Supplementary Regulations for programmes in the natural sciences at NTNU

This English translation is for information only. If there is a difference in meaning between the Norwegian text and this English translation, the Norwegian text is the authoritative version.

SR stands for Supplementary Regulations.

The Supplementary Regulations to the Academic Regulations for NTNU for programmes of study in the natural sciences of 15 August 2017 replace the Supplementary Regulations in effect from 1 August 15. The Supplementary Regulations for the programmes in the natural sciences were adopted in June 2017 by the Deans of the Faculty of Information Technology and Electrical Engineering, the Faculty of Engineering and the Faculty of Natural Sciences.

SR Section 1-1 Scope

The Supplementary Regulations to the Academic Regulations for NTNU for programmes of study in the natural sciences at the Faculty of Information Technology and Electrical Engineering, the Faculty of Engineering and the Faculty of Natural Sciences apply to bachelor's programmes and master's programmes including international master's programmes, in addition to one-year programmes and programmes of individual courses established for use in such programmes, for which the three faculties are responsible.

The natural science programmes are disciplinary studies in the subject areas of biology, physics, geology, informatics, chemistry and mathematical sciences, as well as interdisciplinary programmes of study based on these disciplines. These programmes are not governed by national curriculum regulations, except for the five-year master's programmes in teacher education (lektorutdanning) in the natural sciences.

SR Section 1-2 Definitions

In these Supplementary Regulations, these terms are used as follows:

Specialized syllabus selected by the student:

Course at second/graduate degree level / cycle 2 (master's level) that can be used in master's programmes where the programme description allows the use of such courses.

Final examination:

A collective term that includes written examinations with invigilation or oral examinations. The final examination is generally the concluding assessment of the student in a course.

SR Section 2-9 Affiliation requirements and prerequisites for award of new degrees

For recognition of education previously included in the basis for a degree or as part of a degree or professional education programme, the student must have completed at least 90 new credits in addition, in order to obtain a new degree in the natural sciences. This does not apply to the five-year teacher education programme in the natural sciences.

SR Section 3-4 Leave of absence (former SR Section 7.1)

- Master's degree students who have completed courses during a leave of absence can apply to the
 Faculty to include these courses in their individual education plan. Courses that are completed
 during the leave, and that are included in the individual education plan or where an application to
 include them has been submitted, will result in an adjustment of the time frame for the programme
 of study; see SR Section 4-3.
- 2. Master's degree students are not entitled to receive academic supervision during the leave period.
- 3. For leave of absence longer than one year in the master's programme for 60-credit theses and longer than half a year in the master's degree programme for 30-credit theses, the possibility of giving a new master's thesis may be considered.

SR Section 4-2 Specification of programme descriptions and course descriptions

1. Transitional arrangements: If programme descriptions are changed in a way that may affect the progress of students who have already been admitted, transitional arrangements must be defined to ensure that these students are not delayed. These are specified in the programme descriptions.

2. Academic level of courses:

- a. Special requirements must be set for the academic level of courses to be included in 2-year master's programmes and the last two years of 5-year integrated master's programmes; see the Norwegian Qualifications Framework for Lifelong Learning (NQF) cycle 2. The master's degree must consist of courses at second-degree level (cycle 2 in NQF) worth at least 30 credits in addition to "Experts in Teamwork". Basic courses at bachelor's degree level (cycle 1 in the NQF) may not be included. Advanced courses at bachelor's degree level (cycle 1 in the NQF) may only be included when the Faculty decides on this. Any provisions about this must be stated in the study programme description.
- b. In the five-year teacher education programme in the natural sciences, the Faculty itself grants exemptions to the rule that courses equivalent to at least 30 credits must be at master's level (cycle 2 in the NQF). Any provisions about this must be stated in the study programme description.
- c. The courses included in the master's degree must have clear academic relevance to the master's thesis and the programme's academic profile.

3. Specialized syllabus selected by the student:

a. The programme description for each programme of study specifies whether a specialized syllabus selected by the student must or can be included in the master's degree.

- b. A specialized syllabus worth up to 15 credits can be created for individual students when it is difficult to find relevant courses that are specified in the programme description. This syllabus must be linked to existing course codes reserved for this use.
- c. The specialized syllabus must be worth either 7.5 credits or 15 credits, and may consist of one or two courses. A specialized syllabus established in the programme description which is worth 10 credits may be permitted for educational collaboration with external institutions (including UNIS, the University Centre in Svalbard) to achieve a master's degree totalling 120 credits. The Rector may grant exemption from 7.5 credits or a multiple of this; see the Board decision on the size of courses, S-sak 89/16 dated 7 December 2016.
- d. A specialized syllabus may be replaced by ordinary courses included in the programme description when this is stated in the programme description. Examinations then take place in accordance with the assessment procedure described in the course description.

SR Section 4-3 Individual education plan for the master's degree programme

- 1. Master's degree agreement: A master's degree agreement must be entered into between the Department responsible for the master's thesis and the student. The Faculty itself may grant exemptions from this. The master's degree agreement forms the basis for the agreement on the individual education plan between the Faculty and the student. The agreement includes an implementation plan for the master's degree programme.
- 2. Time limit on the use of courses in the master's degree:
 - a. To include a course in a master's degree, fewer than 12 semesters must have elapsed, calculated from and including the semester after the examination in the course has been completed. This also includes the last two years of study in a five-year master's programme in the natural sciences.
 - b. If the time frame is exceeded, an academic evaluation of the course in relation to the current course description must be done. Factors to be considered include whether changes have been made in the academic content, methods and intended learning outcomes of the course, as well as the development of the discipline. If there have been changes, the course is regarded as out of date. If no major changes have taken place, the course can still be included in the degree.
- 3. Start of master's theses in five-year master's programmes: Examinations in all compulsory and elective courses included in the student's approved individual education plan for the first three years of the programme must have been passed before commencement of the master's thesis.
- 4. Academic requirements for the master's thesis:
 - a. Several smaller pieces of work may be accepted as a master's thesis, provided that the content of these works forms a whole.
 - b. The master's thesis is normally individual, and all students who are admitted to the master's degree programme are entitled to an individual thesis.
- **5. Scope of the master's thesis:** The scope of the master's thesis must normally be 60 credits. Master's theses with a scope of 30 or 45 credits may be used where appropriate. This is specified in the programme description.
- 6. Supervision and use of resources during the master's programme:
 - a. All master's degree students must have a responsible supervisor. The responsible supervisor must be employed in a permanent academic position or adjunct position at the Department responsible for the master's thesis. The master's thesis may be written under

- academic supervision entirely or partly at another Department/Faculty or in an external company/institution by agreement with the Faculty to which the student belongs.
- b. The Faculty may enter into an agreement that academic staff in a permanent position at another unit at NTNU (such as the NTNU University Museum) may have primary responsibility for supervision of master's students.
- c. The master's degree agreement governs duties and rights between the student, supervisor and Department. Resources that have been made available in the relevant master's programme may be withdrawn from students who do not comply with their obligations related to completion of the master's thesis. The Faculty, or party authorized by the Faculty, decides on the withdrawal of resources based on the recommendation of the responsible Department.

7. Time frame for the master's degree programme:

- a. Work on the master's thesis has a time limit. The nominal length of study for a full-time, two-year master's programme is four semesters, calculated from the semester to which admission to the master's degree programme applies. The date by which the master's degree programme must be completed must be specified in the agreement on the master's degree programme/individual education plan entered into with the student. Before this date, all examinations included in the master's degree, except for any specialized syllabus selected by the student, must have been passed.
- b. The submission deadline for students admitted to a master's programme in the autumn semester is 15 May of the following year academic year for students at the Faculty of Natural Sciences (NV) and the Faculty of Engineering (IV) and 1 June of the following academic year for students at the Faculty of Information and Electrical Engineering (IE). For students admitted to a master's programme in the spring semester, the deadline for submission is 15 December of the following academic year.
- **8.** Adjustment of time frame in the master's degree programme (former SR Section 20.3-6): If the student is granted specific recognition of courses in the master's degree, the nominal period of two years for completing the master's programme will be adjusted. The deadline for submission of the master's thesis will be adjusted as follows:

Scope of the course:	Submission deadline for students admitted in autumn:	Submission deadline for students admitted in spring:
Courses with a scope of 20.5-30 credits	15 December	15 May (NV and IV)/1 June (IE)
Courses with a scope of 30.5-45 credits	15 September	15 February
Courses with a scope of 45.5-60 credits	15 May (NV and IV)/1 June (IE)	15 December

9. Delayed submission of master's theses:

a. If the master's thesis cannot be submitted by the deadline, it is possible to apply for an extension. For master's theses of 60 or 45 credits, it is possible to apply for an extension of up to 3 months when there is a valid reason. For master's theses of 30 credits, it is possible to apply an extension of up to 6 weeks when there is a valid reason.

- b. If the master's thesis has not been submitted after the extended deadline, an application must be submitted for a further extension, or the candidate will be regarded as having failed (see SR Section 5-9). If a new application for extension is not granted, the candidate is regarded as having failed.
- c. It is only possible to apply for an extension twice. This does not apply if illness is the reason.
- d. Practical aspects at a university outside Norway, such as the structure of the academic year, may provide a basis for a short extension of the total time to be spent on the master's programme. In this case, this must be specified in the master's agreement and the individual education plan.

10. Reasons for postponement:

- a. Valid reasons for postponement (in addition to illness) may include teaching duties, organized student activities, caregiving and problems with the thesis that are outside the candidate's control. Documentation or an explanatory statement in writing is required, as well as a new plan for completion. The Faculty, or the Department if the Faculty has approved this, decides on the application. When the reason for extension is teaching duties, organized student activities or caregiving, the extension must be granted in full-time equivalents corresponding to the specified reason. The extension granted does not affect the assessment of the thesis.
- b. In connection with illness, the submission deadline will be extended corresponding to any period of sick leave. Illness must be documented by a medical certificate or equivalent.

11. Works of joint authorship as a master's thesis:

- a. The master's thesis can also be completed as a work of joint authorship if each candidate's contribution is clearly defined and corresponds to a normal master's thesis in terms of the work effort and scope.
- b. Participation in a joint work may be linked with different Departments. In such cases, the course for the joint work and the size of the group must be approved jointly by the Departments. Before the work starts, the Department and students must jointly decide on the form of work and assessment to be used. Information about this must be included in the master's degree agreement for the individual student. The Department's approval is required for changes in the form of work or assessment form after the work has started.
- c. For a joint work, there must be at least one common supervisor. The supervisor must help to ensure that the participants gain the best possible academic benefit from their work, and must otherwise maintain adequate contact with the participants to keep track of each participant's contribution to the work.

12. Copyright to and exploitation of the master's thesis:

- a. The candidate who has written the master's thesis holds the sole copyright to the work. If the master's thesis is a joint work (see the subsection on "Works of joint authorship as a master's thesis" in this section, Clause 11), each of the candidates has the sole copyright to the parts of the master's thesis that can be identified as her/his own work. After completion of the master's degree, master's theses that are not subject to access restrictions/embargo may be used within the framework specified in the Norwegian Copyright Act [Lov om opphavsrett til åndsverk].
- b. NTNU is entitled, free of charge, to use and to develop the results from the work on the master's thesis for teaching and research purposes. This also applies to production of copies free of charge (hard or digital copies). For such use, the candidate's name must be stated in accordance with legal stipulations and good practice. For use beyond this, such as

- publishing and other financial use, NTNU and the candidate(s) must enter into a special agreement.
- c. For master's theses in collaboration with a company/external organization, see NTNU's standard contract.

SR Section 4-4 Part-time studies

- 1. The Faculty decides on applications for part-time programmes of study. Only individual education plans for 75 %, 50 % or 25 % of normal progress in relation to the nominal length of study can be arranged.
- **2.** Part-time studies in the master's degree programme:
 - a. The minimum workload for the master's thesis is 50 % of normal progress.
 - b. The master's degree programme is extended for a period corresponding to the parttime percentage, and this is specified in the master's agreement and individual education plan for the student.

SR Section 4-5 Exemption from assessment

If exemption from assessment is to be granted, the courses recognized must overlap at least 50 % in academic and practical terms as well as in level and scope.

SR Section 5-1-7 Descriptions of grades for master's theses in STEM subjects

See the discipline-specific descriptions of grades for master's theses in STEM subjects (science, technology, engineering and mathematics).

SR Section 5-3 Completion of the master's programme

- **1.** The master's programme is concluded with assessment of the master's thesis and may include a final master's examination in addition.
- 2. Master's examinations may be held throughout the academic year, including outside the ordinary examination periods. The forms of assessment for the final master's examination are determined for each programme of study by the Faculty responsible for the programme, and are included in the programme descriptions. The master's thesis must have been submitted, and examinations in all courses to be included in the master's degree must have been passed, before the final master's examination. Exceptions may be made for examination in specialized syllabi selected by the student.

SR Section 5-4-6 The right to assessment without being a student

The right to register for assessment without being admitted as a student applies only in courses without compulsory activities, and in cases where the student has fulfilled any previous knowledge requirements for the course.

SR Section 5-6 Assessment

- Final examination each semester: For courses in the science programmes, final examinations
 are held in the examination period each semester for courses with the course code prefixes BI,
 IT and KJ.
- **2. New assessment in connection with a failing grade:** The course description specifies which assessments must be repeated after a student has failed the course.

SR Section 5-8-7 Form of Norwegian and languages for written assessment

Students in master's programmes who write their master's thesis in a non-Scandinavian language (a language other than Danish, Norwegian or Swedish) and who do not master a Scandinavian language do not need to write a summary of the master's thesis in Norwegian. The summary must then be written in English instead.

SR Section 5-9 Resubmission of master's thesis after a failing grade

- 1. Students who receive a grade of F or "fail" for the master's thesis may, within three weeks after announcement of the grading or after the deadline for submission, apply to the Faculty for resubmission of the master's thesis. The Faculty, or the body authorized by the Faculty, decides on the application for resubmission. A grade of F or "fail" is also given when the master's thesis has not been submitted by the deadline.
- 2. If a grade of F is given after the master's thesis has been graded in connection with the final examination, the thesis may be resubmitted in revised or supplemented form. The Department, in consultation with the supervisor and examiner, must provide a written assessment of whether it is possible to revise the student's thesis. A new deadline for submission must be set as follows:
 - a. For a grade of F for theses of 60 and 45 credits: If the thesis can be revised within three months, the student can be given a new deadline. If it cannot be revised with a normal work effort within three months, the grade of F is maintained.
 - b. For a grade of F for theses of 30 credits: If the thesis can be revised within six weeks, the student can be given a new deadline. If it cannot be revised with a normal work effort within six weeks, the grade of F is maintained.
- 3. If a master's thesis has been given a grade of F because of non-submission, the student may apply to the Faculty or party authorized by the Faculty for permission to register for the examination with a master's thesis that is based on working on the existing material developed by the student. In this connection, the Department must assess, in consultation with the supervisor, whether this material could result in a master's thesis within a short period (1-3 months), and whether it is reasonable to assign further resources to the student in the form of academic supervision, a workplace, laboratory or field equipment and the like. In this evaluation, the emphasis should be on the resources that the student has already used in his or her master's programme up to this point.
 - a. For a grade of F for theses of 60 and 45 credits: If work on the material can be completed within three months, the student can be given a new deadline. If it cannot be

- completed with a normal work effort and submitted within three months, the grade of F is maintained.
- b. For a grade of F for theses of 30 credits: If work on the material can be completed within six weeks, the student can be given a new deadline. If the thesis cannot be completed with a normal work effort and submitted within six weeks, the grade of F is maintained.
- **4.** In the determination of the grade for amended/revised master's theses in accordance with Clause (2) and (3), emphasis must be placed on the use of more time than the nominal length of study.
- 5. Alternatively to Clause (1) (3), the student may, within three weeks after the announcement of grades or the expiry of the submission deadline, apply for assignment of a new master's thesis with a new deadline based on the rules for the time frame for the master's programme and adjustment of the time frame (see Section 3-3, SUPP Section 2-5-5 and 4-3-7). At the same time, an application must be submitted for reuse or possible adjustment of the courses in the individual education plan for the master's programme. The Department must assess whether it is reasonable to allocate further resources to the student in the form of academic supervision, a workplace, laboratory or field equipment and similar. In this evaluation, emphasis must be placed on the resources that the student has already used in his or her master's programme up to this point. The Department sends its evaluation to the Faculty, which makes a decision on the matter. If the application is granted, a new master's agreement is signed.

SR Section 7-3 Grade point average

A grade point average is given in the programmes in the natural sciences, except for the five-year teacher education programme in the natural sciences.

SR Section 8-1 Supplementary Regulations

The five-year teacher education programme in the natural sciences is governed both by the Supplementary Regulations for the five-year teacher education programmes and by the Supplementary Regulations for programmes in the natural sciences at NTNU. Supplementary Regulations for the five-year teacher education programmes take precedence over Supplementary Regulations for the programmes in the natural sciences.

SR Section 8-3 Entry into force

These Supplementary Regulations enter into force from and including 15 August 2017, and apply to all students admitted to the programmes in the natural sciences at the Faculty of Information Technology and Electrical Engineering, the Faculty of Engineering and the Faculty of Natural Sciences. The Supplementary Regulations for science programmes at NTNU of 1 August 2015 are revoked from and including 15 August 2017.