UNIVERSITY OF AMSTERDAM

FACULTY OF SCIENCE

TEACHING AND EXAMINATION REGULATIONS
PART B: programme-specific section

Academic year 2017-2018

MASTER'S PROGRAMME
SOFTWARE ENGINEERING

Chapter 1.   General Provisions

Article 1.1 – Definitions
See part A.

Article 1.2 – Study programme information
1. The Master's programme Software Engineering is registered under CROHO number 60228.
2. The language of instruction is English. The Code of Conduct for Foreign Languages at the University of Amsterdam in its latest form applies to this programme (http://www.uva.nl/en/about-the-uva/uva-profile/rules-and-regulations/teaching/teaching.html).
3. The programme has a total study load of 60 EC.
4. The programme is offered in a one-year full-time variant and in a two-year part-time variant.

Article 1.3 – Enrolment
The programme starts in the first semester of an academic year (September).

Chapter 2.   Programme objectives and exit qualifications

Article 2.1 – Programme objectives
1. The aim of Software Engineering is to systematically design, construct and maintain large software systems that are delivered in time and within budget, that are reliable and efficient and that are maintainable over the long term.
2. The programme educates students to become professional software engineers who successfully pursue a career in industry, government, higher education or academic research.

Article 2.2 – Exit qualifications
The exit qualifications of the Master's programme Software Engineering are defined as follows:
1. Graduates are familiar with the most relevant theories, methods and techniques in the domain of Software Engineering and have the necessary background knowledge to familiarise themselves with novel methods and techniques for lifelong learning.
2. Graduates can successfully apply theory in practice to find innovative solutions for existing as well as for new problems. They can analyse and solve both general and domain-specific software engineering problems.
3. Graduates can make valuable contributions to complex software engineering projects that require the independent and critical application of academic knowledge and skills.
4. Graduates master the methods and techniques for analysing existing software systems and their evolution in the context of changing requirements.
5. Graduates are able to produce formal specifications of modest-sized samples of software and to use them for the generation of relevant tests.
6. Graduates know how to employ model-driven and language-driven approaches in software construction and are able to reason about and reflect upon aspects of design, code quality and software construction methods.
7. Graduates are able to translate system requirements into a software architecture, handle trade-offs between conflicting requirements, motivate choices made and assess an architecture document for different stakeholders with different priorities.
8. Graduates understand why user needs are difficult to express, capture and understand and are familiar with best practices in requirements engineering as well as their shortcomings.
9. Graduates understand why big software projects are prone to failure and are familiar with software engineering process models, their situation-awareness and their general shortcomings.

10. Graduates have sufficient technical understanding and intellectual capacity to play – after some years of practical experience – a managerial or advisory role in software engineering.
11. Graduates can clearly report their findings, both in oral and in written form, and can explain problems at an audience-focused level of abstraction.
12. Graduates have research skills at the academic level and are in state to autonomously perform research in the domain of software engineering.

Chapter 3.   Further admission requirements

Article 3.1 – Admission requirements
1. Admission to the Master's programme Software Engineering is restricted to students with either of the following qualifications:
    a. Aa Bachelor degree in Informatics or a closely related subject from a Dutch university (WO);
    b. a foreign qualification equivalent in length and depth to a);
    c. a Bachelor degree in Informatics or a closely related subject from a university of applied sciences (HBO) in the Netherlands with a grade point average (GPA) of 7 or higher;
    d. completion of substantial part of a higher education degree programme in Informatics or a closely related subject and several years of relevant practical experience in the software engineering domain in an industrial context.
2. The Admissions Board decides about applications based on the formal prior education as well as the motivation and additional qualifications of a candidate.
3. The Admissions Board may invite a candidate for additional tests, intake interviews or ask for references in order to determine its decision.
4. The Admissions Board may make its decision dependent on the successful completion of additional courses by the candidate. These courses are detailed in the admission letter.
5. In exceptional cases, the Admissions Board may deviate from the provisions of paragraph 1.

Article 3.2 – Pre-Master's programme
Not applicable.

Article 3.3 – Limited programme capacity
Not applicable.

Article 3.4 – Final deadline for registration
1. Any request for admission must be submitted to StudieLink and the Faculty of Science before May 1 in the case of Dutch students, before April 1 in the case of EU students and before February 1 in the case of non-EU students.
2. The Admissions Board may consider applications submitted after the respective closing date.

Article 3.5 – English language requirements
1. Proficiency in English as the language of instruction must be demonstrated by the successful completion of one of the following examinations:
    1. IELTS Test with minimum total score of 7.0 and a minimum score of 6.5 in each area;
    2. TOEFL Internet-based Test with minimum score of 98;
    3. Cambridge Certificate with at least score B in CAE and at least score C in CPE.
2. Those who are in possession of a Dutch Bachelor degree or in possession of a Bachelor degree from an English-speaking university in the United States, Canada, Australia, New Zealand, the United Kingdom or Ireland satisfy the requirement of sufficient command of the English language.

Article 3.6 – Free curriculum
1. Subject to certain conditions, the student has the option of compiling a curriculum of his/her own choice, which deviates from the curricula prescribed by the programme.
2. The concrete details of such a curriculum must be approved beforehand the Examinations Board of the programme.
3. The free curriculum is put together by the student and must at least have the size, breadth and depth of a regular Master's programme.
4. The following conditions must at least have been met in order to be eligible for the Master's degree:
    1. at least 42 EC (including the Master Project SE and preparation) must be obtained from the regular curriculum;
    2. the level of the programme must match the objectives and exit qualifications that apply for the Master Software Engineering programme.

Chapter 4.   Curriculum structure

Article 4.1 – Composition of programme
1. The programme consists of 8 compulsory components.
2. Teaching methods and assessment techniques are detailed in the course catalogue.

Article 4.2 – Compulsory components

Component	Code	Study load (EC)	Semester	Teaching method	Assess-ment
Requirements Engineering	5364REEN6Y	6	1	L, S, W, CP	Written, Lab work
Software Testing	5364SOTE6Y	6	1	L, S, W, CP	Written, Lab work
Software Architecture	52848SAR6Y	6	1	L, S, W, CP	Written, Lab work
Software Evolution	5364SOEV6Y	6	1	L, S, W, CP	Written, Lab work
Preparation Master Project Software Engineering	5364PRMS6Y	6	1&2	IC, W	Written, Oral
Software Process	5364SOPR6Y	6	2	L, S, W, CP	Written, Lab work
Software Construction	5364SOCO6Y	6	2	L, S, W, CP	Written, Lab work
Master Project Software Engineering	5364MAS18Y	18	2	IC	Written, Oral

L = Lectures, S = seminars, W = workshops, CP = Computer practical, IC = Individual coaching

Article 4.3 – Practical exercise
Components may include practical work as defined in Article 1.2 of part A.

Article 4.4 – Elective components
Not applicable.

Article 4.5 – Sequence of examinations
1. Students may participate in examinations of a component only after having demonstrated sufficient prerequisite knowledge. Details are defined in the course catalogue.
2. Students may start with the Master Project only after successful completion of at least five components, one of which must be Preparation Master Project.
3. Practical work must be submitted by the deadline or will be considered failed.
4. Resits for practical work are only permitted by special approval of the course coordinator.
5. After a first assessment written work can be handed in once more for final improvements, subject to approval by the course coordinator or project supervisor
6. The assessment of projects in which several students have worked on an assignment will only be made at the end of the relevant teaching period. In principle, an individual resit is not possible.
7. The Examinations Board may deviate from the above regulations for the benefit of students.

Article 4.6 – Participation in practical exercise and study group sessions
1. All parts and activities of the curriculum are obligatory (presence and participation).
2. Exemptions for activities must be granted a-priori by the examiner.
3. If no exemption has been granted and the conditions stated in paragraph 1 are not met, a component is failed.
4. Under exceptional circumstances, the Examinations Board may permit an exemption from the conditions stated in paragraph 1, with or without the imposition of additional requirements.

Article 4.7 – Maximum exemption
Exemption from compulsory components is only granted under exceptional circumstances subject to approval by the Examinations Board. A maximum of 12 EC in the programme can be accumulated through granted exemptions.

Article 4.8 – Validity period of examinations
1. The validity period of successfully completed (interim) examinations and exemptions can be limited, as described in part A (2017-2018), article 4.8.
2. In addition to article 4.8.2 of part A (2017-2018), all components that are listed in article 4.2 can be tested on grounds of present-day scientific insights when a student wants to include results of successfully completed examinations and/or granted exemptions older than 4 years in his/her study programme. If the contents of those components no longer corresponds to the present-day insights and/or the objects of the master programme, the Programme Director can decide that the results of successfully completed examinations have expired and the Examinations Board will choose replacing components.
3. In addition to article 4.8.4 of part A (2017-2018) results of interim examinations which include theoretical course material are valid throughout the period of the course in question. Results of practical examinations are valid up to and including the end of the academic year in which they were achieved.

Article 4.9 – Degree
Students who have successfully completed all compulsory components of the programme are awarded the degree Master of Science. The degree awarded is stated on the diploma.

Chapter 5. Transitional and final provisions

Article 5.1 - Amendments and periodic review
1. The dean will adopt any amendment to the Teaching and Examination Regulations after taking advice, and if necessary approval by the relevant Board of Studies. A copy of the advice will be sent to the authorised representative advisory body.
2. An amendment to the Teaching and Examination Regulations requires the approval of the authorised representative advisory body as stated in the WHW.
3. An amendment to the Teaching and Examination Regulations is only permitted to concern an academic year already in progress if this does not demonstrably damage the interests of students.

Article 5.2 – Transitional provisions
Not applicable.

Article 5.3 - Publication
1. The Dean of the faculty will ensure the appropriate publication of these Regulations and any amendments to them.
2. The Teaching and Examination Regulations will be posted on the faculty website and deemed to be included in the course catalogue.

Article 5.4 – Effective date
These Regulations enter into force with effect from 1 September, 2017.
Thus drawn up by the Dean of the Faculty of Science on 1 September 2017.

Appendix 1   List of articles that must be included in the OER pursuant to the WHW (articles in framed boxes)

Section A
Art. 1.1   7.13, para 1, WHW
Art. 2.1   7.13, para 2 sub w
Art. 3.2   7.13, para 2 sub e
Art. 4.2   7.13, para 2 sub h and l
Art. 4.3   7.13, para 2 sub n
Art. 4.4   7.13, para 2 sub o
Art. 4.5   7.13, para 2 sub j, h
Art. 4.7   7.13, para 2 sub r
Art. 4.8   7.13, para 2 sub k
Art. 4.9   7.13, para 2 sub p
Art. 4.10   7.13, para 2 sub q
Art. 4.11   7.13, para 2 sub a
Art. 5.1   7.13, para 2 sub u
Art. 5.2   7.13, para 2 sub m

Section B
Art. 1.2   7.13, para 2 sub i
Art. 2.1   7.13, para 1 sub b, c
Art. 2.2   7.13, para 2 sub c
Art. 3.1   7.25, para 4
Art. 4.1   7.13, para 2 sub a
Art. 4.2   7.13, para 2 sub e, h, j, l
Art. 4.3   7.13, para 2 sub t
Art. 4.4   7.13, para 2 sub e, h, j, l
Art. 4.5   7.13, para 2 sub s
Art. 4.6   7.13, para 2 sub d
Art. 4.8   7.13, para 2 sub k

Appendix 2   Overview of guidelines pursuant to Section 9.5 WHW UvA

*The structure is a **format** established as a guideline:*   date of decision: 20 November 2012
                                                                 entry into force: 1 September 2013

Section A
Art. 4.5   para 3   *most recent result applies*   date of decision: 14 February 2008
                                                                 entry into force: 14 March 2008

Art. 4.6   *Marks*
                    (5.5 as pass mark boundary)   date of decision: 14 February 2008
                                                                 entry into force: 14 March 2008

                    (5.1 to 5.9 not awarded as final marks)   date of decision: xxxx 2014
                                                                 entry into force: 1 September 2014

Art. 4.11 para 3   *Final examination dates, 12 per year*   date of decision: 14 February 2008
                                                                 entry into force: 14 March 2008

Art. 4.13 *Fraud and plagiarism*   date of decision: 25 May 2010
                                                                 entry into force: 1 September 2010

Section B
Art. 3.1 para 6   *Entry requirements for Master's programme*   date of decision: 22 June 2006
                                                                 entry into force: 22 June 2006
                                                                 withdrawn on 1 September 2014