

GENERAL SYLLABUS FOR THIRD-CYCLE PROGRAMMES IN IN AUDIO TECHNOLOGY

FFN - Chair 2016-02-10

1 Subject area

Audio Technology is the study of the processes and methods of sound recording, production and reproduction from technological as well as artistic perspectives. The scientific foundation of the discipline is complemented with creative considerations and established practice. Central to this subject is the analysis of these processes and methods and their influence on different aspects of sound quality.

2 Programme curriculum

Education at third-cycle level in Audio Technology that concludes with a Degree of Licentiate is comprised of a total of two years' full time study (120 higher education credits) and consists of a study programme that results in 30-60 higher education credits and a licentiate thesis that results in 60-90 higher education credits.

Education at at third-cycle level in Audio Technology that concludes with a Degree of Doctor is comprised of a total of four years' full time study (240 credits) and consists of a study programme that results in 60-120 higher education credits and a doctoral thesis that gives 120-180 higher education credits.

The programme offers several specialisations, for example in technical applications or humans' perception of sound. Courses and the dissertation/thesis therefore have a profile that corresponds to the specialisation in question. Consequently, the courses given are relevant to support the chosen specialisation. The education begins with a course block where the specialisation and current research issue are defined.

The programme should always include the following:

- The relation between audio-technical processes and the audible result
- Analysis of sound quality
- Statistical processing of listening tests
- Measurement of acoustic quantities
- Artistic activity (for example arranging, composing, playing an instrument).

The scope of an individual element is determined by the student's specialisation. Specific courses of relevance to the chosen specialisation are also read.

In addition to internal activities such as seminars and other forms of dissemination and discussion of methods and results in the programme, external activities, for example

participation at conferences and exchanges with other seats of learning, are also carried on with the aim of assuring the quality of the education.

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. A follow-up of the plan is held at least twice a year by the third-cycle student and his/her supervisor and is approved by the Head of Department at least once a year, as delegated by the Vice-Chancellor.

3 Eligibility and selection

3.1 General eligibility requirements

An individual fulfils the general eligibility requirements for the third-cycle educational programme when he or she 1) has completed a second-cycle degree, 2) has completed higher education courses worth at least 240 credits, of which at least 60 are for second-cycle courses, or 3) in some other manner, in this country or abroad, has acquired the equivalent qualifications. The faculty board may permit an exemption from the requirement of basic eligibility in the case of an individual applicant, if there are special grounds as written in Chapter 7, Section 39 of the Higher Education Ordinance (2010:1064). Also refer to the local guidelines laid down in the Admission Rules for Third-cycle Education at Luleå University of Technology.

3.2 Specific eligibility requirements

Degree of Bachelor, main subject/main field of study Audio Technology 60 credits / 90 higher education credits, first cycle.

Good skills in oral and written communication in Swedish and English.

3.3 Selection

Selection from among applicants meeting the requirements shall be made with reference to their ability to benefit from the education. The mere fact that an applicant is deemed able to receive credit towards the education for previous education or working activities may not alone give the applicant precedence over other applicants in the selection process, as per Chapter 7, Section 41 of the Higher Education Ordinance (2010:1064). Also refer to local guidelines laid down in the Admission Rules for Third-cycle Education at Luleå University of Technology.

4 Examinations included in the education

The education consists of courses and an academic thesis. Examinations included in third-cycle programmes are graded as either 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

The courses aim to convey both generic knowledge and skills in scientific work, as well as deeper knowledge within the specialisation of the third-cycle courses and study programmes.

The following areas shall be included in the courses:

1. Philosophy of science
2. Scientific writing and publishing
3. Listening tests
4. Statistics: parametric and non-parametric 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 Third-cycle Education at Luleå University of Technology.

4.2 Academic thesis

An academic project in the form of a dissertation/thesis in Audio Technology shall be presented as a homogenous, cohesive academic work (monograph) or a brief summary – comprehensive summary – of academic essays (composite thesis) 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 department.

The licentiate thesis is defended orally at a public licentiate seminar and is graded as either 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. Grades for a doctoral thesis should be decided by a grading committee that is appointed for each thesis.

5 Degree

In Audio Technology, 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 comprising at least 120 credits of a study programme intended to conclude with the award of 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 Audio Technology receives the degree title of Licentiate in Philosophy.

A third-cycle student who takes a Degree of Doctor in Audio Technology normally receives the degree title of Doctor of Philosophy

Requests for other degree titles are made according to established guidelines.



6 Entry into effect and interim regulations

2007-09-17:

The previous general curriculum will cease to apply for third-cycle students who are admitted to studies at third-cycle level after 1 July 2007. Third-cycle students admitted before this date may choose to either follow the previous curriculum or transfer to the present curriculum.

2016-02-10:

The previous general curriculum (*2007-09-17, FFN*) will cease to apply for third-cycle students who are admitted to studies at third-cycle level after 10/02/2016. The amendment to 3.2 (Specific eligibility requirements); 4.1 (courses). If agreed between the third-cycle student and the supervisor, the new general syllabus (ref. LTU 3251-2015) may be used as a steering document for third-cycle students who, on the date of decision, have not achieved the requirements for a licentiate degree/equivalent number of ECTS credits (120). It must then be documented in the third-cycle student's individual study plan which general curricula that applies.

Appendix

THIRD LEVEL QUALIFICATIONS

Objectives (Higher Education Ordinance, SFS 1993:100)

1. Knowledge and understanding

For a degree of Licentiate (Licentiatexamen), 120 HE credits, research students must

- demonstrate knowledge and understanding in the field of research, including current specialist knowledge in a defined part of the field and a deeper knowledge of scientific methods in general and of methods in the specific field of research in particular.

For a degree of Doctor (Doktorsexamen), 240 HE credits, research students must

- demonstrate broad knowledge in and a systematic understanding of the field of research, together with deep and up-to-date specialist knowledge in a defined part of the field of research; and
- demonstrate familiarity with scholarly methods in general and with methods in the specific field of research in particular.

2. Skills and abilities

For a degree of Licentiate, 120 HE credits, research students must

- demonstrate an ability to identify and formulate issues, critically, independently and creatively, and proceeding with scientific precision; to plan a limited research project and other advanced tasks and to carry them out using appropriate methods within specified time limits, so as to contribute to the development of knowledge; and to evaluate this work;
- demonstrate an ability to clearly present and discuss research and research results in dialogue with the scholarly community and society in general, orally and in writing, in both national and international contexts; and
- demonstrate the skills required to independently participate in research and development work and to work independently in other advanced contexts.

For a degree of Doctor, 240 HE credits, research students must

- demonstrate an ability to engage in scholarly analysis and synthesis and in independent, critical examination and assessment of new and complex phenomena, issues and situations;
- demonstrate an ability to identify and formulate issues, critically, independently and creatively, and proceeding with scientific precision, and to plan and, using appropriate methods, conduct research and other advanced tasks within specified time limits, and to scrutinise and evaluate such work;
- demonstrate, in a dissertation, their ability to make a substantial contribution to the development of knowledge by their own research;

- demonstrate an ability to present and discuss research and research results with authority, in dialogue with the scholarly community and society in general, orally and in writing, in both national and international contexts;
- demonstrate an ability to identify their need of further knowledge; and

- demonstrate a potential to contribute to the development of society and support other people's learning, both in the field of research and education and in other advanced professional contexts.

3. Judgement and approach

For a degree of Licentiate, 120 HE credits, research students must

- demonstrate an ability to make ethical assessments in their own research;
- demonstrate insight into the possibilities and limitations of science, its role in society and people's responsibility for how it is used; and
- demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge.

For a degree of Doctor, 240 HE credits, research students must

- demonstrate intellectual independence and scholarly integrity and an ability to make ethical assessments relating to research; and
- demonstrate deeper insight into the potential and limitations of scholarship, its role in society and people's responsibility for how it is used.

4. Scholarly essay

For a degree of Licentiate, 120 HE credits,

- research students must have received a passing grade on a scholarly essay worth at least 60 higher education credits.

For a degree of Doctor, 240 HE credits,

- research student must have received a passing grade on a scholarly dissertation (doctoral dissertation) worth at least 120 higher education credits.