural sciences	
Revision date	**Subject group**	
	Other Subjects within Technology	
Offered first time	**Offered for the last time**	
Spring semester 2026		
Department	**Replaced by**	
Institutionen för systemteknik		

Course offered for

- Bachelor of Science in Engineering Electronics

Prerequisites

Advanced knowledge and skills in their subject area.

Intended learning outcomes

After completing the course the student should independently be able to

1. design and criticize a plan for a scientific study
2. assess scientific works
3. write scientific and technical text with good academic standard
4. select and critically examine text in electrical engineering
5. address ethical issues and societal aspects of scientific and technical work.

Course content

The course focuses on important aspects of thesis writing such as

a) scientific method
b) scientific writing
c) literature search
d) source criticism
e) reference management
f) research ethics
g) societal aspects of research and technological development.”

Teaching and working methods

The course consists of lectures, seminars, and assignments. The course will be a preliminary study for a thesis degree project carried out, including the formulation of research questions, literature search and compilation of a theoretical framework, and methodology description.

Examination

UPG3	Seminar in Ethics	0.5 credits	U, G
UPG2	Seminars	1.5 credits	U, G
UPG1	Assignments	2 credits	U, G

Grades for examination modules are decided in accordance with the assessment criteria presented at the start of the course.

Grades

Two-grade scale, U, G

Other information

About teaching and examination language

The teaching language is presented in the Overview tab for each course. The examination language relates to the teaching language as follows:

- If teaching language is “Swedish”, the course as a whole could be given in Swedish, or partly in English. Examination language is Swedish, but parts of the examination can be in English.
- If teaching language is “English”, the course as a whole is taught in English. Examination language is English.
- If teaching language is “Swedish/English”, the course as a whole will be taught in English if students without prior knowledge of the Swedish language participate. Examination language is Swedish or English depending on teaching language.

Other

The course is conducted in such a way that there are equal opportunities with regard to sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation and age.

The planning and implementation of a course should correspond to the course syllabus. The course evaluation should therefore be conducted with the course syllabus as a starting point.

The course is campus-based at the location specified for the course, unless otherwise stated under “Teaching and working methods”. Please note, in a campus-based course occasional remote sessions could be included.

Common rules

Course syllabus

A syllabus must be established for each course. The syllabus specifies the aim and contents of the course, and the prior knowledge that a student must have in order to be able to benefit from the course.

Timetabling

Program courses are timetabled after a decision has been made for this course concerning its assignment to a timetable module. Single subject courses can be timetabled at other times.

Interruption in and deregistration from a course

The LiU decision, Guidelines concerning confirmation of participation in education, Dnr LiU-2020-02256 (https://styrdokument.liu.se/Regelsamling/VisaBeslut/764582), states that interruptions in study are to be recorded in Ladok. Thus, all students who do not participate in a course for which they have registered are therefore obliged to report the interruption so that this can be noted in Ladok. Deregistration from or interrupting a course is carried out using a Web-based form.

Cancelled courses and changes to the course syllabus

Courses with few participants (fewer than 10) may be cancelled or organised in a manner that differs from that stated in the course syllabus. The Dean is to deliberate and decide whether a course is to be cancelled or changed from the course syllabus. For single subject courses, the cancellation must be done before students are admitted to the course (in accordance with LiUs regulation Dnr LiU-2022-01200, https://styrdokument.liu.se/Regelsamling/VisaBeslut/622645).

Guidelines relating to examinations and examiners

For details, see Guidelines for education and examination for first-cycle and second-cycle education at Linköping University, Dnr LiU-2023-00379 (http://styrdokument.liu.se/Regelsamling/VisaBeslut/917592).

An examiner must be employed as a teacher at LiU according to the LiU Regulations for Appointments, Dnr LiU-2022-04445 (https://styrdokument.liu.se/Regelsamling/VisaBeslut/622784). For courses in second-cycle, the following teachers can be appointed as examiner: Professor (including Adjunct and Visiting Professor), Associate Professor (including Adjunct), Senior Lecturer (including Adjunct and Visiting Senior Lecturer), Research Fellow, or Postdoc. For courses in first-cycle, Assistant Lecturer (including Adjunct and Visiting Assistant Lecturer) can also be appointed as examiner in addition to those listed for second-cycle courses. In exceptional

cases, a Part-time Lecturer can also be appointed as an examiner at both first- and second cycle, see Delegation of authority for the Board of Faculty of Science and Engineering.

Forms of examination

Principles for examination

Written and oral examinations and digital and computer-based examinations are held at least three times a year: once immediately after the end of the course, once in August, and once (usually) in one of the re-examination periods. Examinations held at other times are to follow a decision of the faculty programme board.

Principles for examination scheduling for courses that follow the study periods:

- courses given in VT1 are examined for the first time in March, with re-examination in June and August
- courses given in VT2 are examined for the first time in May, with re-examination in August and January
- courses given in HT1 are examined for the first time in October, with re-examination in January and August
- courses given in HT2 are examined for the first time in January, with re-examination in March and in August.

The examination schedule is based on the structure of timetable modules, but there may be deviations from this, mainly in the case of courses that are studied and examined for several programmes and in lower grades (i.e. 1 and 2).

Examinations for courses that the faculty programme board has decided are to be held in alternate years are held three times during the school year in which the course is given according to the principles stated above.

Examinations for courses that are cancelled or rescheduled such that they are not given in one or several years are held three times during the year that immediately follows the course, with examination scheduling that corresponds to the scheduling that was in force before the course was cancelled or rescheduled.

When a course, or a written or oral examination (TEN, DIT, DAT, MUN), is given for the last time, the regular examination and two re-examinations will be offered. Thereafter, examinations are phased out by offering three examinations during the following academic year at the same times as the examinations in any substitute course. The exception is courses given in the period HT1, where the three examination occasions are January, March and August. If there is no substitute course, three examinations will be offered during re-examination periods during the following academic year. Other examination times are decided by the faculty programme board. In all cases above, the examination is also offered one more time during the academic year after the following, unless the faculty programme board decides otherwise. In total, 6 re-examinations are offered, of which 2 are regular re-examinations. In the examination registration system, the examinations given for the penultimate time and the last time are denoted.

If a course is given during several periods of the year (for programmes, or on different occasions for different programmes) the faculty programme board or boards determine together the scheduling and frequency of re-examination occasions.

For single subject courses, written and oral examinations can be held at other times.

Retakes of other forms of examination

Regulations concerning retakes of other forms of examination than written examinations and digital and computer-based examinations are given in the LiU guidelines for examinations and examiners, Dnr LiU-2023-00379 (http://styrdokument.liu.se/Regelsamling/VisaBeslut/917592).

In principle, other examination forms should be handled in the same way as a written examination when they are given for the last time. However, the times for the examination may vary based on the nature of the element compared to the times for the written examinations.

Course closure

For Decision on Routines for Administration of the Discontinuation of Educational Programs, Freestanding Courses and Courses in Programs, see Dnr LiU-2021-04782 (https://styrdokument.liu.se/Regelsamling/VisaBeslut/1156410). After a decision on closure and after the end of the discontinuation period, the students are referred to a replacement course (or similar) according to information in the course syllabus or programme syllabus. If a student has passed some part/parts of a closed program course but not all, and there is an at least partially replacing course, an assessment of crediting can be made. For questions about the crediting of course components, contact the Study councellors.

Registration for examination

In order to take an written, digital or computer-based examination, registration in advance is mandatory, see decision in the university's rule book Dnr LiU-2020-04559 (https://styrdokument.liu.se/Regelsamling/VisaBeslut/622682). An unregistered student can thus not be offered a place. The registration is done by the student at the Student Portal or in the LiU-app during the registration period. The registration period opens 30 days before the date of the examination and closes 10 days before the date of the examination. Candidates are informed of the location of the examination by email, four days in advance.

Code of conduct for students during examinations

Details are given in a decision in the university's rule book, Dnr LiU-2020-04559 (http://styrdokument.liu.se/Regelsamling/VisaBeslut/622682).

Retakes for higher grade

Students at the Faculty of Science and Engineering at LiU have the right to retake written examinations and digital and computer-based examinations in an attempt

to achieve a higher grade. This is valid for all examination components with code “TEN”, “DIT” and "DAT". The same right may not be exercised for other examination components, unless otherwise specified in the course syllabus.

A retake is not possible on courses that are included in an issued degree diploma.

Grades

The grades that are preferably to be used are Fail (U), Pass (3), Pass not without distinction (4) and Pass with distinction (5).

- Grades U, 3, 4, 5 are to be awarded for courses that have written or digital examinations.
- Grades Fail (U) and Pass (G) may be awarded for courses with a large degree of practical components such as laboratory work, project work and group work.
- Grades Fail (U) and Pass (G) are to be used for degree projects and other independent work.

Examination components

The following examination components and associated module codes are used at the Faculty of Science and Engineering:

- Grades U, 3, 4, 5 are to be awarded for written examinations (TEN) and digital examinations (DIT).
- Examination components for which the grades Fail (U) and Pass (G) may be awarded are laboratory work (LAB), project work (PRA), preparatory written examination (KTR), digital preparatory written examination (DIK), oral examination (MUN), computer-based examination in a computer lab (DAT), digital preparatory written examination in a computer lab (DAK), home assignment (HEM), and assignment (UPG).
- Students receive grades either Fail (U) or Pass (G) for other examination components in which the examination criteria are satisfied principally through active attendance such as tutorial group (BAS) or examination item (MOM).
- Grades Fail (U) and Pass (G) are to be used for the examination components Opposition (OPPO) and Attendance at thesis presentation (AUSK) (i.e. part of the degree project).

In general, the following applies:

- Mandatory course components must be scored and given a module code.
- Examination components that are not scored, cannot be mandatory. Hence, it is voluntary to participate in these examinations, and the voluntariness must be clearly stated. Additionally, if there are any associated conditions to the examination component, these must be clearly stated as well.
- For courses with more than one examination component with grades U,3,4,5, it shall be clearly stated how the final grade is weighted.

For mandatory components, the following applies (in accordance with the LiU Guidelines for education and examination for first-cycle and second-cycle

education at Linköping University, Dnr LiU-2023-00379 http://styrdokument.liu.se/Regelsamling/VisaBeslut/917592):

- If special circumstances prevail, and if it is possible with consideration of the nature of the compulsory component, the examiner may decide to replace the compulsory component with another equivalent component.

For possibilities to alternative forms of examinations, the following applies (in accordance with the LiU Guidelines for education and examination for first-cycle and second-cycle education at Linköping University, Dnr LiU-2023-00379 http://styrdokument.liu.se/Regelsamling/VisaBeslut/917592):

- If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it.
- If the coordinator has recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.
- An examiner may also decide that an adapted examination or alternative form of examination if the examiner assessed that special circumstances prevail, and the examiner assesses that it is possible while maintaing the objectives of the course.

Reporting of examination results

The examination results for a student are reported at the relevant department.

Structure and organisation of study programmes

The contents and design of the programmes are to be continuously revised such that new knowledge is integrated into courses and specialisations. Within one programme, several study specialisations or profiles may be available. The identities of the study specialisations or profiles and the regulations governing how these may be selected are given in the syllabus and curriculum for the particular field of study and programmes.

The structure and organisation of the programmes are to follow specified criteria that are summarised in the syllabus for each programme.

- The syllabus defines the aims of the study programme.
- The curriculum, which constitutes one part of the syllabus for the field of study, gives details of the terms in which the various courses have been timetabled, and their scheduling through the academic year.
- The course syllabus specifies, among other things, the aim and contents of the course, and the prior knowledge that a student must have, in addition to the admission requirements for the programme, in order to be able to benefit from the course.

Qualification requirements

The qualification requirements specified in the Higher Education Ordinance 2007 apply to students admitted after 1 July 2007. For students admitted earlier than 2007 and has completed components of a programme after 1 July 2007 has the right to be assessed with respect to the qualification requirements specified by the Higher Education Ordinance 2007. Regardless of the year of admission, local regulations laid down by the faculty board and university board also apply, see "Föreskrifter och allmänna råd om examensbenämningar och preciserade krav för generella examina på grundnivå och avancerad nivå", (https://styrdokument.liu.se/Regelsamling/VisaBeslut/622693).

Qualifications within a study programme

Qualification requirements that are specific to a study programme are given in the syllabus for that programme.

Admission requirements and matriculation and postponement of matriculation

A person who has been accepted for a study programme is to start their studies (matriculate) in the term that is specified in the decision about admission. The date and location of the matriculation procedure will be communicated to those admitted. For those admitted to term 1, the matriculation is mandatory.

Regulations concerning admission requirements, matriculation and postponement of matriculation have been laid down in the admission regulations for Linköping University (http://styrdokument.liu.se/Regelsamling/VisaBeslut/622645).

Admission to a later part of a programme

Admission to a later part of a study programme is used here to refer to admission to term 2 or later and with the purpose of completing the programme and taking a degree. Admission to a later part of a programme may take place only if sufficient resources and space on the programme are available. Furthermore, the applicant must satisfy the entry requirements for the relevant term of the programme, as specified in Dnr LiU-2022-00174 (https://styrdokument.liu.se/Regelsamling/VisaBeslut/1179685).

Interruption in studies

Notification of an interruption in studies is to be made by the student through a web form Forms. If such a notification is not made and if the student does not do a course registration during the first term during which the interruption is to take place, the interruption will be considered to be a withdrawal. An interruption in studies must cover a complete term, and notification of interruptions can be given for a maximum of two consecutive terms. Notification of resumption of studies is done by the student and is to take place at the course registration for the term that follows the interruption. The student then has a guaranteed place at the program,

provided that the program and courses are still offered.

A student who is taking an interruption in studies may during this period retake examinations. The student is responsible that registration for courses is carried out at the correct times in preparation for the resumption of studies.

Withdrawal from a study programme

A student who wishes to withdraw from a study programme must notify the study guidance counsellor. A student who leaves the studies without giving notification of an interruption in study and who fails to register on a course for the immediately subsequent term is considered to have withdrawn. A student who has withdrawn may return to the study programme if a vacancy is available.

Courses within a study programme

The curriculum for the various years of a study programme specify which courses are mandatory (m), elective (e) and voluntary (v). The course specified as voluntary (labelled with "v") in the programme syllabus are assessed solely as voluntary courses, and credits from these may not contribute to the requirements for a degree.

Take courses from another study programme or third-cycle courses

Students taking a master's programme in engineering can apply to take courses given in Term 7 and later terms of the programme from all engineering master's programmes. Admission to courses at Term 7 or higher requires the possession of at least 150 credits within the programme to which the student has been admitted.

Admission to third-cycle courses requires studies at Master's level, i.e. year 4-5 or admitted to a Master's programme. Information can be obtained from the relevant director of advanced studies.

Admission is granted to the extent that resources allow, provided that places are available on the course. When selecting a course from another programme or third-cycle courses, the admission requirements specified in the course syllabus should be satisfied.

For credit transfer of the courses, see credit transfer below.

Credit transfer of courses outside the programme curriculum

To include courses that are not specified in the program curriculum in a degree, the student need to apply to and be granted this from the faculty programme board. The credits must be completed at the time of application.

Registration for programme courses

Registration for courses that are given as part of a study programme must be made during the specified period, which has been preliminarily set to 1-10 April

for the autumn term, and 1-10 October for the spring term. Information about course registration is published on the Study councellors webpages or in programme rooms, sent to students by email, and disseminated at scheduled information meetings.

Changes in the program curriculum

In case of changes in the program curriculum, study planning in consultation with the study guidance counsellor may be required in individual cases, see section Study planning.

Study planning

Students who require support in planning their continued studies can contact the study guidance counsellor of the programme. Study planning involves the student and the study guidance counsellor together drawing up an individual plan for studies during the subsequent term. The individual plan may allow the student to deviate from the general curriculum.

Completed first-cycle courses are a precondition for successful studies at more advanced levels. For this reason, study planning is based on giving priority to courses from earlier years of study that have not been completed. If further capacity is available, other courses can be planned to achieve full-time studies, provided that suitable prerequisites are available.

Study planning takes place on a regular basis if the student:

- does not satisfy the requirements for progression to later terms. In order for a student to be able to participate in courses from later years in such cases, a decision of exemption is required.
- does not satisfy the requirements for starting a degree project.

Other situations in which study planning may be required:

- A student has fallen behind during the early part of a study programme and has failed to complete several courses.
- A student has not satisfied the entry requirements for a degree project before term 6 of an engineering degree.
- Changes in the program curriculum.
- A student has applied for admission to a later part of a programme.
- Studies have been carried out abroad.
- A study programme is to be resumed after an interruption.

In these cases the study guidance counsellor supports the student in planning the continued studies, also in situations in which the student can register for the relevant courses without the need for a special decision for the continued studies.

Part of education abroad

Students can exchange study at LiTH for study at an institute of higher education

abroad, and/or work on a degree project abroad.

In the event that study (courses) at LiTH are exchanged for study abroad, the faculty programme director is responsible for a decision about a preliminary individual study plan, which is to be drawn up in advance. After the exchange, the student apply to credit completed courses from the exchange into their degree. The guideline for credit assessment in an exchange is that the courses should be in line with the program's orientation.

Regulations for entry requirements, ranking and nomination for study abroad through LiTH's exchange agreements, see Regulation of exchange studies (https://styrdokument.liu.se/Regelsamling/VisaBeslut/622362). For the compulsory study abroad period within Ii (Industrial Engineering and Management – International) and Yi (Applied Physics and Electrical Engineering – International), see specific regulation (https://styrdokument.liu.se/Regelsamling/VisaBeslut/755476).