

The following Study and Exam Regulations (German: SPO) were verified and approved by the Senate at its 268th meeting on 26 June 2007.

Only the German version of this document is legally binding!

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Study and Exam Regulations B. Programme-specific section Article 35

Master's Programme Software Engineering and Management (MSEM)

- To be eligible for the award of the Master's degree, the candidate must have obtained at least 90 ETCS and completed courses totalling 50 hours per week.
 1 ECTS credit corresponds to 30 hours of work. Thus, the expected total workload per semester is 900 hours.
- (2) All mandatory courses required for the successful completion of the programme and the corresponding type of examinations and credits are shown in table 1 below. The courses are categorised according to modules. For each module, the corresponding ECTS credits are listed.
 - Subject to the provisions of Article 3 (4), courses are generally taught in English.

Table 1: Master's Programme

| | DIE 1. IVI | aster s | Programme | | | Exam | ination | |
|--|------------|---------------|--|------|--------------------------------|--------------------------|------------------|----------|
| S e | Course | | | | | | | ECTS |
| m | No. | Module no. | Title | Туре | No. of hours per week | Туре | Duration in min. | |
| 1 | | M1 | Software Engineering 1 | | | | | [10] |
| | | M1.1 | Algorithm Theory | V/Ü | 4 | LK | 90 | 5 |
| | | M1.2 | Software Architecture | V/L | 2 | LA | | 3 |
| | | M1.3 | Paradigms in Software Development | V/L | 2 | LA | | 2 |
| | | M2 | Engineering Application Domains | | | | | [10] |
| | | M2.1 | Intelligent Systems | V/L | 4 | LA | | 5 |
| | | M2.1 | Real-time Systems | V/L | 4 | LL | | 5 |
| | | М3 | Project Management and Leadership | | | | | [10] |
| | | M3.1 | Product and Quality Management | S | 2 | LA | | 4 |
| | | M3.2 | Management Methods/Leadership | S | 3 | LA | | 3 |
| | | M3.3 | Business Models for Software | S | 3 | LA | | 3 |
| To | tal 1st se | emester | L | | 24 | 8 | 90 | 30 |
| | | | | | | (LA/ LL/ LK) | | |
| 2 | | M4 | Software Engineering 2 | | | | | [10] |
| | | M4.1 | Information Management | V/L | 4 | LA | | 5 |
| | | M4.2 | Requirements and Usability Engineering | V/L | 2 | LA | | 3 |
| | | M4.3 | Project and Risk Management and Project Controlling | V/L | 2 | LA | | 2 |
| | | M5 | Change and Strategic Information Management | | | | | [10] |
| | | M5.1 | Change Management | S | 2 | LR | | 2 |
| | | M5.2 | Strategic Information Management | S | 4 | LR | | 5 |
| | | M5.3 | Process Management | S | 2 | LR | | 3 |
| | | М6 | International Cooperation in Software Engineering | | | | | [10] |
| | | M6.1 | Computer Mediated Communication | S | 2 | LK | 90 | 3 |
| | | M6.2 | Remote Collaboration in Virtual Teams | S | 2 | LA | | 3 |
| | | M6.3 | Intercultural Management | S | 4 | LK | 120 | 4 |
| Total 2nd semester | | | | | 24 | 9 (LA/ LK/ LR) | 90- 120 | 30 |
| 3 | | M7 | Master's Thesis | | | | | [30] |
| | | M7.1 | Master's Colloquium | | 2 | LA (4DT) | | 4 |
| Ta | عاما عداد | M7.2 | Master's Thesis | | | (1PT) | | 26 |
| Total 3rd semester Total Master's Programme | | | | | 50 | 17 (LA/ LR/ LL/LK) | 60- 120 | 30 90 |

(3) The following table shows the specific examinations of the Master's Programme:

Table 2: Examinations

| exal | minations grade of the Master's degree | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| No. Title | | | | | | | | |
| Module M1: Software Engineering 1 | | | | | | | | |
| M1.1 Algorithm Theory | 5 | | | | | | | |
| M1.2 Software Architecture | 3 10 | | | | | | | |
| M1.3 Paradigms in Software Development | 2 | | | | | | | |
| Module M2: Engineering Applications Domains | | | | | | | | |
| M2.1 Intelligent Systems | 5 10 | | | | | | | |
| M2.2 Real-Time Systems | 5 | | | | | | | |
| Module M3: Project Management and Leadership | Module M3: Project Management and Leadership | | | | | | | |
| M3.1 Product and Quality Management | 4 | | | | | | | |
| M3.2 Management Methods/Leadership | 3 10 | | | | | | | |
| M3.3 Business Models for Software | 3 | | | | | | | |
| Module M4: Software Engineering 2 | · | | | | | | | |
| M4.1 Information Management | 5 | | | | | | | |
| M4.2 Requirements and Usability Engineering | 3 10 | | | | | | | |
| M4.3 Project and Risk Management and Project Controlling | 2 | | | | | | | |
| Module M5: Change and Strategic Information Management | t | | | | | | | |
| M5.1 Change Management | 2 | | | | | | | |
| M5.2 Strategic Information Management | 5 10 | | | | | | | |
| M5.3 Process Management | 3 | | | | | | | |
| Module M6: International Cooperation in Software Engineer | ring | | | | | | | |
| M6.1 Computer-Mediated Communication | 3 | | | | | | | |
| M6.2 Remote Collaboration in Virtual Teams | 3 10 | | | | | | | |
| M6.3 Intercultural Management | 4 | | | | | | | |
| Module M7: Master's Thesis | | | | | | | | |
| M7.1 Master's Colloquium | 4 | | | | | | | |
| M7.2 Master's Thesis | 26 30 | | | | | | | |
| Total | 90 | | | | | | | |

- (4) The modules shown in table 2 are only passed if all individual examinations of the module are passed with an overall grade of at least "sufficient" (4.0 on the German scale from 1 to 6).
- (5) The degree certificate includes the grades of the modules as listed in table 2 and the grade of the Master's Thesis. The grade of each module is calculated based on the weighted average grades of the credit value of each individual examination. The corresponding weights are shown in table 2. The degree classification will be determined by the weighted average grade of the individual modules and the final grade of the Master's Thesis, based on the weights shown in table 2.
- (6) These Study and Exam Regulations shall enter into force on 1 September 2007. Students who have already commenced their studies at the time of enactment may, upon written application, which must be submitted by 1 February 2008, take their examinations in accordance with the previous Study and Exam regulations.

List of abbreviations

Type of course:

V = Lecture L = Laboratory S = Seminar Ü = Exercise

Type of examination credits:

LK = course-related written exam

LL = course-related lab work

LR = course-related presentation

LA = course-related practical work

PT = Master's Thesis