The subject plan was approved by Fakultetsrådet (Faculty Council) October 2, 2013. Valid from Spring 14.

Subject title

Art, Technology and Design (Konst, teknik och design)

Subject description and programme outcomes

Scientific field

The doctoral education subject area Art, Technology and Design holds research within an emerging research area shaped by dynamic encounters between artistic and scientific approaches, as well as between three different perspectives: art, technology and design. The subject is advanced and developed within the framework of the doctoral programme in Art, Technology and Design. Pursued in collaboration between KTH and Konstfack, the programme provides a new arena for encounters between different cultures of knowledge and methods of research, innovation and production within art, technology and design. The overarching aim of the doctoral programme is to combine research and education on sustainable social development, and the adjustments such a development entails, with a radical rethinking of the relation between the individual, society and the environment. In challenging conventions within established knowledge areas, in holding a transdisciplinary scope, and by combining the practices of making with advanced epistemological and methodological perspectives, research and education within the programme should offer a strong power of innovation.

Artistic techniques may, for example, be used for detailed studies of everyday phenomenon that disclose their connections to larger contexts of habitual patterns. Underlying perceptions and mechanisms may thus be brought forth and made accessible for productive re-evaluations. Current research in design has, for instance, pointed to the conventional coding in terms of gender in everyday objects, and investigated aspects of their foundational effects on e.g. identity formation, action patterns and consumerist culture. By centring on human experience through a rethinking of design and sound-art perspectives, recent research on urban sonic environments contributes to new ways of planning and constructing the forms of future inhabitation in a denser urban environment.

The research area is essentially interdisciplinary through its focus on intersecting perspectives and concrete materialisations. Research projects in the subject area have a critical and analytic approach that is applied both to material and performative experimentations and in discursive, theoretical investigations.
Research projects have a strong transdisciplinary potential in their capacity to include collaborations with external partners from e.g. business, culture and public sector, and government.

**Description of possible specialisation**

The subject has no specialisations.

**Specification of how the programme outcomes are to be achieved**

The educational goals are achieved by taking courses in accordance with the individual study plan, through participation in seminars, national and international conferences, and through supervision.

**Current research**

**Programme structure**

The education of third cycle level consists of a course part and a dissertation part. The course part may consist of lectures, literature studies, experiments, artistic practices and formulations, essay writing, problem solving and active participation in seminars, exhibitions and conferences. Courses can be taken within the programme as well as in cooperation with other national and international institutions. The main part of the courses should normally be taken during the first half of the education. The main supervisor is responsible for the individual candidates course plan through his or her engagement with the individual study plan. Possible exceptions from the mandatory courses shall be motivated and be approved by programme director before handing in the individual study plan to the Director of third cycle education.

The education of third cycle level is conducted through guidance by a main supervisor together with at least one assisting supervisor. The student's progress should be assessed at least once yearly in conjunction with the revision of the individual study plan, made by the student and the main supervisor. The individual study plan is subject to approval by the Director of third cycle education.

Students in the programme are expected to have an interest in and the ability to participate in graduate and undergraduate education, and should take an introductory course in university pedagogy. Teaching assignments should not expand on the maximum 20% prolongation of the designated time for PhD studies. Students should be encouraged to locate parts of their education at a university abroad.

Obtaining a licentiate degree as part of the PhD degree is permitted. The licentiate degree consists of a course part consisting of between 30 to 60 university credits, and a dissertation part consisting of between 60 to 90 university credits, so that together they make up altogether 120 university credits.

The PhD degree consists in a course part consisting of between 60 to 90 university credits, of which 30 are mandatory, and a dissertation part consisting of between 150 and 180 university credits, so that together they make up 240 university credits.

**Seminars, exhibitions and conferences**

Doctoral candidates are expected to take an active part in seminars and other programme activities throughout his or her time of education. The programme organises a yearly event with presentations of the
participants' work in the form of lectures, performances, exhibitions or as otherwise appropriate. In these activities all PhD students within the programme are expected to participate. Regular participation in national and international symposia and conferences is an important component in the educational process.

**Compulsory and recommended courses**

The doctoral programme consists of a mandatory package of 30 university credits. Besides providing basic epistemological and methodological insights, both at a comprehensive level and for the particular research area, the set of courses offered are of great significance for the development of the programme's orientation and for establishing the research area. The course package is divided between courses that are primarily based on lectures, seminars and literature, and courses organised as seminars and workshops that focus on emerging analytical and experimental methods in alignment with the progress of the individual research projects carried out within the programme. Included in the course package is an introductory course to university teaching with a special focus on art and design.

The current list of courses is to be found on the webpage of the doctoral programme. The course list is subject to annual revisions by the programme council. The mandatory courses are held every two years, or more frequently if necessary. In some cases the teaching may be coordinated with similar courses at an advanced level, where the difference in course level is regulated through the number of lectures or seminars and the quality requirements for assignments. The examination on PhD level is generally characterised by higher requirements in terms of independence and creativity. Courses held within the programme are registered at KTH but are given partly or entirely both at KTH and Konstfack. Students can also take certified courses at other universities.

*Mandatory courses (30 credits)*

**Theory of science and research methods in art, technology and design, 7.5 credits**

The course provides a basic introduction to theory of science and an orientation to knowledge paradigms in different scientific traditions; advanced epistemological and methodological insights in current research in the subject area art, technology and design; and raises examples for discussion concerning the relation between the individual, society and the environment from the basis of historical and philosophical examples.

**Concepts, theories and experimental practices in art, technology and design, 7.5 credits**

The course provides an orientation in the emerging field of research known internationally in terms of "practice-based research in the arts", "arts and technology studies" and "research by design", and draws on completed PhD projects to advance in-depth understandings of methods of investigation and presentation of findings that are of particular interest to the profile of the subject area. A particular emphasis is put on different forms of academic writing and examples of revaluation and experimental approaches are highlighted and discussed.

**Introduction to university teaching and learning in arts and design education, 5 credits**

The course provides a basic orientation in university pedagogy and specialisation in teaching methods for education in art and design.

**Rethinking research practices in art, technology and design, 10 credits**

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The course is carried out as seminars and/or workshops based on the on-going research projects of the course participants. The course carries two equally important elements. One concerns the material and performative aspects and matters to do with the artistic articulation pertaining to individual research projects that are discussed by reference to detailed studies of relevant cases within the subject area. The other element puts emphasis on the discursive aspects of the participants’ work, discussing the framework of their research projects in terms of criticality, theory, relevance and significance by reference to selected key writings in the area. Results and discussions generated by the course are documented in a digital archive.

Elective courses (30-60 credits for PhD degree)

Additional courses are set individually in relation to the student's knowledge needs. These courses can be offered at Konstfack or KTH within the framework of the doctoral programme and/or in collaboration with courses on advanced level at these universities. The student may also take course at other universities in Sweden or abroad. The course plan is regulated in the individual study plan.

Compulsory courses

- FAD3100 Theory of Science and Research Methods in Art, Technology and Design 7.5 hp.
- FAD3103 Introduction to University Teaching and Learning in Arts and Design Education 5.0 hp.
- FAD3101 Rethinking Research Practices in Art, Technology and Design 10.0 hp.

Thesis

The thesis / dissertation is an obligatory part of the education at third cycle level. The aim of the education is to provide students with the proper training that enables him or her to make independent contributions to scientific and artistic collaborations within and beyond the research area.

The outset for thesis and dissertation work within the programme are different practices for investigation and artistic articulation/formulations, both material and written, which are presented on an on-going basis throughout the doctoral studies in e.g. exhibitions, texts, and published articles. The public defence can either be based on a dissertation composed of parts / compilations, provided these are of a sufficient quality and are held together by a frame narrative; alternatively from the basis of a dissertation consisting of a coherent final presentation of research result in the form of a monograph. It is essential that the work manifests a capacity for reflection that relates to cutting edge research in the subject area and to current discussions in the field.

The thesis / dissertation should contain new research findings developed by the student, alone or in collaboration with others, through theoretical, artistic and/or empirical research activities. The scope of the thesis / dissertation is not regulated in terms of word count or similar measures. By way of useful comparison, however, a measure applied to other programmes at KTH is relevant: “The scientific results shall for doctoral degree meet the quality criteria for publication of at least four articles in internationally recognized journals with referee system (for licentiate degree at least two articles) or equivalent.” A defining element of this doctoral programme is that scientific results, besides their publication in e.g. peer-reviewed articles, may well be developed and communicated in other forms and media such as exhibitions, enactments, prototypes, performances, film, etc. For any such cases, adequate documentation and discussion on result are of utmost importance.
The theses / dissertations at KTH are normally written in English, but if the subject area motivates that the thesis / dissertation is written in another language, a special permit may be issued by the Director of third cycle education.

**Entry requirements and selection**

**General and special admission requirements and prior knowledge**

KTH's general prerequisites for admittance to doctoral programmes are applied.

The primary target group are students with a degree in Architecture, Civil engineering, Master degree from Design, Art, Arts or Technical formation. Other educational backgrounds may also be appropriate.

Recruitment / announcement and admittance of students according to KTH's rules.

**Selection rules and procedures**

The programme may recruit doctoral students through announced positions and as funded by stipends. The admittance must be preceded by obligatory interviews.

In general, applicants to the programme should be strongly motivated for doctoral studies, have the ability to work independently, and a capacity for critical analysis, collaboration and communication. The applicant should have good knowledge of both spoken and written English. Knowledge in Swedish is not necessary, but may facilitate the successful completion of the doctoral studies. More specifically, candidates are expected to be able to reflect critically around their proposed topic of research in relation to its broader social relevance; concerning perspectival encounters between the subject areas art, technology and design; and to central questions inherent to the shift towards a more sustainable society.

**The programme’s degrees and examinations**

**Degree of Licentiate and Degree of Doctor (PhD)**

Obtaining a licentiate degree as part of the doctor degree is permitted. The licentiate degree consists of a course part consisting of between 30 to 60 university credits, of which 30 are mandatory, and a dissertation part consisting of between 60 to 90 university credits, so that together they make up altogether 120 university credits.

The doctor degree consists in a course part consisting of between 60 to 90 university credits, of which 30 are mandatory, and a dissertation part consisting of between 150 and 180 university credits, so that together they make up 240 university credits.

**The programme’s examinations**

Courses on third cycle level should include either written or oral tests on knowledge. The examination should be designed to ensure that the examiner is convinced about the student's capacity to absorb the course content.
Regarding the rules for examination of the thesis/dissertation part of licentiate and doctoral degree, see KTH's general rules.