THE PROGRAMME DESCRIPTION GUIDE

GUIDELINES FOR THE DESIGN OF PROGRAMMES OF STUDY AND COURSES AT NTNU

Adopted by the Rector in June 2016. Last modified in October 2023.

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1. About the document

The Programme Description Guide (Guidelines for the design of programmes of study and courses at NTNU) is to be used by course coordinators, programme coordinators, faculties, administrative committees, etc. in connection with:

- annual revisions of existing programmes of study
- the creation of new programmes of study and courses
- the evaluation and quality assurance of courses and programmes of study through annual and periodic evaluations, for example

The document is specially designed to serve as a process guide for work on programme descriptions and course descriptions. It operationalises formal programme of study requirements, while the structure in chapter 4 is adapted to the programme description module in KASPER.

The programme description guide should be seen in conjunction with the document <u>Portfolio Guide</u> (Guidelines for the development of the portfolio of studies), which describes requirements for all educational provision resulting in credits at NTNU, and the two application stages applied by the faculties when creating and discontinuing programmes of study.

Please note that some of the links in this document lead to web resources in Norwegian only.

2. Development of programme descriptions and course descriptions

The programme description process is one of several ongoing educational quality processes at NTNU. Other key processes are the quality report for education with long-term plans for portfolio of studies development, creation and discontinuation of programmes of study, and the establishment of admission capacity. The educational area is largely regulated and developed through these processes, which will ensure and document quality and systematic development, dimensioning, evaluation and revision of NTNU's programmes and courses. This work and the processes must be viewed in context and are supported by common guidelines. This is also clarified in NTNU's annual cycle for educational quality processes.

The Education Quality Division's 'portfolio team' at the Department of Education has dialogue meetings with the faculties each semester, and can assist with advice and guidance regarding key requirements and guidelines.

Deadlines

The Pro-Rector's annual 'collective order for the educational quality processes' is sent to the faculties and administrative committees ("forvaltningsutvalg") towards the end of the spring semester. The order summarises the strategic guidelines, timeline and deadlines for NTNU's education quality processes. Appendix D in the collective order provides further details on the programme description and course revisions. The collective order is submitted in ePhorte and can also be found as an attachment to the listing 'Pro-Rector's collective order' here: Annual cycle for the education quality processes.

Programme of study descriptions must be completed and adopted by the programme description authority (faculty or administrative committee) by **1** April. Faculties must fully approve the courses by **15** January. As described in the section on legislation and regulations below, faculties must ensure and document that all formal requirements are met before a decision is made.

3. Formal requirements

The programme description guide is pursuant to <u>Section 4-1 (3) of NTNU's Academic Regulations</u>. It must be followed regarding the description of all educational provision that falls under the definition of a programme of study, cf. Section 1-2 of the Academic Regulations:

"A programme of study means a unit of study consisting of a collection of courses with total learning outcomes that are offered to students to apply for and be admitted to. A programme of study is characterised by the fact that it is not necessary to apply for new admission in order to take new courses within the programme of study."

The requirement includes programmes of study that lead to a degree, shorter studies such as one-year programmes, and formal continuing education¹. Part 5 of the programme description guide also applies to courses that are offered separately and that are not part of a programme of study. The provisions in the guide apply regardless of how the programme is organised (campus-based, session-based, online, decentralised, etc.).

The programme description guide is based on and summarises requirements stipulated in the Regulations concerning quality assurance and quality development in higher education and tertiary vocational education ("studiekvalitetsforskriften"), the Regulations on the supervision and control of the quality of Norwegian <a href="https://ninkspace.nin

Sections 4-2 (1) and (2) of NTNU's Academic Regulations specify what a programme description and course description must contain as a minimum. Programme of study and courses descriptions are mandatory and legally binding for NTNU and must be correct at all times. Students require clear, precise information about how they are to plan and conduct their courses of study, as well as their rights and obligations. Neither programme of study nor course information can be changed after this has been adopted and announced to students².

The programmes of study at NTNU must meet all requirements in relevant laws and regulations, including associated supplementary rules and guidelines. Within some subject areas, there are also National Curriculum Regulations and circulars that regulate the programmes of study. In addition, some educational programmes have certification requirements established by various sector ministries, subordinate agencies or other external actors. A complete overview of applicable rules and frameworks can be found on NTNU's webpage "General laws and regulations – studies"

3.1 Quality assurance and documentation of legal and regulatory requirements

Norwegian universities are self-accrediting. This means that NTNU has the authority to establish programmes at all levels, and a duty to ensure that all formal quality requirements are followed. In accordance with point 3.2.4 of NTNU's Delegation Regulations, it is assumed that the faculties meet all

¹ Cf. Ministry of Education and Research Circular F-03-16.

²Programme description archiving must follow applicable guidelines in https://ntnu-doku.gitlab.io/arkivplan/rutiner/saksomraader/studie-og-eksamen/. Changes in the event of procedural errors or other special circumstances are made in accordance with Section 4-2 of the Academic Regulations.

formal requirements and have good quality control to ensure compliance with legal requirements, regulations and guidelines.

Before programme descriptions are annually adopted and approved, the programme description authority (faculty or administrative committee) must ensure that all relevant regulatory requirements are met. This applies to the general requirements stipulated in the Regulations concerning quality assurance and quality development in higher education and tertiary vocational education and the Regulations on the supervision and control of the quality of Norwegian higher education, and any specific requirements stipulated in National Curriculum Regulations, etc. Faculties must always be able to document that the requirements have been met.

Quality assurance of formal requirements for academic environments

Universities must have documented procedures and practices for quality assurance of new and existing programmes of study, cf. annotations to Section 4-1 (3) of the Regulations on the supervision and control of the quality of Norwegian higher education. Procedures and practices for revising programmes of study that have already been accredited must also ensure that the national requirements in Section 2-3 of the Regulations on the supervision and control of the quality of Norwegian higher education are fully met. The aforementioned provision stipulates requirements regarding the composition of expertise, size and stability of the academic environment.

Pursuant to Section 4-1 (3) of the Regulations on the supervision and control of the quality of Norwegian higher education, the institution must have arrangements in place for systematic control of formal quality requirements, including requirements relating to academic environments. The requirements thus apply *both* to new establishment *and* to continuous quality assurance of existing programmes of study.

NTNU has the following main principles regarding quality assurance of the formal requirements for academic environments:

- 1. Quality assurance of all requirements for academic environments is carried out in connection with new establishment and in connection with periodic evaluation of programmes of study (minimum every five years).
- 2. During the annual adoption of programme descriptions, the programme description authority confirms that all formal requirements for programmes and academic environments have been met. If there is doubt as to whether any of the requirements have been fully met or not, mapping must be carried out more frequently than periodic evaluation. The frequency and action plan depend on the type of non-conformity, and any actions must be documented.

A function has been developed in KASPER to document the quality assurance of requirements for the academic environment associated with programmes. Currently, this is a just basic solution, with a certain amount of data integration from FS. For the time being, therefore, some manual work must also be expected in order to register and maintain the information. Good registration procedures can facilitate this work, cf. sections 5.8 and 5.12 below.

4. Programme description content

Chapter 4 describes which fields need to be included in the programme description. The individual sections have bullet points indicating which content should be described. Most sections also have an explanatory help text under the heading 'guidance'. The help text (only in Norwegian) also appears on the right side of the image in KASPER when editing the programme descriptions.

Any fields that are not relevant to the programme of study must be left blank. This may, for example, apply to the fields for supervised professional training and field trips for programmes that do not have these learning activities.

Annual revision of the programme description takes place in KASPER. An important exception here are the fields under 4.1 'Programme of study frameworks'. This content has been adopted in other contexts and cannot be changed in connection with the annual programme description process. Therefore, these fields are not editable in KASPER.

4.1 Programme of study frameworks

4.1.1 Name of the programme of study

Specify the name of the programme of study

Guidance:

The programme of study must have a name that indicates the level of the programme, and which represents the key parts/key part of the programme's academic content. The name must give students, employers and society in general a good understanding of the programme's content.

The name of the programme of study must be given in Norwegian Bokmål, Norwegian Nynorsk and English. If it is an international programme of study, the information should only be given in English.

The name of the programme of study is adopted upon creation. Any changes made to names of programmes of study of 60 credits or more must be approved by the Rector. A separate function has been developed in KASPER's portfolio module for applying for such a name change, with an annual deadline of 15 September. See <u>guidelines for applying for a programme of study name change</u> for further information. Faculties adopt name changes for programmes of study of less than 60 credits.

4.1.2 Name of degree

• Specify the degree designation and any supplementary designation.

Guidance:

NTNU may award degrees and vocational education in accordance with <u>the degree regulations</u>, cf. Section 2-1 of <u>NTNU's Academic Regulations</u>.

The degree designation and any supplementary designation must be stated in Norwegian Bokmål, Norwegian Nynorsk and English. See sections 2-10 of the Academic Regulations relating to degree designations and sections 2-11 and 2-12 relating to supplementary designations.

The degree cannot be changed after the programme of study has been accredited (creation approved).

4.1.3 Level of programme

• Specify the programme's level.

Guidance:

The level must be stated according to the stepwise cycles in the Norwegian Qualifications Framework for Lifelong Learning (NQF):

- > Cycle 1: bachelor's degree, one-year programme or formal continuing education
- > Cycle 2: master's degree, cand.med., cand.psychol. or formal continuing education
- Cycle 3: PhD.

Formal continuing education may be located in the first or second cycle.

The programme level cannot be changed after the programme of study has been accredited (creation approved).

4.1.4 Language of instruction

• Specify the programme of study's language of instruction .

Guidance:

<u>NTNU's language policy guidelines</u> must be used as a basis when choosing the language of instruction. Although a programme of study has Norwegian as its language of instruction, it is possible to offer individual courses in English. This may, for example, be necessary in order to facilitate exchange students.

The language of instruction cannot be changed after a programme of study has been accredited (creation approved).

4.1.5 Scope of credits

• Specify the number of credits.

Guidance:

The scope of credits cannot be changed after the programme of study has been accredited (creation approved).

4.1.6 Nominal length of study

• Specify the number of years of study and whether it is a part-time or full-time programme of study.

Guidance:

The information cannot be changed after the programme of study has been accredited (creation approved).

4.1.7 Host faculty and host department

Specify the programme of study's host faculty and (if applicable) host department.

Guidance:

Any changes that are made regarding the host faculty and/or host department must be reported to the 'FS group' at the Section for Learning Support and Digital Services at the Department of Education.

In the event of a change of host faculty, an agreement must be in place between the faculties involved.

4.1.8 Admission

Admission requirements and ranking rules

- Describe the academic requirements that apply regarding admission to the programme of study, including any specialisations associated with the programme.
- Describe the ranking rules that are used regarding admission to the programme of study, including any specialisations associated with the programme.

Guidance:

For programmes of study where admission takes place through the Norwegian Universities and Colleges Admission Service, reference must be made to the national Regulations concerning admission to higher education in the descriptions of admission requirements and ranking rules, respectively. For programmes of study where admission is administered locally at NTNU, reference must be made to the rules stipulated in NTNU's admission regulations. Admission and ranking rules are formulated in dialogue with the Admissions Office at the Section for Admissions and International Relations at the Department of Education.

It is not possible to directly change admission requirements in connection with the programme description revision in KASPER. A function is being developed in <u>KASPER's portfolio module</u> that can be used if one wishes to change admission requirements. If one wishes to change admission requirements, it is important that the Admissions Office is consulted during an early stage of the process. Annual deadlines for submission to the Admissions Office:

- 1 February for programmes of study regulated by the National Admission Regulations
- 1 December for programmes of study regulated by NTNU's Admission Regulations

Certificate of good conduct from the police:

 Specify whether a certificate of good conduct from the police is required for admission, and the specific legal basis that applies.

Guidance:

Applicants to programmes of study where students may come into contact with minors as part of clinical teaching or programmes involving supervised professional training, must submit a certificate of good conduct from the police as stated in Section 39 (1) of the Police Databases Act in connection with admission. If special rules have been stipulated concerning a certificate of good conduct from the police for certain types of professional practice, these apply accordingly to students participating in programmes involving supervised professional training or clinical teaching. The faculties must assess whether the educational programmes they offer are covered by the rules on certificates of good conduct from the police.

An overview of programmes of study at NTNU that require submission of a certificate of good conduct from the police upon admission is currently available on a separate webpage about certificates of good conduct from the police.

Medical requirements:

• Specify whether documentation of MRSA and tuberculosis status, self-declaration about health, vaccinations or similar is required.

4.1.9 Reference to National Curriculum Regulations

Refer to any national guidelines for the programme of study.

Guidance:

National guidelines may, for example, include National Curriculum Regulations and plans or guidelines recommended by Universities Norway (UHR). For some subject areas, it may also be relevant to refer to relevant international regulations. It is the faculties' responsibility to possess the necessary knowledge about any regulations within their field of study.

See more about 'National Curriculum Regulations for higher education' at: <u>General laws and regulations</u> - studies.

In the event of changes to the national guidelines, the host faculty must assess whether the changes are so extensive that the programme of study must be discontinued and replaced by a new one. The portfolio team at the Department of Education can provide further guidance.

4.2 Brief information about the programme of study

• Give a brief description of the programme of study's academic profile focusing on students as the primary target group.

Guidance:

The text must describe in plain language the academic profile and distinctive character of the programme of study. For example, this may include perspectives related to relevance to working life, sustainability and innovation, as well as other relevant factors that characterise the programme.

If the programme of study is carried out jointly with other departments, this must be stated.

Please note that it is not necessary to describe the organisation and structure of the courses in the programme, as this is covered by other fields in the programme description.

4.3 Special requirements and conditions

Suitability requirements

Specify whether the programme of study involves suitability assessments.

Guidance:

Cf. <u>Regulations on suitability assessment</u>. Give a brief account of the suitability assessment ("skikkethetsvurdering") throughout the programme and the applicable criteria for the programme. Refer to NTNU's webpage on suitability.

Authorisation scheme

Specify whether the programme of study involves an authorisation scheme.

Guidance:

If, after completing their education and receiving a diploma, candidates are subject to the authorisation scheme ("autorisasjonsordning"), cf. <u>Section 48 of the Health Personnel Act</u>, this must be specified.

Certification scheme

Specify whether the programme of study is subject to certification schemes.

Guidance:

Some programmes of study have certification requirements ("sertifiseringsordninger") that are established by various sector ministries, subordinate agencies or other external actors. There is no exhaustive list of all regulations that may apply within different disciplines. It is the faculties' responsibility to possess the necessary knowledge about any regulations within their field of study.

Equipment requirements

• Specify whether there are any special requirements for equipment, technology or anything else necessary to participate in the teaching.

Guidance:

Section 3-10 of the Academic Regulations states that students must have their own standard laptop computer for use in teaching and assessment. The Rector may stipulate further provisions regarding equipment requirements for laptop computers.

Costs pertaining to compulsory materials other than textbooks and laptop computers that are necessary for teaching must be covered by the institution.

4.4 Learning outcomes

 Describe the programme of study's learning outcomes divided into the categories 'knowledge', 'skills' and 'general competence'.

Guidance:

Programme of study learning outcomes must be described in accordance with the Norwegian Qualifications Framework for Lifelong Learning (NQF). They must be available in Norwegian and English. The level of complexity of the learning outcomes must also be described.

Learning outcomes must be described as what a candidate is to have achieved after successfully completing their education. The learning outcome descriptions must provide a basis for communicating about the candidates' competence both internally at the institution, to educational institutions at home and abroad, and to working life and society.

Cf. NOKUT's description of What are learning outcomes and learning outcome descriptions? Within NQF, learning outcome descriptions are normally so specific that they give a good account of the programme of study in question, and at the same time so general that they are understandable for people without special expertise in the field of study.

NQF requires that programmes of study are structured in such a manner that the content (learning activities) supports the expected learning outcomes, and that the forms of assessment are designed so that the expected learning outcome can be verified. There must be full accordance between the description of the candidate's expected learning outcomes as stated in the diploma and the programme of study's learning outcomes. NTNU's distinctive character must be expressed in the programme's learning outcome descriptions. NTNU's academic profile must also be expressed in the description of learning outcomes for programmes regulated by the National Curriculum. The learning outcomes for educational programmes with vocational requirements, such as programmes with National Curriculum Regulations, must meet both the vocational requirements and the requirements of the Norwegian qualifications framework for lifelong learning (NQF).

See also <u>Section 2-2 (1), (4) and (5) of the Regulations on the supervision and control of the quality of Norwegian higher education</u> regarding guidelines for and of the learning outcomes.

4.5 Structure of the programme of study

Programme structure

Describe the structure of the programme of study.

Guidance:

The description must include information about the following:

- Overview of all courses in the programme of study, which clearly shows the progression from semester to semester for all academic years of study in the programme.
- Any specialisations/profiles included in the programme.
- Which courses are compulsory and elective. Include any reservations about changing electives.
- Programme specialisation: any requirements regarding scope of specialisation in order to obtain the degree. For bachelor's degrees, it must be stated which courses are included in the specialisation.

According to Section 2-2 (4) of the Regulations on the supervision and control of the quality of Norwegian higher education, the content, structure and infrastructure of the educational programme must be adapted to the programme of study's learning outcomes. The content and structure of the programme must show how all the courses in the programme, together with the progression from semester to semester, lead to the learning outcomes for the programme. Each course will contribute to achieving parts of the programme's learning outcomes. Through some courses, students can gain knowledge about various topics, while acquiring

skills and general competence through other courses. See also <u>NOKUT's guidance on accreditation</u> requirements, page 16.

The programme description guide has an attached matrix for the programme's overall learning outcomes for each course, and faculties are recommended to use this to document that learning outcomes, content and structure are in accordance with each other. The matrix is available at Innsida, and a function is being developed so that it is available in the module for annual evaluation of programmes of study in KASPER.

Common courses

• Specify which of NTNU's common courses are included in the degree, and describe any limitations regarding the choice of common courses.

Guidance:

NTNU has three common courses ("fellesemner"). These are Examen Philosophicum (ex.phil.), area courses ("områdeemner") and Experts in Teamwork (EiT). The description should contain information about:

- Which variant of ex.phil. may be included in the programme
- Which area course(s) may be included in the programme, and which study area the programme belongs to. In the area course scheme, NTNU has the following study areas: 1. Humanities and Aesthetic Disciplines, 2. Teacher Education, 3. Medicine and Health, 4. Natural Sciences, 5. Social Sciences, 6. Technology, 7. Economics, Management and Administration
- Which variant of EiT (intensive/longitudinal) may be included in the programme?

See www.ntnu.no/studier/fellesemner for more information about the common course scheme at NTNU.

Deadlines and choices

• When in the programme specialisations, electives, etc. are chosen.

Progression requirements

Describe the programme's formal progression requirements.

Guidance:

The description must clearly show whether there are progression requirements in order to continue in the programme. This typically means that students must have passed all courses or a given number of credits in a semester or academic year in order to start the following semester or academic year. Progression requirements are therefore more extensive than required prerequisite knowledge at course level.

Transitional arrangements

Describe any transitional arrangements in the event of changes to the programme description.

Guidance:

In the event of changes to the programme of study's programme description that may have consequences for the progress of students that have already been admitted, transitional arrangements must be described to ensure that the students' progress is not delayed.

For programmes that follow previous National Curriculum Regulations, one must keep in mind that rules for transitional arrangements may have been changed.

4.6 Workload

• Specify the total student workload.

Guidance:

The students' total work effort is divided into a number of activities. For example, this may include lectures, supervision, assignment seminars, study groups, supervised professional training, laboratory work, independent work (literature studies, assignments, discussions etc.), and examinations.

Based on this, estimate the distribution of time spent between scheduled learning methods, non-scheduled learning methods, and individual efforts/self-study. The workload may be stated as hours per week or hours per academic year, depending on what is appropriate in terms of the profile and organisation of the programme of study.

The academic year is fixed at 40 weeks and a full-time education gives 60 credits per year. Programmes of study at NTNU are based on the assumption that an academic year constitutes *a minimum* of 1500 hours and normally no more than 1800 hours of work effort for the students, cf. the requirements in Section 2-2 (3) of the Regulations on the supervision and control of the quality of Norwegian higher education. Broken down, this means the following for students' expected *average work effort* (some courses and some programmes may have higher requirements for students):

- ➤ 40 42.5 hours per week (average for the academic year).
- ➤ 26 29 hours per credit (average for the academic year)
- ➤ One -1- week of work corresponds to approximately 1.5 credits
- A course of 7.5 credits corresponds to approximately 5 weeks of work.

4.7 Teaching and learning methods

Learning activities

- Give a general description of the types of learning and work methods used in the programme of study. Use the learning and work methods as a point of departure in the course descriptions for the programme of study.
- Specify how students are facilitated in taking an active role in the learning process in the programme and how the learning methods are adapted to a digitalised society.
- Describe how students encounter research and/or artistic development work as part of their studies.

Guidance:

The various teaching and learning methods must be adapted to the content, structure and expected learning outcomes in the programme of study, cf. the annotations to Section 2-2 (5) of the Regulations on the supervision and control of the quality of Norwegian higher education. Teaching and learning methods must

be adapted to a digitalised society. For programmes with few students and/or student groups spread over a wide geographical area, measures must be implemented to ensure a good study environment that facilitates academic interaction between students and/or between students and the academic environment.

Excursions

• Describe any excursions in the programme of study.

Guidance:

Please keep in mind that students cannot be required to pay for compulsory study trips. Any alternatives to voluntary study trips must be described in accordance with applicable guidelines.

The Rector's decision on *Clarification of the regulations on payment of fees for study trips etc.* can be found under 'Other provisions' on the website General laws and regulations – studies.

Supervised professional training

 Describe the scope and organisation of the supervised professional training. Other relevant information about supervised professional training, such as references to relevant guidelines, implementation requirements etc, must also be described.

Guidance:

Supervised professional training can form a separate course in its own right, or form part of the learning activities in a course. The requirements for assignments, scope and execution will be different depending on where in the course of study the student is.

The faculties must have arrangements in place to ensure quality requirements in supervised professional training stipulated in the Regulations on the supervision and control of the quality of Norwegian higher education and in the National Curriculum Regulations for various vocational programmes. Section 2-2 (9) of the Regulations on the supervision and control of the quality of Norwegian higher education stipulates that a supervised professional training agreement must be drawn up between the institution and the practical training institution for programmes of study that involve supervised professional training. See also page 20 of NOKUT's guide on accreditation requirements.

4.8 Forms of assessment

• Give a general description of the forms of assessment used in the programme of study. Use the forms of assessment in the included courses as a point of departure when describing the programme of study's forms of assessment.

Guidance:

Assessment is defined as "all types of testing of the students' knowledge, skills and general competence that form the basis for determining a grade in a course", cf. Section 1-2 of NTNU's Academic Regulations. Partial assessment is defined as a "performance that is graded and which is included in the calculation of the final grade in the course. Weighting of partial assessments must be stated in the course description".

Students should encounter varied forms of assessment during their studies. This regulation is given in <u>Report to the Storting 16 (2016–2017)</u> - <u>Quality Culture in Higher Education</u>. Varied forms of assessment can stimulate

in-depth learning and ensure that students achieve the expected learning outcomes. The regulations *do not require* that students must meet varied forms of assessment. The regulatory requirements are that the form of assessment must be academically sound (Section 3-9 of the Act relating to Universities and University Colleges), and that it must be suitable for measuring whether the student has achieved the programme's learning outcomes (cf. the annotations to Section 2-2 (5) of the Regulations on the supervision and control of the quality of Norwegian higher education.

The programme's forms of assessment may include both midway and final assessments of the students' achieved learning outcomes. Examples of this may be written examinations, practical assignments, presentations, portfolio submissions etc.

4.9 Internationalisation

Periods of study abroad

- Describe which semester is best suited for student exchange.
- Provide an overview of updated and binding exchange agreements.

Other arrangements

 Describe which internationalisation arrangements the programme of study has other than student exchange.

Guidance:

All educational programmes leading to a degree must offer student exchanges through updated and binding agreements, adapted to the programme of study's level, scope and distinctive character. In cases where several short programmes can be combined into a degree programme, the requirement applies that there must be exchange agreements that are academically relevant to the programme as a whole. The academic relevance of the exchange must be ensured by the programme's academic environment, cf. the annotations to Section 2-2 (8) of the Regulations on the supervision and control of the quality of Norwegian higher education. It is not required that the agreements must be at programme of study level. The agreements can be at institution/faculty/department level or similar, as long as they are academically relevant. There are no requirements regarding the length of exchange. Exchange must take place during the ordinary study period, and the institution must ensure that exchanges can be incorporated into the programme. It is important to organise student exchange so that it is predictable for the students. Although the agreements do not have to be at programme of study level, it is a requirement that the programme's academic environment ensures that the individual student exchange is academically relevant.

The programme must also have internationalisation arrangements other than student exchange. The arrangements must be adapted to the programme's level, scope and distinctive character, and may include a number of activities such as the use of international literature, international guest lecturers, foreign students, participation in international conferences etc., cf. Section 2-2 (7) of the Regulations on the supervision and control of the quality of Norwegian higher education.

All graduates from NTNU must have acquired international competence relevant to the subject area. Strategic goals and development goals related to internationalisation can be found in NTNU's International Development Plan 2022-2025.

See also pages 19-20 of NOKUT's guidelines on accreditation requirements.

4.10 Interaction with working life and/or society

 Describe forms of interaction between the programme of study and working life and/or society, and how this helps to ensure relevance and updated knowledge.

Guidance:

The programme must be academically up-to-date and of clear relevance to further studies and/or working life. Relevance and updated knowledge in professional/working life and/or society are ensured through arrangements for interaction with working life and/or society that are adapted to the programme's content and level.

Such interaction may include the use of representatives from working life as guest lecturers, the use of educators who have shared positions between academia and the field of practice, and supervised professional training or internships for students in working life. Relevant interaction may also include participation by representatives from professional/working life and society in programme of study councils, periodic evaluations or project groups in connection with major programme description revisions. The programme description must provide examples of the programme of study's interaction with working life and/or society, and how this contributes to relevance and updated knowledge.

See page 14 of <u>NOKUT's guide on accreditation requirements</u> for further clarification of how to understand relevance and updated knowledge in this context.

4.11 Occupational opportunities

 Describe how the programme of study is academically relevant to working life, with specific examples of possible career paths.

Guidance:

It is important to have a realistic and specific description of career opportunities that are communicated to the students. Such a description should be based on good communication with relevant working life actors. See pages 13-14 of NOKUT's guidelines on accreditation requirements for further clarifications.

4.12 Further studies

• Give specific examples of possible further studies at NTNU and/or possibly other educational institutions.

Guidance:

In cases where the programme of study is relevant for further studies, it is important to have a realistic and specific description of this that is communicated to students. Such a description should be based on good communication with relevant educational institutions where students will be able to apply for admission for further studies, or with working life actors, cf. NOKUT's guidance on accreditation requirements (page 14)

4.13 Evaluation of the programme of study

- Give a brief, general description of the evaluation methods used at programme of study and course levels.
- Specify the date of the previous and the next scheduled periodic evaluation of the programme of study.

Guidance:

For programme of study evaluation requirements, see the **Quality Assurance System for Education**.

5. Content of course descriptions

All courses must have a course description that meets specific requirements, cf. Section 4-2 (2) of the Academic Regulations.

Online Course Planner (EpN)

Courses are created and revised in the Online Course Planner (EpN). Course revision is an annual process that is conducted before the start of each academic year, and the specific work in EpN starts in the autumn.

Existing courses are retrieved from the educational administration system FS for editing in the EpN application. The course descriptions are quality assured in the tool through various stages. After the courses have been through the quality assurance process, the courses are returned to FS and prepared for publication on NTNU's website. Data from EpN is also transferred to other relevant systems, such as KASPER and Blackboard.

See more information about EpN and user guides.

Below is an overview of key requirements regarding course description content.

5.1 Course name

• Specify the course name.

Guidance:

The course should have an appropriate name. The name must be given in Norwegian Bokmål, Norwegian Nynorsk and English.

5.2 Level of study

• Specify the level of the course.

Guidance:

The level must be specified according to the stepwise cycles in the Norwegian Qualifications Framework (NQF), the first cycle, second cycle and third cycle respectively. See more <u>information about the cycles at NQF</u>.

5.3 Responsible unit

• Specify which department is responsible for the course.

5.4 Weighting (scope of the course)

• Specify the scope of the course in credits.

Guidance:

The scope of course must be given in credits, with the exception of preliminary courses ("forkurs"). The weighting of these courses must be stated in preliminary course credits. It is not possible to change the

weighting after a course has been created. In such cases, one must discontinue the course and create a new one with new weighting.

5.5 Language of instruction

Specify the language of instruction.

Guidance:

Instruction may be given in Scandinavian languages or English, cf. NTNU's <u>language policy guidelines</u> and NTNU's international action plan. This does not apply to foreign language courses.

5.6 Requirements for admission to studies

• Specify whether the course has requirements for admission to studies.

Guidance:

A requirement for admission to studies means that only students who have admission to one or more specified programmes of study are permitted to participate in the teaching and take an examination in the course.

5.7 Weighting reduction

Specify whether the course overlaps in whole or in part with another course.

Guidance:

Weighting reduction ensures that students do not receive double credits if they take two (or more) courses with the same content. For example, this may be relevant if a course has changed course code. Therefore, weighting reduction also includes discontinued courses. See <u>Section 4-6 of the Academic Regulations</u>.

5.8 Affiliated programmes of study

 Specify any other programmes of study to which the course belongs, apart from those chosen as the primary programme of study ('programme of study reporting').

Guidance:

Here, as far as practicable, one should specify programmes of study that include/make use of the course. The host faculty can assist with guidance on programme affiliations.

Registration of the correct programme affiliation(s) is important for correct reporting to DBH, and for being able to plan the course with regard to the different student groups participating. A correct link between courses and programmes of study will also simplify the quality assurance of the academic environment affiliated with the educational programmes, cf. Sections 3.1 and 5.12.

5.9 Forms of assessment and grading scale

- Specify the form of assessment, including any partial assessments.
- Specify the grading scale.

Guidance:

The form(s) of assessment must be adapted to the expected learning outcomes and must be described exhaustively and precisely. Specify the duration of the assessment form, e.g. whether it is a three-hour written examination or a two-week home examination.

The grading scale must be stated as letter grades or pass/fail.

Specify whether the form of assessment can be changed if there is a re-scheduled examination, cf. Section 5-6 (1) of the Academic Regulations. Changes in the form of assessment for re-scheduled examinations must be stated in the course description.

The course may include partial assessments. These are achievements/performances that are graded and included in the calculation of the final course grade, cf. Section 1-2 of the Academic Regulations. If the course has several partial assessments, the course description must specify the following:

- percentage weighting of the partial assessments
- > any partial assessments (or all) that must be retaken if a student does not pass the course, cf. Section 5-6 (3) of the Academic Regulations
- any partial assessments (or all) that must be retaken if a student wishes to improve their course grade, cf. Section 5-6 (4) of the Academic Regulations

The course description may stipulate that the appeal procedure may take place directly after a separate partial assessment if the result prevents further progression in the semester, cf. Section 6-2 (7) of the Academic Regulations

The course may have portfolio assessment as the only form of assessment, or as a partial assessment in combination with other partial assessments, cf. Section 5-11 of the Academic Regulations. In the case of portfolio assessment, the course description, or before the start of the semester at the latest, must provide supplementary information about which pieces of work are included in the basis for assessment, which forms these should take and whether feedback is provided along the way. More detailed guidelines for the description of portfolio assessment are given in the Guide for portfolio assessment at NTNU.

5.10 Compulsory activities

Specify compulsory course activities.

Guidance:

Examples of compulsory activities are reports, exercises, supervised professional practice, field courses, laboratory work, presentations, etc.

Compulsory activities must be approved in order to be eligible for assessment, but the result is not included in the basis for calculating the course grade.

The compulsory activities must be described precisely and exhaustively, the number of activities must be stated and the activities must be assessed as approved/not approved.

5.11 Teaching term

 Specify the semester(s) in which the course is offered, i.e. whether the course is taught in the spring and/or autumn, and whether it extends over one, two or more semesters.

5.12 Course coordinator and associated lecturers/educators

- Specify the course coordinator.
- List any other associated lecturers/educators who will contribute to teaching and/or supervision in the course.

Guidance:

The course must have one course coordinator (called 'main educator' in EpN), but may have several lecturers/educators (called 'educators' in EpN).

Persons registered as the main educator and educators in EpN are republished as course coordinator and lecturers respectively in course descriptions on NTNU's website.

Special note on the interrelation of systems:

Registrations of the main educator and educators affiliated with the course in EpN are transferred to FS. FS is the source for presentation of the course coordinator and lecturers on the course's website. The employee who is registered as the main educator in the course is linked to the course evaluation in KASPER. The faculties should consider whether it is appropriate for all course contributors to be registered as lecturers in EpN and published in the course descriptions on NTNU's website. This may not be expedient for large courses with many contributors.

A description of how teachers can be linked to a course is available here: <u>Publication of subject teachers on the subject page</u>. The teachers linked to the course can be imported into the professional environment overview for the programme of study in KASPER³. Note that a correct overview in KASPER requires that the courses are associated with the correct programme(s) of study in EpN (see 5.8).

The professional environment module in KASPER will get a function that ensures that the import from 'Course overview' ("emne samlebilde"), tab 'Person role' ("personrolle") in FS can be run to KASPER at the same time as the work on quality assurance of the national requirements for professional environment is actually carried out. The import then ensures that the same people who appear on the course's website/course description are transferred to an overview of the study programme's overall professional environment in KASPER. Such an overview can facilitate the basic work of mapping, which must be done before the education management can assess the overall overview of the professional environment and whether the national requirements for the professional environment have been met⁴. The faculties are encouraged to prepare descriptions of which registration practices for academic environments affiliated with studies are to be used as a basis at their own departments.

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³ In KASPER, there is access to the academic environment functionality from the modules for management, periodic evaluation and application for the establishment of new study programmes.

⁴ Section 2-3 of the Regulations on the supervision and control of the quality of Norwegian higher education stipulates requirements for the composition, size and stability of the academic community's competence. See section 3.1 for a more detailed description of when and how these requirements are to be quality assured.

5.13 Academic content

• Give a brief description of what the course is about.

Guidance:

The description must be seen in relation to the learning outcomes, cf. 5.5.2.

If the course is an area course ("områdeemne"), the area of study and generic topics must be stated. See more information about this in the document '<u>The common course scheme at NTNU</u>: background, purpose and <u>organisation</u>'. See also the Pro-Rector's annual collective order for the educational quality processes, where Appendix D3 details the course revision for Experts in Teamwork. The collective order is sent in ePhorte and can also be found as an attachment to the listing 'Pro-Rector's collective order' here: <u>Annual cycle for the educational quality processes</u>.

5.14 Learning outcomes

• Specify the expected learning outcomes for the course, divided into the categories 'knowledge', 'skills' and 'general competence'.

Guidance:

The learning outcomes for formal education in Norway must include descriptions of *knowledge*, *skills* and *general competence*. The level of complexity of the learning outcomes must also be described. Cf. NOKUT's description of What are learning outcomes and learning outcome descriptions? Within NQF, learning outcome descriptions are normally so specific that they give a good account of the programme of study or course in question, and at the same time so general that they are understandable for people without special expertise in the field of study.

The description of learning outcomes at course level must be far more specific and measurable through the forms of assessment than equivalent descriptions at programme of study level. It is important that the connection between the learning outcomes of the course and the chosen forms of learning and assessment is well thought out and clear.

At course level, there may be different weighting of learning outcomes in relation to the categories in the qualifications framework. Some courses are heavily orientated towards one of the dimensions, while others have a more even distribution.

The learning outcomes for the course must be formulated briefly and in plain language. It is important to describe clearly and specifically what the student is able to do after passing the course.

The sum of all courses in the programme will ensure that the programme of study's overall learning outcomes are covered within all dimensions of NQF (cf. section 4.4). If the course belongs to a programme of study/programmes of study, the learning outcomes for the course must therefore be clearly relevant to the general learning outcome description for the programme(s) of study.

5.15 Learning methods and activities

Describe which learning methods and activities are used in the course.

Guidance:

The description must show how the teaching is designed to promote the student's learning, cf. Section 2-2 (5) of the Regulations on the supervision and control of the quality of Norwegian higher education. There should be a clear correlation between the expected learning outcomes of the course and the learning methods and activities chosen for the course.

It must be stated whether the teaching takes place on campus, or whether it is decentralised and/or online teaching. For online studies, one must describe how lectures and subject matter are communicated, and how communication between lecturer and students is organised.

Any additional information about compulsory activities can also be described under learning methods and activities.

5.16 Recommended previous knowledge

Specify any recommended previous knowledge.

Guidance:

If certain previous knowledge is desirable but not necessary, it must be stated here. This is helpful for students who want to choose the right course.

5.17 Required prerequisite knowledge

• Specify which courses must be passed in order to register for the course and/or take the examination.

Guidance:

Both the course code and course name must be specified. Be clear about whether students can start the course without any required prerequisite knowledge but are not permitted to take the examination, or whether the required prerequisite knowledge must be in place before starting the course.

5.18 Course materials (teaching materials)

Specification of teaching materials is not a compulsory part of the course description, but it is a requirement that an overview of the syllabus is prepared for each individual course, and that an updated overview is available before the start of the semester.

Appendix 1: Norwegian qualifications framework and learning outcomes⁵

Cycle 1 (bachelor level)

	Knowledge (K), Skills (S) and General competence (G)							
NQF The ca	indidate:	[Name of programme] The candidate:						
1K1	has broad knowledge about key topics, theories, issues, processes, tools and methods within the academic field							
1K2	has knowledge about research and development work in the field							
1K3	can update their knowledge in the field							
1K4	has knowledge about the subject area's history, traditions, distinctive character and place in society							
1S1	can apply academic knowledge and relevant results of research and development work to practical and theoretical problems and make well-founded choices							
1S2	can reflect on their own academic practice and adjust it under supervision							
1S3	can find, assess and refer to information and scholarly subject matter and present it in a manner that sheds light on a problem							
154	can master relevant academic tools, techniques and forms of expression							
1G1	has insight into relevant academic and professional ethics issues							
1G2	can plan and carry out varied assignments and projects over time, alone or as part of a group, and in accordance with ethical requirements and guidelines							
1G3	can communicate key academic subject matter such as theories, problems and solutions, both in writing and orally, as well as through other relevant forms of expression							
1G4	can exchange opinions and experiences with others who have a background in the field, thereby contributing to the development of good practice							
1G5	has knowledge about innovative thinking and innovation processes							

Cycle 2 (master level)

	Knowledge (K), Skills (S) and General competence (G)								
NQF The ca	andidate:	[Name of programme] The candidate:							
2K1	has advanced knowledge within the academic field and specialised insight within a defined area								
2K2	has in-depth knowledge about the subject area's scientific or artistic theories and methods								
2K3	can apply knowledge to new areas within the academic field								
2K4	can analyse academic problems based on the subject area's history, traditions, distinctive character and place in society								
2S1	can analyse and relate critically to various sources of information and use them to structure and formulate academic arguments								
252	can analyse existing theories, methods and interpretations in the field and work independently on practical and theoretical problems								
2S3	can use relevant methods for research and academic and/or artistic development work in an independent manner								

⁵https://www.nokut.no/siteassets/nkr/250414 nasjonalt kvalifikasjonsrammeverk for livslang laring nkr.pdf

2S4	can carry out an independent, defined research or development project under	
	supervision and in accordance with applicable research ethics norms	
2G1	can analyse relevant academic, professional and research ethics issues	
2G2	can apply their knowledge and skills in new areas to carry out advanced	
	assignments and projects	
2G3	can communicate extensive independent work and master the subject area's	
	forms of expression	
2G4	can communicate about academic issues, analyses and conclusions within the	
	subject area, both with specialists and to the general public	
2G5	can contribute to innovate thinking and innovation processes	

Cycle 3 (PhD level)

	Knowledge (K), Skills (S) and General competence (G)							
NQF The ca	andidate:	[Name of study] The candidate:						
3K1	is at the forefront of knowledge within their subject area and masters the subphilosophy of science and/or artistic issues and methods	ject area's						
3K2	can assess the appropriateness and application of different methods and processes in research and academic and/or artistic development projects							
3K3	can contribute to the development of new knowledge, new theories, methods interpretations and forms of documentation within the subject area	5,						
3S1	can formulate problems, plan and carry out research and academic and/or art development work	istic						
3S2	can conduct research and academic and/or artistic development work at a hig international level	h						
3S3	can manage complex academic issues and challenge established knowledge as in the subject area	nd practice						
3G1	can identify new, relevant ethical issues and conduct their research wi professional integrity	th						
3G2	can manage complex interdisciplinary tasks and projects							
3G3	can disseminate research and development work through recognised and international channels	national						
3G4	can participate in debates within the subject area in international foru	ms						
3G5	can assess the need for, initiate and drive innovation							

Appendix 2: The programme of study's learning outcomes distributed by course

According to Section 2-2 (4) of the Regulations on the supervision and control of the quality of Norwegian higher education, the content, structure and infrastructure of the educational provision must be adapted to the learning outcomes of the educational provision. The following matrix shows the programme's learning outcomes ditributed by course, and faculties are recommended to apply this in order to document conformity between the learning outcome description, content and structure. In accordance with Section 3.2.4 of NTNU's Delegation Regulations, it is assumed that the faculties meet all formal requirements and have good quality control to ensure compliance with regulations and guidelines.

<programme of="" study=""></programme>																		
The programme of study's learning outcomes (K=Knowledge, S=Skill, G=General Competence)	The programme of study's courses and the learning outcomes at programme level that these courses help to attain														s			
	Course 1	Course 2	•••	::	•••		:		•••				•••	:	:	:	:	Ē
K-1																		
K-2	X		X	et c.														
K-3		Χ	Χ															
K-4			Χ															
K-5																		
S-1																		
S-2																		
S-3																		
S-4																		
S-5																		
G-1																		
G-2																		
G-3																		
G-4																		
G-5																		