



**GENERAL SYLLABUS FOR EDUCATION AT THIRD-CYCLE LEVEL
IN
WOOD PRODUCTS ENGINEERING**

BFST Dean 07/06/2011
Ref. no. 1131:11

Admission to the education at the third-cycle level in Wood Products Engineering ceases as of 2015-03-01 (ref. no. 2669-14 BFST 19/1 2015).

1 Subject Area

Wood Products Engineering includes the research and development of wood products in a virtual, empirically verified model system, where the end user's product requirements are integrated with material properties and manufacturing processes.

2 Programme curriculum

Education at third-cycle level in Wood Products Engineering that concludes with a Degree of Licentiate comprises a total of two years' full time study (120 credits) and consists of a study programme that gives 30–60 credits and a licentiate thesis that gives 60–90 credits.

Education at third-cycle level in Wood Products Engineering that concludes with a Degree of Doctor comprises a total of four years' full time study (240 credits) and consists of a study programme that gives 60–120 credit and a thesis that gives 120–180 credits.

The courses are both teacher-supervised and independent study. The goal is that participants in graduate school will be prepared for when this is necessary for the subject's work. The research work is independent, with the level of responsibility increasing towards the end of the education. Supervision is provided throughout the education with emphasis on the first part of the education. The same applies with regard to courses, where the emphasis is on the first part of the education. The reporting of research is conducted via articles in academic journals and the presentation of articles at academic conferences.

Education at third-cycle level in Wood Products Engineering consists of theoretical and experimental model-based work as well as research methodology based on multi-dimensional measurements of an industry-related reality of properties, processes and structures within the timber industry, test-planning and also analysis and optimisation of products and manufacturing processes. Collaboration with other national and international universities is sought, as well as collaboration with industry and commerce in the form of, for example, the industry-employed doctoral student model.

An individual study plan is drawn up for every third-cycle student (according to a fixed [model](#)) where the study programme is specified in detail. The individual study plan shall be followed up at least once a year by a supervisor as well as the third-cycle student and then approved by the Head of Department, as delegated by the Board.

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3 Eligibility and selection

3.1 General eligibility requirements

As specified in [Chapter 7, Section 39 of the Higher Education Ordinance](#) and the local guidelines established in the [Admission Rules for Third-cycle Education](#).

3.2 Specific eligibility requirements

Main field of study within natural sciences or engineering and technology, 90 credits first-cycle.

Good command of oral and written communication in Swedish or English.

3.3 Selection

As specified in [Chapter 7, Section 41 of the Higher Education Ordinance](#) and the local guidelines established in [Admission Rules for Third-cycle Education](#).

4 Examinations included in the education

The education consists of courses and an academic thesis. Examinations included in third-cycle 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

Compulsory courses included in a third-cycle qualification in Wood Products Engineering: Educational teacher training; Theory of knowledge; Wood Products Engineering.

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 local guidelines established in the [Admission Rules for Third-cycle Education](#).

4.2 Academic thesis

An academic project in the form of a dissertation/thesis in Wood Products Engineering shall be presented as a homogenous, cohesive academic work (monograph) or a brief summary - comprehensive summary - of academic essays (compilation thesis) that the third-cycle 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 department.

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](#) as delegated 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. Grades for a doctoral thesis should be decided by a [grading committee](#), specifically designated for each thesis.

5 Degree

In Wood Products Engineering, a third-cycle student who has been admitted to a Degree of Doctor has the possibility to take a Degree of Licentiate after completing one part giving at least 120 credits of the education that will be concluded with a Degree of Doctor.

5.1 Degree objectives

As specified in the [Qualifications Ordinance](#) (Higher Education Ordinance, Annex 2 – Degree Ordinance). See also the annex below.

5.2 Degree title

A third-cycle student who takes a Degree of Licentiate in Wood Products Engineering receives the degree title of Licentiate of Technology.

A third-cycle student who takes a Degree of Doctor in Wood Products Engineering normally 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 general syllabus for Wood Products Engineering applies for the admission of third-cycle students as and from the date to be determined by the Dean TFN.



ANNEX

Goal for education at third-cycle level (Qualifications Ordinance, [Higher Education Ordinance, Annex 2](#)):

1 Knowledge and understanding

For a Degree of Licentiate 120 credits (higher education credits), the third-cycle student shall:

- demonstrate knowledge and understanding in the field of research including current specialist knowledge in a limited area of this field as well as specialised knowledge of research methodology in general and the methods of the specific field of research in particular.

For a Degree of Doctor 240 credits (higher education credits), the third-cycle student shall:

- demonstrate broad knowledge and a systematic understanding of the research domain, together with deep and current specialist knowledge within a limited area of this research domain and
- demonstrate familiarity with academic methodology in general and with the specific research domain's methods in particular.

2 Competence and skills

For a Degree of Licentiate 120 credits, the third-cycle student shall:

- demonstrate the skills to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake a limited piece of research and other qualified tasks within predetermined time frames in order to contribute to the formation of knowledge as well as to evaluate this work,
- demonstrate the skills in both national and international contexts to present and discuss research and research findings in speech and writing and in dialogue with the academic community and society in general, and
- demonstrate the skills required to participate autonomously in research and development work and to work autonomously in some other qualified capacity.

For a Degree of Doctor 240 credits, the third-cycle student shall:

- demonstrate the capacity for scholarly analysis and synthesis as well to review and assess new and complex phenomena, issues and situations autonomously and critically,
- demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work,
- demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research,
- demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general and
- demonstrate the ability to identify the need for further knowledge and



- demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.

3 Judgement and approach

For a Degree of Licentiate 120 credits, the third-cycle student shall:

- demonstrate skills to conduct ethical research assessment in their own research,
- demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate skills to identify the need for further knowledge and to take responsibility for one's knowledge development.

For a Degree of Doctor 240 credits, the third-cycle student shall:

- demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics, and
- demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.

4 Academic thesis

For a Degree of Licentiate 120 credits, the third-cycle student shall:

- have completed an academic thesis of at least 60 higher education credits.

For a Degree of Doctor 240 credits, the third-cycle student shall:

- have completed an academic thesis (doctoral thesis) of at least 120 higher education credits.