Subject-Specific Regulations for the Master's Degree Programme in Visual Computing 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)

30 April 2020

> **Note:** This translation is provided for information purposes only. In the event of any discrepancy between the translation and the original German version published in the Official Bulletin (*Dienstblatt der Hochschulen des Saarlandes*), the provisions of the latter shall take precedence.

Pursuant to Section 64 of the Saarland Higher Education Institutions Act (SHSG) (Official Gazette of Saarland I, p. 1080) most recently amended in law on 10 April 2019 (Official Gazette I, p. 412) and pursuant to 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 2 July 2015 (Official Bulletin, p. 616) as 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, p. 404) and with the consent of the University Senate and the University Board, the Faculty of Mathematics and Computer Science at Saarland University hereby issues the following Subject-Specific Regulations for the Master's Degree Programme in Visual Computing.

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

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

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

The Master's programme in Visual Computing is a more research-oriented postgraduate degree programme.

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

The Master's degree programme 'Visual Computing' 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 (BMRPO).

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

Course attendance may be compulsory for certain seminars and practical skills classes. Students will be notified of this by the instructor 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 drawn from the groups in Section 8(1), items 1 to 7 of the Joint Examination Regulations for Bachelor's and Master's Degree Programmes of the Faculty of Mathematics and Computer Science and, additionally, from the group of mid-level academic staff with the right to supervise doctoral candidates.

The persons specified in items 1 to 8 shall be members of one of the faculties at Saarland University and shall be involved with the content of the Master's programme in Visual Computing.

(2) In addition to the examiners specified in Section 8(2) of the Joint Examination Regulations, the Examination Board for Visual Computing may in individual cases and with the consent of those members of professorial staff with responsibility for the relevant subject area also appoint heads of independent junior research groups, members of mid-level academic staff at Saarland University qualified to doctoral level as well as members of staff at on-campus research institutes qualified to doctoral level.

(3) Thesis examiners and/or thesis supervisors for the Master's thesis may be drawn from the groups specified in (1) and (2) above, provided that they regularly offer core modules in the Master's programme Visual Computing. Where reasonable grounds exist, the Examination Board may expand the group of persons from which thesis examiners and/or thesis supervisors can be chosen.

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

1. must have a Bachelor's degree from a German university or an equivalent qualification from a foreign university in visual computing / computer visualization or a related field (particularly computer science, mathematics, physics, electrical engineering or mechatronics)

2. and must 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:

a. Proof of advanced proficiency in English (typically level C1 of the Common European Framework of Reference for Languages)
b. Sufficient merit in the applicant's previous academic record and appropriate curricular content of the Bachelor's degree. Applicants should demonstrate a level of knowledge and competence that corresponds to that acquired in a Bachelor's degree programme in a related subject area taught at Saarland University. Specifically, this requires applicants to show that they have the necessary level of expertise in the following areas:
   I. Mathematics (discrete mathematics, real analysis and multivariable calculus, linear algebra, numerical methods, stochastics)
   II. Computer science, particularly programming, algorithms and data structures

III. A number of core topics in the field of visual computing (imaging techniques, image processing, computer vision, pattern recognition, computer graphics, scientific visualization, geometric modelling)

IV. A number of areas with a connection to visual computing (e.g. machine learning, data science, artificial intelligence, telecommunication, robotics)

c. Evidence of particular interest in the subject by submission of a personal statement written by the applicant and two letters of recommendation written by referees who know the applicant academically

d. Previous periods of relevant work experience or internships

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 Visual Computing. The Examination Board shall decide whether the programme admission requirements have been met.

Section 33
Procedural elements, presentation and layout of the thesis (cf. Sec. 23 of the Joint Examination Regulations)

A colloquium lasting 30 minutes 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 the Master's thesis. One of the colloquium examiners shall be the person who set the candidate's thesis topic.

Section 34
Successfully completing the Master's programme and overall grade (cf. Sec. 24 of the Joint Examination Regulations)

To graduate 'with distinction', a candidate must have attained a final overall grade of 1.1 or better and must have met all of the programme requirements within the standard period of study.

Section 35
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 36
Commencement

(1) 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*).

(2) Students who began studying for their Master's degree in Visual Computing in the Faculty of Mathematics and Computer Science before these regulations entered into force shall continue to study under the study and examination regulations applicable at the time they began the programme, but shall complete their studies including the final academic assessment and examination phase by the end of winter semester 2022/2023.

Saarbrücken, 9 April 2021

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