

# GENERAL CURRICULUM FOR EDUCATION AT POSTGRADUATE LEVEL IN STRUCTURAL ENGINEERING

LULEÅ	Datum.....
TEKNISKA	190930
	Dnr.....
	4434-2019
	Klass nr.....
UNIVERSITET	3
Klass nr	

## 1 Subject Area

Structural Engineering includes loads, design, sustainability, load carrying capacity, repair and strengthening, of buildings and civil engineering structures made of concrete, steel, wood and other materials, separately or in combination, at normal conditions, in cold climate and in fire.

## 2 Programme curriculum

Education at post-graduate level in Structural Engineering that concludes with a licentiate degree comprises a total of two years full time study (120 higher education credits) and consists of a study programme that gives 30-60 higher education credits and a licentiate thesis that gives 60-90 higher education credits.

Education at post-graduate level in Structural Engineering that concludes with a doctorate comprises a total of four years full time study (240 higher education credits) and consists of a study programme that gives 60-120 higher education credits and a doctoral thesis that gives 120-180 higher education credits.

Up to the licentiate degree, the education primarily focuses on knowledge of methods and subject competence in the field where the academic work is carried on. Scientific communication, analysis and a critical approach are other aspects that are emphasised. The later part of the education focuses chiefly on the theme of the academic work and the development of related research questions and theory. Other themes that are emphasised in the latter part of the education are pedagogical training, leadership and network building. Courses are chosen for each individual as needed, The education shall fulfil the strategic aims of the university, An individual study programme is set up for every post-graduate student (according to a fixed template) where the study programme is specified in detail. The individual study programme is followed up at least once a year by the post-graduate student and his/her supervisor and is then approved by the head of department, as delegated by the faculty board.

## 3 Eligibility and selection

### 3.1 General eligibility requirements

As specified in Section 39 of Chapter 7 of the Higher Education Ordinance and the local guidelines laid down in the Admission Rules for Post-graduate Education at Luleå University of Technology.

### 3.2 Specific eligibility requirements

### 3.3 Selection

As specified in Section 41 of Chapter 7 of the Higher Education Ordinance and the local guidelines laid down in the Admission Rules for Post-graduate Education at Luleå University of Technology.

For selection for education at post-graduate level in Structural Engineering the following selection criteria apply:

- Knowledge relevant to the project in question
- Knowledge in the Structural Engineering subject is an additional qualification.
- Good skills in oral and written communication in English.

## **4 Examinations included in the education**

The education consists of courses and an academic thesis. Examinations included in postgraduate programmes are graded Pass or Fail. Course and licentiate thesis grades are decided by specially appointed teachers (examiners). Doctoral thesis grades are decided by a specially appointed grading committee.

### **4.1 Courses**

No courses are compulsory but basic and applied courses are recommended in mathematics, structural engineering, structural mechanics, strength of materials, modelling and simulation, and measurement methods.

Goal attainment is tested by means of the form of examination specified in the syllabus

#### **4.1.1 Recognition of prior studies**

As specified in the local guidelines laid down in the Admission Rules for Post-graduate Education at Luleå University of Technology.

### **4.2 Academic thesis**

An academic project in the form of a dissertation/ thesis in Structural Engineering shall be presented as a homogenous, cohesive academic work (monograph) or a brief summary — comprehensive summary — of appended academic essays (composite thesis) published in academic media that the post-graduate student has written alone or together with another person or persons.

Thesis manuscripts shall be presented at one or more research seminars or be subjected to equivalent review through the agency of the departments

The licentiate thesis is defended orally at a public licentiate seminar and is graded Pass or Fail. When the thesis is graded both the content of the thesis and the defence of the thesis are taken into consideration. The grade of a licentiate thesis is decided by an examiner appointed by the head of department.

The doctoral thesis is defended orally at a public disputation and is graded Pass or Fail, When the thesis is graded both the content of the thesis and the defence of the thesis are taken into consideration. The grade of a doctoral thesis is decided by a grading committee that is appointed for each thesis,

## **5 Degree**

In Structural Engineering, a post-graduate student who has been admitted to a doctorate has the possibility to take a licentiate degree after completing a portion giving at least 120 higher education credits of the education that will be concluded with a doctorate.

### **5.1 Degree objectives**

As specified in the degree description (Higher Education Ordinance, Appendix 2 — Degree Ordinance). See also the appendix below.

### **5.2 Degree title**

A post-graduate student who takes a licentiate degree in Structural Engineering receives the degree title of Licentiate of Science.

A post-graduate student who takes a doctorate in Structural Engineering receives the degree title of Doctor of Technology.

Requests for another degree title are made according to established guidelines.

## **6. Entry into effect and interim regulations**

The previous general syllabus will cease to apply for third-cycle students who are admitted to studies at third-cycle level after 2019-10-11.

If agreed between the third-cycle student and the supervisors, the new general syllabus, dnr 4439-2019, may be used as a steering document for a previously admitted third-cycle student.

It must be documented in the third-cycle student's individual study plan which general syllabus that applies.

