



GUIDELINES FOR DESIGN OF STUDY PROGRAMMES AND COURSES AT NTNU (THE PROGRAMME DESCRIPTION GUIDE)

NTNU 2021

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About the programme description guide

The guide for the *design of study programmes and courses at NTNU (the “Programme Description Guide”)* should be seen in the context of the document *Requirements for the study programme portfolio at NTNU (the “Portfolio Guide”)*¹, which includes a description of the strategic assessments to be made when establishing and closing programmes and courses.

The programme description guide is founded on Section 4-1 (3) of NTNU’s Academic Regulations. Section 4-2 (1) and (2) of the Academic Regulations describe what a programme description and course description must include as a minimum. There are also requirements founded on the Regulations on supervision of the educational quality in higher education (studietilsynsforakriften). The Programme Description Guide must be followed for the description of **all educational provision**² that falls under the definition of a programme of study in Section 1-2 of the Academic Regulations:

A study unit consisting of a collection of courses with an overall learning outcome, to which students can apply and be admitted. A characteristic of a study programme is that it is not necessary to reapply for admission in order to take new courses within the programme.

Purpose

The Programme Description Guide is based on requirements set out in the [Regulations concerning quality assurance and quality development in higher education and tertiary vocational education](#) (studiekvalitetsforakriften), the [Regulations on supervision of the educational quality in higher education](#), and the [academic regulations for NTNU](#) (studieforakriften). It is an advantage to be familiar with these regulations, as well as with the *Veiledning om akkreditering av studietilbud* (Guidance on accreditation of study programmes).³

In some subject areas, there are also national curriculum regulations that govern certain programmes of study. In addition, some programmes have certification requirements established by various sector ministries or subordinate government agencies. Study programmes covered by such regulations must comply with the regulations.

Through its standardized format, the guide helps to increase the quality of education at NTNU. A common specification of requirements for all study programmes makes it easier for students, applicants, and external stakeholders to obtain and use information about educational offerings at NTNU. It also becomes easier for programme councils and units to design programme descriptions and course descriptions when everyone uses the same template.

The guide is to be used as part of the preparations for establishing new programmes of study and is to be used by course coordinators, heads of programmes, faculties, executive committees, etc. in the annual reviews and the audits of existing study programmes.

¹ [Guidelines for development of the study programme portfolio \(“The Portfolio Guide”\)](#)

² This includes both programmes of study that lead to a degree and shorter educational offerings such as one-year programmes, further education and courses that are offered separately and that are not part of a study programme; see Directive F-03-16 from the Ministry of Education and Research. The guide is applicable regardless of how the programme of study is organized (campus-based, based on group sessions, online, decentralized, etc.). Studies at the doctoral level comprise both the required coursework and the scientific thesis.

³ [Veiledning om akkreditering av studietilbud \(Guidance on accreditation of study programmes\)](#)

Process for developing programme descriptions and course descriptions

The work on quality assurance provides the basis for the programme description process and is made clear in NTNU's annual cycle for this process; see the appendix. The timeline for the process is illustrated in an appendix and described in more detail in the Portfolio Guide (see footnote 1).

Together with the Education Quality Division, the Pro-Rector for Education has dialogue meetings with the faculties and can provide advice and guidance on fulfilment of key requirements and guiding principles. It is also recommended to involve other units in the central university administration in developing the programme descriptions and course descriptions when needed.

The description of the programme of study must be complete and approved by the faculty by **1 April**. The courses must be approved by the faculty by 15 January ⁴.

The programme descriptions and course descriptions create an obligation and are legally binding for NTNU. They must always be correct. Students are entitled to clear and precise information about how to plan and carry out their studies, as well as their rights and obligations. No programme or course information can be changed after it has been approved and announced to students. Changes in connection with procedural errors or other exceptional circumstances are made in accordance with Section 4-2 of the Academic Regulations.

Laws and regulations

Programmes of study at NTNU must fulfil all the requirements of relevant laws and regulations, with accompanying supplementary regulations and guidelines. An overview of the regulations and framework in effect is available on NTNU's summary page "Generelle lover og regler – studier" ("General laws and regulations – study programmes").⁵

NTNU is to have procedures for systematically checking that all study programmes satisfy relevant regulatory requirements; see Section 4-1 (3) of the Regulations on supervision of the educational quality in higher education. It is assumed that the faculties meet all formal requirements and can document this⁶.

Archival of programme description documents

Archival of programme descriptions must follow the applicable [guidelines](#).

About the programme of study

As well as completion of the fields below, the programme description must include the following information: the date of the approved programme description, the name of the unit that has approved the programme description, and the date of the previous and next planned *periodic* evaluation of the programme of study where applicable; see the [Guide to periodic evaluation of programmes of study](#) .

The fields that do not concern the programme of study, for example, programmes in which students are not subject to suitability assessment, must be left blank.

⁴ <https://innsida.ntnu.no/wiki/emneplanlegging>

⁵ <https://innsida.ntnu.no/wiki/-/wiki/Norsk/Generelle+lover+og+regler+-+studier>

⁶ Cf. the powers delegated to the dean and executive committee under Section 3.2.4 of [NTNU's regulations on delegation](#)

Framework for the study programme

Name of the study programme

The programme of study must have an appropriate name – see Section 2-2 (1) of the Regulations on supervision of the educational quality in higher education. The name must provide students, employers and the community with a clear understanding of the programme's content. The name of the programme must be specified in Norwegian Bokmål, Norwegian Nynorsk and English. If it is an international programme, the information should only be provided in English.

Name of the degree

The name of the degree and any additional designation must be specified in Norwegian Bokmål, Norwegian Nynorsk and English. See sections 2-10 to 2-12 of the Academic Regulations for rules on the structure of names, including English names.

Education level (NQF cycle)

Specify the level of education in terms of the stages of the cycles in the Norwegian Qualifications Framework for Lifelong Learning (NQF):

- Cycle 1: bachelor's degree, professional training qualification and further education (may be in the first or second cycle).
- Cycle 2: master's degree, cand.med., cand.psychol., professional training qualification (five-year primary and lower secondary teacher education) and further education (may be in the first or second cycle).
- Cycle 3: PhD and Dr philos.

Language of instruction

Specify the language of instruction for the study programme⁷.

Nominal length of study

Specify the number of years of study and whether it is a part-time- or full-time programme. Specify the scope in terms of credits.

Workload

The students' total workload is divided among various activities such as lectures, supervision, thesis seminars, discussion groups, practical training, laboratory work, independent work (literature studies, assignments, discussions, etc.), and taking examinations. On this basis, estimate the distribution of the time spent between scheduled forms of learning, non-scheduled forms of learning, and students' own work/self-study. This applies per week and/or per academic year.

The academic year is specified as ten months; see Section 3-8 (1) of the Universities and University Colleges Act. The basis for programmes of study at NTNU is that an academic year amounts to a minimum workload of 1500 hours and normally not more than 1800 hours for students. The academic year is specified as 40 weeks and a full-time programme results in 60 credits per year. Broken down, this has the following implications for the average work effort expected from students (certain courses and certain programmes of study may have higher requirements for students):

- 40 – 42.5 hours a week (average for the academic year).
- 26 – 29 hours per credit (average for the year of study)
- One -1- week's work corresponds to about 1.5 credits
- A course worth 7.5 credits corresponds to about 5 weeks of work.

⁷ See [NTNU's Guidelines on Language Policy](#)

Host faculty and host department

Specify the host faculty and (if applicable) the host department for the programme.

References to national curricula and regulations

Refer to the appropriate curriculum for programmes of study with national curriculum regulations or equivalent, or a curriculum recommended by Universities Norway (UHR) with national guidelines.

Evaluation

Give a brief overall description of the evaluation methods that are used at programme and course level; see *Quality Assurance of Education*⁸.

Admission

Admission requirements

Refer to the national regulations on admission to higher education (forskrift om opptak til høyere utdanning) when the programme is advertised through the Norwegian Universities and Colleges Admission Service (NUCAS).

Refer to the regulations on admission to NTNU when admissions are managed by NTNU. For ranking rules, also refer to the national regulations on admission, or to NTNU's admission regulations if applicable; see Chapter 3 of NTNU's admission regulations. Rules for admission and ranking are developed in a dialogue with the Academic Administrative Division, specialist group for admissions.

Ranking rules for admission to programme options must be stated in the programme description for the programme; see Section 22 (1) of NTNU's admissions regulations.

Police certificate of good conduct

If a certificate of good conduct from the police (politiattest) is required for admission, this must be specified. Refer to the specific legal authority for the requirement⁹; see Chapter 6 of the Regulations on admission to higher education. Also refer to NTNU's web page for police certificates of good conduct¹⁰. Whether the programme is covered by requirements for a police certificate of good conduct should be assessed according to the guidelines in ePhortesak 21/13522 doc. 1.

Medical certificates

Specify any requirements for documentation of MRSA and tuberculosis status, a personal statement of health, vaccinations related to practical training or similar.

Suitability assessment and authorization

If the programme is subject to suitability assessment, this must be specified; see the Regulations relating to suitability assessment (forskrift om skikkethetsvurdering). Briefly describe the suitability assessment throughout the programme and the criteria applicable to the programme and refer to NTNU's web page on suitability assessment¹¹.

If graduates who have completed their education and received their diploma are covered by the authorization scheme (see Section 48 of the Health Personnel Act), this must be stated.

⁸ <https://innsida.ntnu.no/wiki/-/wiki/Norsk/Kvalitetssystem+for+utdanning>

⁹ See below "students" in [Police Certificate - Purpose](#).

¹⁰ <https://www.ntnu.no/studier/opptak/politiattest>

¹¹ <https://innsida.ntnu.no/wiki/-/wiki/Norsk/Skikkethetsvurdering>

Special requirements and conditions

Additional information about the programme of study can be specified here. This applies to aspects that are not part of the admission requirements. If special requirements for technology apply to participation in the programme, these must be specified. These may concern special software or requirements for computers and hardware; see Section 3-10 of the Academic Regulations. Some programmes of study are subject to various certification schemes, which must also be described.

Introduction

Give a brief overall introductory description of the programme for the primary audience: students. The introduction can describe the academic content, objective, work-related relevance, general requirements for completion and other relevant aspects that are emphasized in the programme. If the programme is implemented jointly with other institutions, this must be stated. Here, it is not necessary to describe the organization and structure of the courses in the programme; this takes place later.

Learning outcome descriptions

Learning outcomes must be described in terms of what a student should have achieved on completion of the programme.

Describe learning outcomes in the categories of “knowledge”, “skills” and “general competence”. The Norwegian Qualifications Framework for Lifelong Learning (NQF) requires us to structure study programmes so that the content (learning activities) supports the expected learning outcomes, and that forms of assessment are designed to enable testing of the expected learning outcome. At NTNU, we must demonstrate our academic profile in the programmes governed by national curricula when we formulate learning outcomes for these programmes.

The learning outcome description must provide a basis for communication about the candidates' competence both internally at the institution, to educational institutions in Norway and abroad, and to employers and society. The learning outcome description must be adapted to study programmes at a specific level in the NQF.

Also see Section § 2-2 (4) and (5) of the Regulations on supervision of the educational quality in higher education.

The learning outcome for programmes with professional requirements, such as programmes with curriculum frameworks, must meet both the professional and the NQF requirements.

The description of the candidate's expected learning outcome as stated in the diploma must fully match the study programme's learning outcome. The description of learning outcomes must be available in Norwegian Bokmål, Norwegian Nynorsk and English.

Programme structure

Overview of the structure and courses in the programme of study

The programme of study must be structured in a way that ensures consistency between the learning outcome descriptions and the learning, actual skills, and general competence that the students have gained after completing their course of study. Under Section 2-2 (4) of the Regulations on supervision of educational quality in higher education, the content, structure and infrastructure of the study programme are to be tailored to the learning outcomes for the programme.

The curriculum guide includes a matrix showing the programme's combined learning outcomes distributed by course, and the faculty is recommended to use this to document consistency between

the learning outcome descriptions, content, and structure. In accordance with Section 3.2.4 of [NTNU's Regulations on delegation](#), it is assumed that the faculties meet all formal requirements and have good quality assurance so that regulations and guidelines are followed.

Specify the following:

- Overview of all courses in the study programme; clearly show the progression from semester to semester for all the years of study in the programme. Which courses are compulsory and which are elective? Include any reservations about changes in elective courses.
- Any requirements for progression/qualification for admission to the next year.
- Specialization in the programme; any requirements for the extent of specialization required to achieve the degree. For a bachelor's degree, the courses included in the specialization must be specified.
- Programme options (profile).

Common courses

Specify any common courses in the degree; see Section 4-11 of the Academic Regulations. Which variant of ex.phil (Examen philosophicum) is included; specify the subject area course¹², Experts in Teamwork (EiT) (intensive/semester-based), and any restrictions on selection of common courses.

The area of study to which the programme belongs must be evident from the programme description.¹³

Deadlines and choices

At what stage of the programme do students choose programme options, specializations, elective courses, etc?

Requirements for progression

Formal requirements for progress, qualification for admission to the next year of study if applicable.

International student exchange

Describe which semester is best suited for student exchange in the degree-conferring programmes of study. Provide a rough overview of the institutions or countries with which exchange agreements have been entered. The content of the exchange must be academically relevant – see Section 2-2 (8) of the Regulations on supervision of the educational quality in higher education.

Transitional arrangements

If programme descriptions are changed in a way that may have consequences for the progression of students who are already taking the programme, transitional arrangements to ensure that these students are not delayed must be described. Pay attention to transitional arrangements for study programmes that follow previous national curricula. These arrangements are usually established in the national curricula through statutory regulations.

¹² See "[Veiledning for utarbeidelse av områdeemne ved NTNU \(Guide for developing subject area courses at NTNU\)](#)" for further description of study area managers, subject area courses and selection of generic themes

¹³ In the scheme for subject area courses, NTNU has the following areas of study: 1. Humanities and aesthetic disciplines, 2. Teacher education and master's programmes in teacher education (lektorutdanning), 3. Medicine and health, 4. Natural sciences, 5. Social sciences, 6. Technology, 7. Economics, management and administration

Learning methods

The learning methods must be adapted to the expected learning outcome for the programme of study – see Section 2-2 (5) of the Regulations on supervision of the educational quality in higher education. Provide a general description of the type of learning methods and approaches to work used in the programme of study, based on the learning methods and approaches to work in the course descriptions to the programme of study¹⁴. Specify how the programme paves the way for the student to take an active role in the learning process in the programme and how the learning methods are adapted to a digitalized society.

Describe the relationship between the programme and research and/or artistic research in accordance with the requirements in Section 1-3 a) of the Universities and University Colleges Act.

Excursions

Describe any excursions and field trips. Pay particular attention to the [guidelines in force for study trips](#). Any alternatives to voluntary study trips must be described in accordance with the guidelines in force.

Practical training

In practical training/placements, students work for a fixed period in a setting similar to the one in which they will work as professionals. The requirements for work tasks as well as their scope and performance will vary depending on the stage that the student has reached in the course of study. Characteristics of practical training are that it takes place outside the framework of the educational institution and is supervised by a professional at the host institution.

Describe the scope and organization of the practical training. Other relevant information regarding practical training, for example reference to relevant guidelines, requirements for completion, etc., must also be described.

Forms of assessment

The forms of assessment in the study must be designed in a way that makes it possible to use the most appropriate methods of measuring the student's achievement of the learning outcome – see Section 2-2 (5) of the Regulations on supervision of the educational quality in higher education. Good variation in forms of assessment is also a clear expectation from the Norwegian Agency for Quality Assurance in Education (NOKUT). As a starting point, use the forms of assessment in the courses in the programme of study when the forms of assessment are described for the programme as a whole.

Internationalization

All NTNU graduates must have acquired international competence that is relevant to the subject area. Describe which schemes other than student exchange the programme of study provides for internationalization, adapted to the level, scope and distinctive character of the programme); see Section 2-2 (7) of the Regulations on supervision of study programmes. In this case the programme is the centre for internationalization, and the activities may include a variety of activities such as use of international literature, international guest lecturers, international students, and participation in international conferences.

¹⁴ For study programmes with few students and/or a geographically dispersed student group, this rule means that NTNU must take steps to ensure a good study environment enabling academic interaction between the students and/or between the students and the academic environment.

Career opportunities

Describe how the study programme is academically relevant to working life with specific examples of possible career paths – see Section 2-2 (2) of the Regulations on supervision of the educational quality in higher education.

Further study

Provide specific examples of possible further study at NTNU, and subject areas with programmes of study at other institutions.

Arrangements for collaboration with employers and/or society

Relevance and up-to-date knowledge within the profession, working world and/or society are ensured through arrangements for interaction with employers and/or society adapted to the content and level of the study programme.

Entrepreneurship and innovation

NTNU's strategy Knowledge for a Better World¹⁵ makes it clear that innovation is a key element of NTNU's programmes, and that NTNU's students must acquire skills in innovation and address issues relevant to working life. Describe how innovation and entrepreneurship are integrated in the programme of study.

Course descriptions

All courses must have a course description that fulfils specific requirements – see Section 4-2 (2) of the Academic Regulations and the Regulations on supervision of the educational quality in higher education. Requirements for the content of a course description are listed below.

Course name

The course must have an appropriate name. The course name must be specified in Norwegian Bokmål, Norwegian Nynorsk and English. The course code is assigned according to the guidelines in force¹⁶. The scope of the course must be specified in credits.

Level

Specify the level of the course; see the stages of the NQF cycles, with cycle 1, cycle 2 or cycle 3.

Teaching semester

Specify the semester(s) in which the course is offered. Spring and/or autumn, and whether the course lasts one, two or more semesters.

¹⁵ <https://www.ntnu.no/ntnus-strategi>

¹⁶ [Retningslinjer for emnekoder](#) (Guidelines for course codes)

Language of instruction

Specify the language of instruction. Teaching can be provided in a Scandinavian language or English; see NTNU's [Guidelines on Language Policy](#) and NTNU's International Action Plan. The exception here is for the language disciplines.

Teaching location

Specify the NTNU campus location(s) where teaching takes place.

Content

Give a brief description of what the course involves. The description must be seen in the context of the expected learning outcomes. If the course is a subject area course, specify the affiliation and generic theme of the subject area.

Learning outcomes

The description of learning outcomes at course level should be far more specific and measurable through the forms of assessment than the corresponding descriptions at programme level. At course level, there is no absolute requirement for formulation of learning outcomes within all the dimensions in the Qualifications Framework. For many courses, it is natural to cover all dimensions, but some courses have a strong focus on knowledge, while the primary focus of other courses may be on skills. The sum of all the courses in the programme of study must ensure coverage of the overall learning outcomes for the programme within all three dimensions.

Learning outcomes should be formulated concisely and be easy to understand. It is important to refer clearly and specifically to what the student knows and can do after passing the course.

At course level, it is important that the relationship between learning outcomes and the chosen learning methods and assessment forms is well-considered and clear.

Recommended previous knowledge

If specific previous knowledge is desirable, but not required, this may be stated here. This is to help students who would like to choose the right course.

Required previous knowledge, restricted admission and reservation for students admitted to a particular programme

Specify the courses that must be passed in order to be able to register for the course and/or take the examination. Specify the courses with the course name and course code. Make it clear whether the student can start the course without required previous knowledge, but not take the examination, or whether the required previous knowledge also applies to starting the course.

Specify whether admission to the course is restricted.

Specify whether the course is reserved for students admitted to a particular programme. This means whether one must be a student in one or more specified programmes of study in order to participate in the teaching and to take the examination for the course, and the programme(s) to which this applies.

Learning methods

Describe how the teaching is designed to promote the student's learning – see Section 2-2 (5) of the Regulations on supervision of the educational quality in higher education. There should be a clear relationship between the expected learning outcomes for the course and the learning methods chosen for the course.

Compulsory activities

Compulsory activities are work and tests that must be approved as a prerequisite for the right to assessment, but where the result is not included in the calculation of the grade for the course. The compulsory activities must be described precisely and comprehensively, the number of activities must be specified, and the activities must be assessed as approved/not approved. Examples include reports, exercises, methods courses, practical training, field courses, laboratory work, or performances.

Form of assessment and grading scale

The form(s) of assessment must be adapted to the expected learning outcomes and must be described exhaustively and precisely. Specify the duration¹⁷ for the form of assessment. Specify whether the form of assessment may be changed if the examination is rescheduled; see Section 5-6 (1) of the Academic Regulations. If the form of assessment is other than a written examination, cf. Section 5-6 (2) of the Academic Regulations, specify how rescheduled examinations will be organized (applies to rescheduled examinations in connection with legitimate absence).

Guidelines for describing portfolio assessment are provided in “Veileder for mappevurdering ved NTNU (Guide for portfolio assessment at NTNU)”.¹⁸ If the course has more than one assessment scheme, that is, component assessments as described in Section 1-2 of the Academic Regulations, the following must be clarified:

- the percentage weighting of the component assessments
- which component assessments must be repeated if students do not pass the course, or whether all component assessments must be repeated; see Section 5-6 (3) of the Academic Regulations
- which component assessments must be repeated if students wish to improve their grade in the course, or whether all component assessments must be repeated; see Section 5-6 (4) of the Academic Regulations.
- If the component assessments take place during the semester and prevent further participation in the course if the component assessment is not passed, it must be made clear whether an appeal against the grade can be made after the separate component assessment; see Section 6-2 (7) of the Academic Regulations.

Provide an exhaustive and precise list of permitted aids for written examinations. On a general basis, bringing a dictionary to the examination is permitted. For language studies, which will have exceptions to the general basis, this must be made clear.

For a practical course where completion of the course is to be regarded as the form of assessment, specify whether it is possible to apply for a third attempt in the course; see Section 5-10 of the Academic Regulations.

¹⁷ Example: three-hour written or two-week take-home examination, etc.

¹⁸ [_Veileder for mappevurdering ved NTNU \(Guide for portfolio assessment at NTNU\)](#)

Specify the assessment scale (letter grades or pass/fail).

Credit reduction due to overlapping courses

Specify whether the course overlaps entirely or partially with another course; see Section 4-6 of the Academic Regulations.

Course coordinator

Specify the course coordinator.

Responsible unit

Specify the department and faculty responsible for the course.

Other relevant information

Other provisions important for the implementation of the course can be specified here. For example, course fees.

Teaching materials

Specification of teaching materials is not a mandatory part of the course description, but it is a requirement that a curriculum summary has been prepared for each course, and that an updated summary is available before the start of the semester.

Course evaluation

Specify briefly how course evaluation is carried out¹⁹.

¹⁹ <https://innsida.ntnu.no/wiki/-/wiki/Norsk/Metoder+for+evaluating+av+emne>

Appendices

Appendix 1 The Norwegian Qualifications Framework and learning outcomes²⁰

Cycle 1 (bachelor's degree level)

Knowledge (K), Skills (F) and General competence (G)		
NQF The candidate:		[Programme name] The candidate:
1K1	has broad knowledge of key topics, theories, issues, processes, tools and methods in the subject area	
1K2	is familiar with research and development work in the subject area	
1K3	can update their knowledge within the subject area	
1K4	has knowledge of the subject area's history, traditions, distinctive character and place in society	
1F1	can apply academic knowledge and relevant results from research and development work on practical and theoretical issues and make well-founded choices	
1F2	can reflect on their own academic practice and adjust this under academic supervision	
1F3	can find, evaluate, and cite information and academic material and present this in a way that sheds light on the problem at hand	
1F4	can master relevant tools, techniques and forms of expression in the discipline	
1G1	has insight into relevant disciplines and issues of professional ethics	
1G2	can plan and carry out varied assignments and projects that extend over time, alone and as a participant in a group, and in accordance with ethical requirements and principles	
1G3	can convey key academic material such as theories, problem formulations and solutions, in writing, orally and through other relevant forms of expression	
1G4	can exchange points of view and experiences with others who have a background in the subject area, thus contributing to the development of good practice	
1G5	is familiar with innovative thinking and innovation processes	

Cycle 2 (master's level)

Knowledge (K), Skills (F) and General competence (G)		
NQF The candidate:		[Programme name] The candidate:
2K1	has advanced knowledge within the academic field and specialized insight in a limited area	
2K2	has thorough knowledge of the scholarly or artistic theories and methods in the field	
2K3	can apply knowledge to new areas within the academic field	
2K4	can analyse academic problems on the basis of the history, traditions, distinctive character and place in society of the academic field	
2F1	can analyse and deal critically with various sources of information and use them to structure and formulate scholarly arguments	

²⁰ https://www.nokut.no/siteassets/nkr/250414_nasjonalt_kvalifikasjonsrammeverk_for_livslang_laring_nkr.pdf

2F2	can analyse existing theories, methods and interpretations within the subject area and work independently on practical and theoretical problem solving	
2F3	can use relevant methods for research and academic and/or artistic development work in an independent manner	
2F4	can carry out an independent, limited research or development project under supervision and in accordance with applicable norms for research ethics	
2G1	can analyse relevant problems in the subject area, profession, and research ethics	
2G2	can apply his/her knowledge and skills in new areas in order to carry out advanced assignments and projects	
2G3	can disseminate extensive independent work and masters the academic field's forms of expression	
2G4	can communicate about academic issues, analyses and conclusions in the field, with both specialists and the general public	
2G5	can contribute to new thinking and innovation processes	

Cycle 3 (PhD level)

Knowledge (K), Skills (F) and General competence (G)		
NQF The candidate:		[Programme name] The candidate:
3K1	Is in the forefront of knowledge within his/her academic field and masters the field's philosophy of science and/or artistic issues and methods	
3K2	can evaluate the expediency and application of different methods and processes in research and scholarly and/or artistic development projects	
3K3	can contribute to the development of new knowledge, new theories, methods, interpretations and forms of documentation in the field.	
3F1	can formulate problems, plan and carry out research and scholarly and/or artistic development work	
3F2	can carry out research and scholarly and/or artistic research work of a high international standard	
3F3	is capable of dealing with complex academic issues and challenging established knowledge and practice in the subject area	
3G1	can identify new relevant ethical issues and carry out his/her research with scholarly integrity	
3G2	can manage complex interdisciplinary assignments and projects	
3G3	can communicate research and development work through recognized Norwegian and international channels	
3G4	can participate in debates in the field in international forums	
3G5	can assess the need for, initiate, and practice innovation	

Appendix 2. Combined learning outcomes for the programme of study by course

Under Section 2-2 (4) of the Regulations on supervision of educational quality in higher education, the content, structure and infrastructure of the study programme are to be tailored to the learning outcomes for the programme. The following matrix shows the programme's combined learning outcomes distributed by course, and the faculty is recommended to use this to document consistency between the learning outcome descriptions, content and structure. In accordance with Section 3.2.4 of [NTNU's Regulations on delegation](#), it is assumed that the faculties meet all formal requirements and have good quality assurance so that regulations and guidelines are followed.

<PROGRAMMES OF STUDY>																
Programme's learning outcomes (K=Knowledge, F=Skills [<i>Ferdighet</i>], G=General competence)	Programme's courses and which learning outcomes at programme level the courses help to fulfil															
	Course 1	Course 2	:	:	:	:	:	:	:	:	:	:	:	:	:	:
K-1																
K-2	X		X	e												
K-3		X	X	tc												
K-4			X	.												
K-5																
F-1																
F-2																
F-3																
F-4																
F-5																
G-1																
G-2																
G-3																
G-4																
G-5																

Appendix 3: New milestone plan for quality of education processes from autumn 2021

Milestone plan page 1 of 2:

When	Activity	Contents	Responsible
September	Pro-Rector's order letter to the faculties (FAC) and executive committees (FUs)	Rector's combined order and overarching objectives and framework for: <ul style="list-style-type: none"> A. Quality assurance report and long-term portfolio development B. Establishment and closures; see Section 4-1 of the academic regulations (studieforskriften) C. Admission capacity (number of students admitted to each programme) 	Pro-rector
October	Revision of the programme description and desired admission capacity	The faculties and executive committees start work on revising programme descriptions and on 15 October 2021 they report their desired admission capacity for 2022.	Faculty and executive committees
December	Submission to the NTNU Board	The Board decides on admission capacity for the following academic year	Pro-rector
20 December	Quality assurance report from the faculties	Analyses of quality and plans for follow-up based on programme reports, departments' reporting and periodic evaluations, and descriptions of long-term strategic plans for portfolio development as input to an item for submission to the Board in March.	Faculty
20 January	Quality assurance reports from the executive committees	The executive committees describe their quality assurance work in accordance with NTNU's quality system for education and Rector's order letter.	Executive committees
January / February	Education dialogue meetings	Dialogue meetings between the Pro-Rector for Education and the faculties on the study programme portfolio and quality development. Follow-up of objectives and framework in the Pro-Rector's order letter.	Pro-rector

Milestone plan page 2 of 2:

1 February	Advance notice - establishment and closure of study programmes (“Step 1”)	Advance notice of desired establishment and closures of programmes with a short strategic justification in accordance with the simplified “Portfolio Guide” .	Faculty
February - April	Portfolio meetings - spring	The portfolio group meets with the faculties to assist with the development of their applications.	Pro-rector
Mar	Submission to the NTNU Board	The Rector submits the quality assurance report including long-term portfolio development to the Board	Pro-Rector
2 May	Registration of establishment and closure of study programmes (“Step 2”)	Registration of final proposals for changes to the programme portfolio, in accordance with the requirements in the simplified and revised portfolio guide.	Faculty and executive committees
June	Submission to the NTNU Board	Overall assessment and decision on establishment and closure of programmes.	Pro-Rector
Aug./Sept.	Portfolio meetings - autumn	Dialogue with the faculties on new programme content and quality assurance of changes in the programme portfolio during the following academic year, in preparation for the upcoming process of programme description.	Faculty
1 October 2022:	Desired admission capacity	<p>Faculties’ deadline for</p> <ul style="list-style-type: none"> - registration of desired admission capacity for all programmes for 2023-2024. - proposals for commitments outside the budget allocation <p>Note: 15 January 2023 is the deadline for registration of courses with restricted admission and quotas in postgraduate teacher education (PPU and FPPU)</p>	Faculty

Note: Further details and ePhorte numbers for deliverables in the various sub-processes are given in Appendix A-C in the Pro-Rector’s annual order memorandum.