

#### Study Board of Energy

Department of Energy Technology
Date of document: 27-11-2020
Document responsible: Study Secretariat

# **Project and Course Examination**

Rules for Conducting Project and Course Exams at the Department of Energy Technology

## Purpose and Scope

This document is a set of guidelines for conducting and participating in project and course exams under the Department of Energy Technology. It should be noted that these rules and guidelines are drawn up on the basis of the rules in the <a href="Examination Policies and Procedures">Examination Policies and Procedures</a> and the <a href="Joint Programme Regulations">Joint Programme Regulations</a>, and should be seen as a compilation of the existing rules as well as practical advice for how lecturers should organise exams, and how students should conduct themselves at the exams.

The motivation for this is that in recent years there have been examples of great variation in conducting exams and in the criteria for passing exams in different courses, and confusion on the part of the students about the rules that apply in the exams.

The Department of Energy Technology recommends that these guidelines should be read through in the planning and execution of each exam so that they are fresh in mind.

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## **Project Exams**

#### Internal co-examiner on project exams

In addition to the examiner, who has served as supervisor, an internal co-examiner is designated. The internal co-examiner is designated from among assistant professors, associate professors and professors. The following requires special permission by the chair of the study board to be internal co-examiners: Part-time lecturers, PhD students, teaching assistants and research assistants.

PhD students and postdocs, who co-supervise student projects, can be present at the exam as observers with the purpose of learning the examination procedure. This means that questions asked by PhD students and postdocs will be disregarded at the assessment phase. Furthermore, PhD students and postdocs cannot take an active part in the assessment, but are permitted to observe the procedure.

#### **Course Exams**

The exam format is in principle stipulated in the curriculum. When it is possible to choose between different exam formats in the curriculum (e.g. oral or written), the exam format must be announced in Moodle no later than two weeks after the start of the course (cf. Examination Policies and Procedures). In all cases, the exam syllabus must be available in Moodle no later than the third last lecture.

The following options are available for conducting written exams:

#### A. Written exam

- is usually scheduled after the project report is handed in
- the result must be provided and the assessment communicated to the students in accordance with the provisions of section 7.2. of the Examination Policies and Procedures.

### B. Oral exam

- is usually scheduled after the project report is handed in
- the assessment is provided immediately after the exam is held
- C. Week-long assignments and the like, including mini project and portfolio
  - the exam result must be provided and the assessment communicated to the students in accordance with the provisions of section 7.2. of the Examination Policies and Procedures.
  - the last part of the exam may be placed during the semester.
- D. Assessment during the class participation/ongoing evaluation
  - the exam result must be provided and the assessment communicated to the students in accordance with the provisions of section 7.2. of the Examination Policies and Procedures.
  - the last part of the exam may be placed during the semester.

If there is a wish to hold exam type A or B during the semester, the lecturer must apply to the Study Board for an exemption; however, the course exams on the 6th semester are always held in April. The exception from this is the Bachelor's study programme in Applied Industrial Electronics.

The dates of the exam and the re-examination are to be announced by 15 October for the autumn semester and 15 March for the spring semester at the latest. Information on permitted aids is provided together with the exam dates.



For all exam formats, the lecturer must make certain that the syllabus and the number of exam questions ensure that the learning objectives can be evaluated.

Furthermore, it must be ensured that the student's work effort in terms of course participation and the exam reasonably complies with the expected work load (cf. the curriculum) (for one student 1 ECTS credit means an estimated workload of 30 hours, which includes lectures, exercises, preparation for each lecture, etc. plus preparation for the exam).

#### A. Written Exam

If the exam is written, the assignment is to be answered in a 4-5 hour exam (stipulated in advance). When designing the exam assignment, it is important to aim at

- reflecting as much of the course syllabus as possible (cf. the course description) in order to determine whether the students have a reasonable overview of the material
- re-using a minimum of exam assignments from previous years. It is recommended to avoid assignments where the only difference, compared to previous similar assignments, is the change of a few constants
- making the assignments independent of each other in order to avoid that some are impossible to solve if the student has not been able to solve one or more of the previous assignment(s)
- having the scope of the exam reflect the complexity and scope of the course
- requiring that the exam assignment be submitted to the study secretary no later than 14 days prior to the exam.

Prior to submission to the study secretary, the exam questions must be presented to the co-examiner for comments. In the case of assessment by internal co-examiners, the exam questions must be looked through by an academic peer. The following information must appear in the exam questions:

Written by: NN Reviewed by: NN

#### Evaluation of the written exam

When assessing an exam paper, it should be the method that counts, to a considerable extent, rather than the specific result. This means that the exam paper does not fully count, even though the result is "correct," if the method used is not specified in the paper. This also means that an exam paper can nearly fully count in the assessment, even though the individual results are "incorrect," if the appropriate methods and theories are used to solve the problem.

Because of the substantial difference between academic standards in the different courses, it is the lecturer's responsibility to set a reasonable level for a passing mark.

The lecturer may impose restrictions on the use of aids, including a laptop, according to the Examination Policies and Procedures, section 3.3. The restrictions are determined when deciding the exam format.

Permitted aids are specified along with the exam date. The examinee brings the permitted aids.



#### Regulations and aids for written exams

- Students must present a valid student ID or photo ID.
- Students must be seated before the assignments are handed out. Examinees must only write their student number (not name) on the exam paper on all pages. For the First Year of Study, however, examinees must write their name on all pages.
- Students are requested to arrive 30 minutes before the exam is to begin. If a student arrives after the exam has begun, the head of studies or chair of the study board must be contacted to decide whether the delay is reasonable. Students will not be permitted entry to the examination room later than 30 minutes after the exam has begun.
- Students are not permitted to leave the examination room earlier than 30 minutes after the exam has begun, and they are not permitted to leave the examination room during the last 30 minutes of the exam.
- If the student has to abandon the exam due to illness, the exam paper is handed in with information about whether the student wants the paper evaluated or not. If the student does not want the paper evaluated, a doctor's certificate dated the same date must be submitted to the study secretary.
- If the student hands in the exam paper before the end of the exam, the wording and the rough drafts are not to be removed from the examination room. The student must hand in these papers to the invigilator.
- If the examinee leaves the exam without writing the assignment, a blank page must be handed in with the student information filled in.
- During written (and oral) exams the Study Board of Energy usually allows the students participating to bring and use all kinds of (engineering) aids, including books, notes, and advanced calculators. In this connection, however, it must be emphasized that:
  - All exams are individual, and that ANY KIND OF CONVERSATION AND OTHER ELECTRONIC COMMUNICATION BETWEEN PARTICIPATING STUDENTS AND BETWEEN PARTICIPATING STUDENTS AND OTHER PERSONS IS FORBIDDEN!
- Aids must be noiseless. Laptops may be used if they do not make any kind of noise, and if the screen
  is placed in a position so that no other student taking the exam is able to read the screen. If the
  student wants to connect to the power supply, he or she must bring an extension cord and power
  strip. All equipment must be connected in due time before the exam starts and cannot be removed
  before the exam is finished.
- The exam papers of written exams must be easy to read; otherwise the exam papers will not be assessed
- If the student wishes to print out the paper from his or her own laptop, the student must bring a printer in order to print out the paper. Printing out documents is only permitted when the exam time has ended.
- When making the exam assignment, the lecturer must be aware of the fact that the students have
  very different calculators (in terms of function and storage capacity, etc.). It is assumed, however,
  that all students have a calculator with trigonometric and logarithmic functions, storage capacity,
  etc. Students must be able to answer the questions without a laptop in the time available for the
  exam. However, the Study Board of Energy can grant an exemption from this upon application.
- The use of headphones is not permitted. In special cases, the Study Board of Energy can grant an exemption from this upon application.
- Smoking is not permitted at Campus Esbjerg. Smoking should be avoided during written exams at Campus Aalborg.



## Digital Exam (a written exam at the university under supervision)

Students bring their own laptops to the exam. The exam must be designed such that students can answer the assignment electronically. To counteract cheating, students must install *exam monitor* on their laptops.

Not all aids are permitted; permitted aids such as programs, e-books, notes, assignments, or similar, in electronic format are announced at the same time as the exam date.

Any use of electronic aids other than those permitted is considered cheating.

#### B. Oral Exam

Two options are available for conducting oral exams:

- Before the exam, the examiner prepares a number of questions/topics (at least 4 different ones) that cover the learning objectives of the course. These may be, for example, subtopics within the syllabus, specific lectures or assignments from the course. The questions/topics are presented to the students no later than 14 days prior to the exam so that they have time to prepare for the exam.
- The examiner only sets the syllabus. A number of questions are prepared that again reasonably cover the contents of the course, as mentioned above. The students do not see the questions in advance, but the questions must be prepared beforehand and used during the exam.

## Thus, it is not permitted to hold an oral exam without written exam questions being prepared in advance.

At the exam, an element of randomness must be ensured in selecting the topics, which each student will be examined in; for example, the students may draw lots covering the topics. With courses each student is expected to be examined for 10-15 minutes. This means that when planning the exam, 15-20 minutes should be allocated per student, including extra time for the assessment, announcement of the mark, calling the next student in, etc. Students can be given preparation time between the drawing of lots and the exam itself. If preparation time is given, this should be reflected in a more thorough/prolonged exam (at least 15 minutes and maximum 30 minutes per student). Please be aware that all students must have equal preparation time.

#### Evaluation of the oral exam

Because of the substantial difference between academic standards in the different courses, it is again up to the lecturer to set a reasonable level for a passing mark. Emphasis is given to the student's ability to demonstrate a reasonable overview of the topic and/or syllabus concerned. Emphasis is not given to rote learning but to insight and the ability to apply the theories and methods presented during the course. An extra examiner must always be present during an oral exam. Be aware that the extra examiner must be qualified to teach the subject. The extra examiner is permitted to have taken part in the course as a second lecturer or assistant teacher. Both of the examiners must be at the assistant professor level or above.

Permitted/necessary aids for oral exams must also be announced at the same time as the exam date. The examinee brings the permitted/necessary aids.

## C. Week-long Assignments and the Like (including Mini Project and Portfolios)

This exam format implies that the student is given some assignments or some material in the form of a problem posed, a larger assignment, a case, a scientific paper or the like, at a set time before the assessment or the exam. The length of the preparation time is stipulated in connection with the selection of the exam format. The exam begins when the student is given the assignment or the material.



It can be stipulated that the student must hand in a written paper, for example in the form of a mini project or a portfolio, based on the material given. In this case, late submission results in the student having used an exam attempt, even if it is only one of several weekly assignments for that course. However, if the student is unable to hand in a paper due to illness, he or she may apply to the Study Board of Energy for an exemption to hand in the paper at a later time. Exemptions are usually only granted in the case of illness, and this requires a doctor's certificate.

The final part of the exam can, for instance, consist of:

- Individual assessment of the written exam paper(s).
- Oral examination based on the written exam paper(s), or the like, handed in by the students (section 4.2 of the Examination Policies and Procedures) can be taken as a starting point regarding exams in project modules. In this case, the paper(s) must be produced by a maximum of seven students. The scope of mini projects must conform to the time available in the course. During the exam of mini projects, it is suggested that the students each present parts of the mini project. If the examiner or co-examiner would like to have parts of the material elaborated, they may ask questions during and after the presentation. They may, of course, ask questions on the entire course syllabus and not only on the mini project. Since the students' choice of presentation is not random, it is the responsibility of both the examiner and co-examiner to ensure that each student has a sufficient overview of the entire syllabus.
- Oral examination based on one or more questions that are related to the material given.

### Evaluation of week-long assignments or the like

As with oral exams, there can be substantial difference between academic standards in the different courses; therefore it is again up to the lecturer to set a reasonable level for a passing mark. Emphasis is given to the student's ability to demonstrate a reasonable overview of the topic and/or syllabus concerned. Emphasis is not given to rote learning but to insight and the ability to apply the theories and methods presented during the course. An extra examiner must always be present during an oral exam. Be aware that the co-examiner must be qualified to teach the subject. The co-examiner is permitted to have taken part in the course as a second lecturer or assistant teacher. Both of the examiners must be at the assistant professor level or above.

Permitted/necessary aids for assessment of week-long assignments, or the like, must be indicated on the timetable along with the examination date(s)/submission dates. The lecturer informs the study secretary about this at the beginning of the semester. The examinee brings the permitted aids.

#### D. Class Participation/Ongoing Evaluation

This exam format always requires course attendance of minimum 80 percent, and it is possible to fail solely due to the lack of attendance. The reason for this is that attendance and the interaction with the lecturer and the other students is an integrated and essential part of the course. Moreover, an additional form of assessment must be used as to whether and to what extent the student's qualifications comply with the course objectives. This assessment can be done, for instance, by having the students hand in notes, work sheets, answers, and by questioning the students during exercises, etc. At the start of the course, the lecturer must inform the students as to how the evaluation of the course will proceed, i.e. which methods the lecturer will use and to what extent.



## Evaluation of the basis for assessment and the like

In addition to checking class participation, the assessment is based on the individual, written answers, oral performances, exercises or tests connected to the lectures. If assessment is to be based on written answers, a submission deadline is stipulated. If submission does not take place on time, the student has used an exam attempt. However, if the student is unable to hand in answers due to illness, he or she may apply to the Study Board of Energy for an exemption to hand in the answers at a later time. Normally, exemptions are only granted in the case of illness, and this requires a doctor's certificate.

If the student does not pass the exam, the teacher is encouraged to inform the student of the reason for this and what material the student should read up on before taking the re-examination.

## **Evaluation of Cross-Disciplinary Course Modules**

Cross-disciplinary course modules are course modules that include two or more fundamentally different subjects.

Regarding the exam for cross-disciplinary course modules, the mark must be based on a joint assessment of the subjects. This is done by assigning the percentage to each assignment in each subject area (all assignments for all sub-elements = 100%). Based on this, a total percentage is calculated for how much of the course the student has passed, and from this a total mark for the course is calculated.

If this rule is to be deviated from, the lecturer must send an application to the Study Board of Energy prior to a study board meeting, so that the student can be informed of the decision no later than four weeks before the exam is to be held. An exemption is also valid for the re-examination.

If the mark is "pass/fail", all subjects must be passed in order for the course module to be passed.

Only one total mark appears on the diploma, and if the student fails one of the subjects, then the entire course is failed. Re-examination thus includes **all** subjects in the course, if any are failed. Examination in a cross-disciplinary course module is held as one overall examination.

It is **not** possible to transfer credits for parts of cross-disciplinary courses.

#### Illness

For all exams, in the event of illness, the student must notify the study secretary on the day of the exam and submit a doctor's certificate or other relevant documentation from i.e. a hospital or Sundhed.dk, no later than two weeks after the exam has been held.

The student must have consulted the doctor on the day of the exam and any expenses are borne by the student. A re-examination due to illness will be held under the conditions that apply for re-examinations.

#### Rules for Re-examinations

The date for the first re-examination must be stipulated no later than two weeks in advance and must be held in August or February, respectively, after the ordinary exam (cf. Examination Policies and Procedures section 1.1.).



Re-examination takes place according to the same procedures as the ordinary exam, except for the fact that assessment during the course cannot be used as an exam format in a re-examination.

It is not a requirement that the exam formats for the re-examination and ordinary exam are the same. The lecturer informs the study secretary about the permitted aids and the format of the re-examination no later than two weeks prior to the re-examination.

Special rules apply for the re-examination of the project module as described in the Examination Policies and Procedures, appendix 4.

## Rules for Specification of the Exam Language

If an exam is held solely in English, the examiner must mark the exam language as 'English' in Digital Exam.

If a project report, mini project or the like is handed in written in English but the oral exam is held in Danish, the exam language must be marked as 'Danish'.

Reports on the 5th and 6th semesters may be written in Danish in case no international students take part in the writing of the report. Students on the 5th and 6th semesters may request to be examined in English, if they need to be able to document a certain number of ECTS points to be eligible for admission at a foreign university at the third semester of the Master's study programme.

All reports in courses and project modules at the Master's study programme must be written in English and oral examinations must be held in English.

## Announcement of the Assessment

The result of the exam must be disclosed, i.e., communicated to the student.

Unless the assessment is told to the student immediately after the exam, the date for when the announcement will be disclosed must be communicated at the same time as the announcement of the date the exam is to be held (cf. Examination Policies and procedures section 1.1.).

The announcement date of the assessment must lie within the following timelines:

- For oral exams the assessment is given immediately after the exam is held
- For written exams, including Digital Exams, the assessment must be given no later than 15 working days after the exam is held
- For ongoing evaluation the assessment must be given no later than 15 working days after the end
  of the course. If a mini project report is handed in, the assessment must be given no later than 15
  working days after the submission date. The assessment is made individually. Therefore, the student
  has the right to receive an assessment without the presence of other students or audience.

Both with oral and written exams the student receives a message through "STADS Self-Service" when the assessment has been disclosed.



## **Exam Complaint**

The student may file an exam complaint within two weeks of the announcement of the exam result. The exam complaint is to be sent to Educational Law and Secretariat <a href="mailto:sl-klager@adm.aau.dk">sl-klager@adm.aau.dk</a>.

Read more at https://www.en.aau.dk/education/student-guidance/rules/complaints/.

## **Exemptions**

An exemption from the ordinary rules may only be granted if special circumstances are present, i.e. illness. Exemptions from current examination rules can be applied for with the Study Board of Energy via the online application form on the Department's <u>Study Web</u>.