Subject-Specific Regulations for the Master's Degree Programme in Entrepreneurial Cybersecurity at Saarland University Supplementing the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science)

26 April 2018

Please note: This translation is provided for information purposes only. In the event of any discrepancies between the translation and the original German version, the latter shall take precedence.

Pursuant to Section 64 of the Saarland Higher Education Institutions Act of 30 November 2016 (Official Gazette of Saarland, p. 1080) and to the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 2 July 2015 (Official Bulletin No. 72, p. 616) as most recently amended by the Ordinance to Amend the Joint Examination Regulations for Bachelor's and Master's Degree Programmes of Faculty 6 (Natural Science and Technology Faculty I – Mathematics and Computer Science) of 28 April 2016 (Official Bulletin No. 47, p. 404) and with the consent of the Saarland University Senate and the University Board, Faculty MI (Mathematics and Computer Science) hereby issues the following Subject-Specific Regulations for the Master's Degree Programme in Entrepreneurial Cybersecurity.

Section 27 Scope (cf. Sec. 1 of the Joint Examination Regulations)

These subject-specific regulations apply to the Master's degree programme in Entrepreneurial Cybersecurity at Saarland University.

Section 28 General information (cf. Sec. 2 of the Joint Examination Regulations)

The Faculty of Mathematics and Computer Science at Saarland University shall confer a Master of Engineering degree (M.Eng.) on students who successfully complete the study programme in accordance with the assessment and examination procedures set out in these examination regulations.

Section 29 Types of degree programme (cf. Sec. 3 of the Joint Examination Regulations)

The Master's degree programme 'Entrepreneurial Cybersecurity' is a single-subject degree programme within the meaning of the Framework Examination Regulations for Bachelor's and Master's Degree Programmes at Saarland University (BMPRO).

Section 30 Student workload (cf. Sec. 4 of the Joint Examination Regulations)

Course attendance may be compulsory for seminars and practical skills classes. Students will be notified of this by the course coordinator at the beginning of the course.

Section 31 Examiners; thesis examiners; supervisors, observers (cf. Sec. 8 of the Joint Examination Regulations)

- (1) The Examination Board shall appoint examiners, thesis examiners and/or thesis supervisors from the groups in Section 8(1), items 1 to 7 of the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of the Faculty of Mathematics and Computer Science and, additionally, from
- 8. the group of mid-level academic staff with the right to supervise doctoral candidates
- 9. heads of independent junior research groups, members of mid-level academic staff qualified to doctoral level and members of the following on-campus or near-campus research institutes who are qualified to doctoral level: the Center for IT Security, Privacy and Accountability (CISPA), the German Research Centre for Artificial Intelligence (DFKI) and the Max Planck Institutes for Informatics and for Software Systems (MPI-I and MPI-SWS).
- (2) In addition to the examiners, thesis examiners and thesis supervisors specified in Section 8(2) of the Joint Examination Regulations, the Examination Board 'Cybersecurity' may in individual cases and with the consent of those members of professorial staff with responsibility for the relevant subject area appoint other qualified and experienced professionals working the relevant field.
- (3) At least one of the thesis examiners shall be drawn from one of the professorial groups specified in Section 8(1), items 1 to 7 of the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of the Faculty of Mathematics and Computer Science.

Section 32 Admission to the Master's programme (cf. Sec. 12 of the Joint Examination Regulations)

- (1) Students seeking admission to the Master's programme shall:
- 1. have a Bachelor's degree from a German university or an equivalent qualification from a foreign university in cybersecurity, computer science or a related field
- 2. demonstrate particular academic aptitude (see Section 77(6) of the Saarland Higher Education Institutions Act SHSG).
- (2) The criteria used to assess particular academic aptitude are:
 - 1. Proof of advanced proficiency in English (typically level C1 of the Common European Framework of Reference for Languages)
 - 2. Sufficient merit in the applicant's previous academic track record and the appropriate curricular content of the Bachelor's degree. Applicants should demonstrate a level of knowledge and competence that corresponds to that acquired in the Bachelor's degree programmes in cybersecurity and computer science taught at Saarland University. Specifically, this requires applicants to show that they have the necessary level of expertise in the following areas:
 - Mathematics and theoretical informatics (discrete mathematics, analysis, linear algebra, numerical methods, stochastic processes, formal methods, formal logic, computability, complexity)

- II. Applied informatics and cybersecurity (programming, data structures and algorithms, software development methodologies, data protection, cryptography, security)
- 3. Supporting documents, typically in the form of a personal statement ('statement of purpose') or a portfolio demonstrating the applicant's particular interest in the subject.
- 4. Taking account of the applicant's previous academic performance in the areas set out in Subsection 2 above, the applicant's suitability for the programme will be determined either by the presentation of satisfactory academic references or by the results of an oral interview conducted by two examiners from the Faculty of Mathematics and Computer Science as appointed by the Examination Board.

The criteria listed above will be used to assess the aptitude of the applicant in terms of the academic profile and requirements of the Master's degree programme in Entrepreneurial Cybersecurity. The decision whether the programme admission requirements have been met shall be made by the Examination Board.

Section 33 Duration and deadlines (cf. Sec. 22 of the Joint Examination Regulations)

The student workload for completing the Master's thesis is 15 ECTS credits and the completion period is three months.

Section 34 Procedural elements, presentation and layout of the thesis (cf. Sec. 23 of the Joint Examination Regulations)

- (1) If reasonable grounds exist, the candidate may apply to the Examination Board to request that public access to the content of the Master's thesis should be delayed for a specified period. This period should not exceed one year.
- (2) A research colloquium shall be held in order to establish that the Master's thesis is the candidate's own original work. The colloquium shall be held no later than six weeks after the candidate submits the printed version of their Master's thesis. One of the colloquium examiners shall be the person who set the candidate's thesis topic.

Section 35 Degree qualification (cf. Sec. 25 of the Joint Examination Regulations)

Candidates attain the degree of Master of Engineering (M.Eng.) upon receipt of the formal graduation certificate.

Section 36 Degree qualification and documentation (cf. Sec. 25 of the Joint Examination Regulations)

In addition to the information presented in Section 25(1) of the Joint Examination Regulations for the Bachelor's and Master's Degree Programmes of the Faculty of Mathematics and Computer Science, the degree certificate may also list other student attainments and the results achieved.

Section 38 Commencement

These regulations shall come into force on the day after they are announced in the Official Bulletin of the Institutions of Higher Education in Saarland (*Dienstblatt der Hochschulen des Saarlandes*).

Saarbrücken, 5 June 2018

President of Saarland University (Univ.-Prof. Dr. Manfred Schmitt)