

Research Project (E031710)

Course size (nominal values; actual values may depend on programme)

Credits	3.0	Study time	90 h	Contact hrs	15.0 h
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Course offerings and teaching methods in academic year 2019-2020

A (semester 1)	English	project	5.0 h
		lecture	3.75 h
B (semester 1)	Dutch	project	3.75 h

Lecturers in academic year 2019-2020

Walraevens, Joris	TW07	lecturer-in-charge
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Offered in the following programmes in 2019-2020

	crdts	offering
Bridging Programme Master of Science in Computer Science Engineering	3	B
Bridging Programme Master of Science in Computer Science Engineering	3	A
Master of Science in Computer Science Engineering	3	B
Master of Science in Computer Science Engineering	3	A

Teaching languages

Dutch, English

Keywords

Scientific literature search, scientific reporting, scientific writing, peer review

Position of the course

The students review a specified scientific research topic by performing a scientific literature search. They present their findings in writing in a structured manner. The content should be correct, should be written down formally and should be structured up to scientific standards. Students acquire competences that are a.o. essential to successfully carry out a master thesis.

Contents

Students will be taught about scientific literature search and scientific writing. They will apply this knowledge, in groups of typically 4 students, to a specified topic. The different topics are embedded in research domains close to the educational programmes of the students. Each group will be coached by a senior researcher.

Initial competences

Reporting about own activities as achieved, for instance, in Engineering Project I, Engineering Project II, Cross-Course Project, ...

Final competences

- 1 Perform a literature search in the scientific literature.
- 2 Analyse results of others in an objective and critical manner.
- 3 Be aware of ongoing evolutions in the field of interest, improve competence to expert level.
- 4 Cooperate in heterogeneous groups.
- 5 Report on technical or scientific subjects in writing.
- 6 Communicate also in English about the field of interest.
- 7 Act in an ethical, professional and social way.
- 8 Interpret the historical evolution of own field of engineering and its social relevance.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences

assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Lecture, project

Learning materials and price

Slides of introductory lecture and additional information will be put on the electronic learning platform.

References

Course content-related study coaching

Interactive support via the electronic learning platform, email and oral consultations with both the coach of the particular research topic and the lecturer

Evaluation methods

continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Examination methods in case of periodic evaluation during the second examination period

Examination methods in case of permanent evaluation

Participation, assignment, peer assessment, report

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible in modified form

Extra information on the examination methods

Examination methods non-periodic evaluation: report search strategy, written survey paper, peer review report, process evaluation

Students are divided in groups of typically 4 students at the beginning of the semester. In week 5, the students report on their strategy to search the literature for their research topic. This report is graded and students perform a first peer review evaluation of their colleague group members. In weeks 8-12, the students get feedback from their respective coaches on drafts of a written survey paper (max. 5 pages) on the research topic. In week 11, each student gives feedback on 1 paper of an other group of students and this by means of a written review report. This peer review report is graded. In week 13, the final version of the review paper is handed in. Only this final version of the survey paper is marked. The evaluations comprise structure, content, correct referencing and formal writing. Finally, a second peer evaluation is organized.

In addition, the process is also evaluated (cooperation in the group, knowledge gained on the topic, ability to independently carry out a literature search, write a scientific report, ...)

Calculation of the examination mark

10% report search strategy, 40% written survey paper, 10% peer review report, 40% process evaluation. Peer evaluation is taken into account. A student who does not gain at least 40% for each part and at least 50% for the parts peer review report and process evaluation cannot pass the course. If the calculated total score of such a student is a mark of ten or more out of twenty, then this is reduced to the highest failing mark (9/20).