The Regulations for the Degree of Philosophiae Doctor (PhD) at the Norwegian University of Life Sciences apply for this course of study. The Regulations concern the objectives of, responsibility for, admission to, and implementation and completion of the PhD education, including collaboration with another degree-conferring institution. For all references in the text, these Regulations apply.

PROGRAMME OF STUDY

The PhD programme in Society, Development and Planning. The programme encompasses four programme options:

- Urban and regional planning
- Real estate and law
- Public health science
- Landscape architecture

MAIN OBJECTIVES

Candidates must be able to carry out an independent work of research on an advanced scientific level. They must be qualified to conduct research activities of an international standard in the subject area, and must be familiar with and have a reflective attitude towards different perspectives and research methods in the field as well within research ethics. The PhD education will give the candidate knowledge, skills and expertise in line with the Norwegian qualifications framework.

PLACE IN THE NORWEGIAN QUALIFICATIONS FRAMEWORK

Level 8, philosophiae doctor (PhD.)

DEGREE ON COMPLETION OF THE PROGRAMME OF STUDY

PhD

SCOPE

The PhD programme totals three years of full-time study, including at least 30 credits from organised activities. The programme is normally completed within three years, but the candidate may extend this period by performing relevant work for the department. The work will be reimbursed by the department and can thus be included as an extension of the contract period. The work must have academic relevance vis-à-vis the candidate’s PhD programme, and must not detract from his/her focus on the PhD project. Some PhD students with external funding have as a point of departure a four-year employment contract that includes an obligation to carry out a stipulated amount of academic work relevant for the external funding body during that period.

OWNER AND CONTACT DETAILS

The Department of Landscape Architecture and Spatial Planning (ILP) is the department responsible. Professor Petter Naess is the head of the research school and Sheena Gilchrist Lisland is the contact person in administration.

COLLABORATION WITH OTHER INSTITUTIONS

Part of the formal and highly specialised doctoral research education takes place in collaboration with Nordic universities, e.g. the Department of Landscape Architecture, Planning and Management at the Swedish
SOCIETAL RELEVANCE

The research theme of the PhD programme in Society, Development and Planning encompasses key challenges to society in the fields of urban and regional planning, real estate and law, public health science and landscape architecture, each of which constitutes one of the four subject areas of the programme. The societal relevance of the PhD programme is far-reaching. For example, land resources are finite, and the way we manage them is of key significance for future economic, environmental, social and cultural development. The development of buildings, infrastructure, green structure and land use generally in cities and urban settlements affect among other things the health and the quality of life of the population, urban emissions of greenhouse gases and resilience to climate change, and how environmental degradation and positive environmental qualities adversely affect or favour different population groups. The purpose of public health science is to promote health and to counter disease in the population at large and among vulnerable groups through greater knowledge about the determinants for health, including nature and the environment. The objectives of the PhD education in this field are to increase knowledge about what contributes to health, and to develop and evaluate targeted measures for promoting health and preventing disease. An understanding of socioeconomic change processes, of real estate and management systems, of people's perception and use of places and landscapes and their relationship to these, provides fundamental knowledge for future management and development. Key concepts in this connection are market stability, and legal transparency and predictability.

A PhD degree in society, development and planning qualifies graduates for future research and teaching at academic institutions, as well as for management activities and the business sector in general where there are high demands on scientific insight and analytical thinking.

ADMISSION REQUIREMENTS

See sections 5 and 6.

Admission to the PhD programme is contingent on the applicant having an academically strong five-year master's degree in the subject areas offered at the Department of Landscape Architecture and Spatial Planning or in a corresponding related field of study. The department requires the submission of a satisfactory plan for the PhD programme, approved funding and a project description of the PhD work. The project description must give an account of the topic, the research question and choice of research methods. The description should provide a timeline for the various phases of the work. Admission is conditional on the topic being part of the department's field of study and possible connections to research groups at the department. The topic should be relevant to the department's research strategy, and it is an advantage if it can be linked to ongoing or planned research projects. It is also a prerequisite that the department has sufficient capacity for supervision.

Admission will be formalised in a contract between the department and the PhD candidate.

LEARNING OUTCOMES

Candidates shall be qualified to conduct research activities of an international standard in their subject areas and shall have knowledge of the scientific theory and methodology of the area of study. This will be achieved through formal courses as part of the required coursework and through candidates' own research practice. Candidates are expected to participate actively in international research networks in order to remain updated in the field, and to present their own research and receive feedback on it.
The formal courses are of central importance in achieving the learning outcomes, but work on the candidate's thesis is nevertheless the most important activity in order to achieve the educational objectives.

**LEARNING ACTIVITIES**

A PhD education consists of:
- an independent work of research in cooperation with supervisors and other researchers if relevant
- approved completion of the required coursework
- participation in active national and international research communities
- dissemination closely related to the research work
- writing a doctoral thesis based on the research work

The doctoral thesis may be a monograph or may be based on articles accompanied by a synthetizing chapter/introductory chapter that provides a frame for the thesis (“Kappe”). Guidelines have been compiled regarding the content of the synthetizing chapter/introductory chapter in an article-based thesis within the framework of this PhD programme.

In order to ensure the quality and progress of the work, compulsory introductory, midway assessment and final seminars are held. External academics participate in the seminars and give critical and constructive feedback.

Each PhD candidate is a member of one of the department’s research groups and is thus in regular contact with several active researchers other than their supervisors. The research groups hold scientific seminars with presentations given by invited introductory speakers, the senior researchers in the groups and PhD students.

**COMPULSORY COURSES**

The programme has three compulsory courses, each equivalent to 5 credits, which focus on general research skills.

“Framing the PhD” (PHD405) is compulsory for all of the PhD students in the programme during the autumn of Year 1. This is a start-up course to help students successfully delimit, specify and prepare a work plan for the PhD study process. Students also acquire general skills in obtaining information and using literature. Furthermore, the course helps them to develop a reflective attitude towards the relation between theory and methodology, and between research topic and research questions. It promotes the development of an understanding of the writing process as a tool for reflection. In addition, students learn basic skills in presentation and in giving feedback. The course concludes with the obligatory introductory seminar.

“Academic Writing» (PHD406), held once or twice a year, is also a compulsory course. The purpose is to strengthen the participants’ understanding of the nature of academic writing and publishing, the personal and contextual aspects of becoming an academic author, and how participants can become more effective in the writing process. The participants’ ability to write, edit and assess texts, focusing on both the detailed level (sentences/paragraphs) and the document as a whole are developed through practical tasks, presentations and critical feedback. Participants also receive training in assessing others’ texts and reacting to comments made in peer reviews of their own texts.

A course in theory of science and research ethics is also compulsory. The department holds annual courses in theory of science and ethics (PHD415) of special relevance for research in societal development and planning. In addition, we recommend PhD students to take the PHI401, which is held by the School of Economics and Business-NMBU. Often a course in methodology chosen in consultation with the supervisor will also be relevant. Other courses are held in collaboration with other Norwegian and international institutions and will vary in content according to the topic of the doctoral thesis. They will be announced on an ongoing basis.
The subject areas in the programme are fairly limited in Norway. Collaboration with other Nordic institutions has therefore been initiated regarding the development of more subject-specific courses in order to reach a critical mass of participants. These courses offered will vary in accordance with the current debate in the field, ongoing research projects and the topics selected by the participants. PhD workshops are held regularly in connection with international conferences. PhD students are encouraged to participate either in a PhD workshop in connection with the most important academic conferences within their fields such as the AESOP (Association of European Schools of Planning), ECLAS (European Council of Landscape Architecture Schools), and the European Urban Health Conference, or to give presentations at these or other international conferences. Such international participation in courses, workshops and conferences ensures that candidates are familiar with the forefront of international research and that they are inspired by new ideas from outside the ILP environment.

**EVALUATION OF LEARNING OUTCOMES**

A committee consisting of three members is appointed to evaluate the doctoral thesis. The work concludes with a trial lecture on a specified topic and a public defence of the doctoral thesis (disputation).

The degree of philosophiae doctor (PhD) is conferred on the basis of:

- Approved completion of the required coursework
- An approved doctoral thesis
- An approved trial lecture on a specified topic
- An approved public defence of the doctoral thesis (disputation)

See section 12.

**ACADEMIC CONTENT AND STRUCTURE**

The thesis must be an independent work at an international level. It may be in the form of a monograph or be based on articles. An article-based thesis usually consists of three to five articles.

The synthesizing chapter/ introductory chapter must synthesise and describe the connection between the articles. It should explain how the work on the thesis as a whole contributes new knowledge to the field. The research work must be of such merit as to be able to be published as part of the academic literature within its field.

The PhD programme will conclude with a public defence of the thesis, and a trial lecture will be held on an assigned topic related to, but not directly overlapping the subject of the thesis. The ability of the candidate to synthesise knowledge of the subject area within a given timeframe and to disseminate and present academic topics will be tested. The lecture must be at the master’s degree level.

The department normally admits one intake of PhD students annually and students take the same initial compulsory start-up courses. In exceptional circumstances there may be two intakes in the same year.

**Research school:**

The PhD programme in Society, Development and Planning is developed and run by a separate research school at the Department of Landscape Architecture and Spatial Planning. The research school constitutes a frame for common PhD courses addressing general topics within research, together with highly specialized courses offered in cooperation with other NMBU departments and with Nordic and other international partners within the four subject areas of the programme. The researcher school organizes the start, midway and final seminars mandatory for each PhD student, as well as regular PhD lunches with a topical content. It has also issued elaborate guidelines concerning certain aspects of the PhD study procedure targeting PhD students, supervisors and internal members of assessment committees.
SUBJECT AREAS IN THE PHD PROGRAMME

The Department of Landscape Architecture and Spatial Planning has a broad-based subject portfolio in society, development and planning, and work on the doctoral degree gives expertise and subject specialisation in the following research areas:

Urban and regional planning, including:
- impacts of land use and development (environmental, social, economic, etc.)
- the role, opportunities and limitations of planning and planners in processes that form and change the physical surroundings
- the professional work methods of planners (when preparing and assessing planning proposals as well as in relation to the public planning process)

Real estate and law, including:
- socio-economic change processes
- real estate and management systems
- prerequisites for market stability, legal transparency and predictability

Public health science, including:
- environment and health
- health in planning
- health-promoting experiences and activities

Landscape architecture, including:
- quality in the residential environment and public green spaces
- management of green structure/green spaces in cities
- management of the cultural landscape in agriculture and of urban landscape qualities
- history and green cultural heritage
- democracy and public involvement in landscape functions, patterns and change

INTERNATIONAL PERSPECTIVE

The international perspective is maintained through courses given in collaboration with international partners, through presentations at international conferences, publication in international journals and by inviting external opponents to the compulsory introductory, midway and final seminars.

The research community at the Department of Landscape Architecture and Spatial Planning participates in a number of subject-specific networks. The most important of these are AESOP, ECLAS and the Nordic network PLANNORD.

RESEARCH COMMUNITY LINKED TO THE PROGRAMME OF STUDY

The department has Norway’s largest research community in connection with planning, real estate and landscape architecture, as well as the largest university-based research community in public health science. The department has active research groups that work with nature resource management, green cultural heritage, urban sustainability, real estate development and public health science.

RESEARCH WORK IN CONNECTION WITH THE PROGRAMME OF STUDY
The research work shall be an independent work resulting in a doctoral thesis, which may be a monograph or based on articles. An article-based thesis consists of three to five articles, partly depending on the number of articles with co-authorship. An synthesizing chapter/ introductory chapter must be provided, with the candidate as the sole author.

SUPPORT FUNCTIONS AND INFRASTRUCTURE

A principal supervisor from the department and a co-supervisor are appointed for each candidate. Regular peer review meetings and social events are held for the PhD candidates.

It is a prerequisite that research fellows are linked to active research groups at the department and that the PhD candidates can access professional networks in this manner. Nevertheless, not all of the formal courses that the candidates take during the course of studies will be held at NMBU. The subject-specific courses held in collaboration with other institutions are of particular importance.

Supervisors must be actively engaged in research in their own field, and must also hold a PhD degree.

The department has a Virtual Reality Lab which will may be useful for certain PhD students.

EXCHANGES

In relation to the candidate’s research topic there will be exchange opportunities with some of the leading research environments through the department's research network.

ACCESSIBILITY

General information about universal design and special arrangements at NMBU: [http://www.nmbu.no/1mu](http://www.nmbu.no/1mu).

WORDING OF THE DIPLOMA

The PhD programme in Society, Development and Planning at the Department of Landscape Architecture and Spatial Planning consists of the following programme options:

- Urban and regional planning
- Real estate and law
- Public health science
- Landscape architecture

The PhD education is to furnish the candidate with special expertise and scientific immersion within one of these subject areas, or optionally a combination of two or more of them. The candidate ______ has obtained her/his PhD degree within the subject area of ________. The PhD education is to qualify the candidate to conduct research activities of an international standard and for other work within societal fields where high demands are made on scientific insight and analytical thinking. The PhD student undergoes an education that provides a deeper and extended qualification, based on a preceding Master degree. The PhD student has to conduct an independent research study resulting in an academic thesis at a high scientific level. The candidate must be knowledgeable of and engage in a reflective way with different perspectives and research methods within the field of research and within research ethics.
The degree of philosophiae doctor (PhD) is conferred on the basis of:
- Approved completion of the required coursework
- An approved doctoral thesis
- An approved trial lecture on a specified topic
- An approved public defence of the doctoral thesis (disputation)

The programme is based on the general description of the *PhD Education at NMBU*, and is regulated by the *Regulations for the Degree of Philosophiae Doctor (PhD) at the Norwegian University of Life Sciences*. 