Admission requirements and supplementary regulations for the PhD programme in Computer Science: Software Engineering, Sensor Networks, and Engineering Computing at Western Norway University of Applied Sciences

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The section numbers and titles below refer to the corresponding sections in the System for Quality Assurance of PhD Programmes at Western Norway University of Applied Sciences

Section 4 Admission

Admission to the PhD programme in Computer Science takes places on a continuous basis throughout the year. The programme committee is responsible for the evaluation of submitted applications.

Admission requires that the applicant holds a master's degree within the information and communication technology or computing fields, such as a master's degree in informatics, computer science, software engineering, communication systems, engineering computing, scientific computing, or computational engineering.

Candidates from other natural sciences or engineering disciplines holding a master's degree with a strong emphasis on ICT and computing may also qualify for admission to the programme. However, these candidates will have additional course requirements cf. Section 5.

Qualifying master's degree programmes includes the master's degree in software engineering offered jointly by Western Norway University of Applied Sciences and the University of Bergen and the master's programme in applied computer science and engineering offered by Western Norway University of Applied Sciences.

Admission into the programme requires that the applicant has obtained strong grades for both the master's thesis and the course work of the master's degree. Specifically, admission into the programme normally requires that the applicant has obtained:

- a grade of B (Norwegian scale) or better on the master's thesis,
- an average grade higher than C (Norwegian scale) on the coursework associated with the master's degree.

Section 5 Coursework

The programme committee is responsible for ensuring that the courses that constitute the training part of the PhD programme are offered on a regular basis to the PhD candidates enrolled in the programme. In relation to this, the programme committee is responsible for maintaining a plan that specifies the elective courses that will be offered in the next two years.

Candidates are required to follow at least one of the elective courses offered in the programme of study (PCS9xx courses). Courses offered by other universities can be approved as part of the coursework. It is a prerequisite that the course in question is accepted as a PhD level course at the host university. Candidates from engineering disciplines or other natural sciences than computer science are required to take at least 20 ECTS of coursework within computer science. Out of those, 10 ECTS must be PCS9xx courses offered in the programme of study, the other 10 ECTS may also be taken at other institutions. Exceptions can be handled by the programme committee.

The programme committee may approve up to 5 ECTS based on other activities undertaken by the candidate of relevance for the doctoral training. Approved activities include popular science dissemination, presentations at scientific workshops and conferences, participation in PhD summer/winter schools, and longer visits to other academic institutions. Credit awarding activities and the number of credits awarded are determined by the programme committee. Guidelines for ECTS assignments:

- National and international Research Schools can be approved. 25 hours of school activities corresponds to 1 ECTS. ECTS will only be allocated in full integer numbers, no rounding up will take place. The candidate should provide links documenting the activities of the Research School and should submit any certificates provided by the School organisers. Any ECTS formally granted by the Host institution of the Research School will be accepted. No additional allocation according to the rule above will be made in these cases.
- Participation in international conferences with own contribution. 2 ECTS. Credits can only be awarded for one conference. National meetings with international speakers do not qualify.
- Popular science contributions within the research field of the candidate can be awarded up to 2 ECTS.
- A 45 minute lecture/seminar on a subject defined by the candidate can give 1 ECTS. Credits can only be given for one seminar. The seminar should be open to the public and be announced two weeks in advance. The subject is proposed by the candidate and approved by the supervisor and the chairman of the programme committee. The programme committee appoints an evaluation committee of two members to evaluate the seminar. The committee members can not be involved as supervisors of the candidate. The criteria for approval of the seminar are the same as for trial lecture approval, see Section 19 of the Regulations for the Doctor of Philosophy Degree (PhD) at Western Norway University of Applied Sciences.
- Extended stays at other academic institutions (beyond the compulsory stay abroad) can be awarded 1 ECTS. Each case is evaluated by the programme committee. The application for ECTS should include a description of the additional learning outcome achieved by the extended stay.
- Scientific papers that are not a part of the thesis, can not be awarded ECTS in the coursework part.

Section 6 Supervision

All PhD students in the programme should have two supervisors at HVL. External supervisors may come in addition to this.
When the main supervisor has his PhD and research activities outside the field of computer science (i.e. including Software Engineering, Sensor Networks and Engineering Computing), there should be at least one (co-)supervisor qualified for PhD supervision within computer science.

Section 9 Reporting

The PhD candidate and the supervisor(s) must submit an annual report to the programme committee detailing the progress on the coursework and the research project of the candidate. The programme coordinator must conduct an annual meeting with the candidate and the supervisor(s) assessing the progress and conducting planning of the doctoral training. The progress report and the meeting form the basis for the overall reporting to the programme committee.

Section 10 The doctoral thesis

The PhD thesis should be written in English. However, the programme committee may approve that the thesis will be written in other languages. If the candidate plans to write the thesis in a language other than English, this must be stated as part of the application for admission into the programme. A candidate may submit an application for changing the language during the course of the studies. An application for change of language must be accompanied by a recommendation from the supervisor(s).

The doctoral thesis may have the form either of a monograph or of a collection of papers published in, or submitted to, peer-reviewed international workshops, conferences or journals. In the latter case, at least one paper must have been published or accepted for publication in a high-quality journal or conference before submission of the doctoral thesis. A thesis based on a collection of papers must include an overview chapter that provides an introduction to the research field, clearly states the research questions and goals, provide an overview of the research results obtained, and positions the scientific results contained within the state-of-the art in the research field