

Study Regulations Governing the Research Master's Degree Programme BioMed

5 June 2025

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.

The Faculty of Natural Sciences and Technology, the Faculty of Medicine and the Faculty of Mathematics and Computer Science at Saarland University hereby issue the following Study Regulations Governing the degree programme Research Master's BioMed. These study regulations are issued pursuant to Section 60 of the Saarland Higher Education Act of 30 November 2016 (SHSG; Saarland Official Gazette I, p. 1080), most recently amended in law by Article 1 of the Act of 10 July 2024 (Saarland Official Gazette I, p. 555) and on the basis of the Joint Examination Regulations for Bachelor's and Master's Degree Programmes of the Faculty of Natural Sciences and Technology and the Center for Human and Molecular Biology at Saarland University of 4 November 2021 (Official Bulletin 2022, p. 272), with the consent of the Saarland University Senate.

Section 1 Scope

These study regulations govern the content and structure of the degree programme Research Master's BioMed based on the Joint Examination Regulations for Bachelor's and Master's Degree Programmes of the Faculty of Natural Sciences and Technology and the Center for Human and Molecular Biology at Saarland University of 4 November 2021 (Official Bulletin 2022, No. 22, p. 272) and the Subject-Specific Regulations Governing the Single-Subject Research Master's Degree Programme BioMed Supplementing the Joint Examination Regulations for Bachelor's and Master's Degree Programmes of the Faculty of Natural Sciences and Technology and the Center for Human and Molecular Biology at Saarland University of 5 June 2025 (Official Bulletin 2025, No. 58, p. 474). The organization of the curriculum, teaching and examinations in this programme is the responsibility of the Faculty of Natural Sciences and Technology (NT) at Saarland University.

Section 2 Academic degree

The Faculty of Natural Sciences and Technology, the Faculty of Medicine and the Faculty of Mathematics and Computer Science award candidates who have successfully completed all of the programme's academic assessments the degree Master of Science (M.Sc.). A specialist area can also be indicated in the academic title designation.

Section 3 Start and duration of programme

- (1) Students begin the programme at the start of the summer or winter semester.
- (2) The standard period of study is two semesters.

Section 4

Objectives of the degree programme and career relevance

(1) This Master's programme aims to prepare candidates to complete challenging research in the field of BioMed, nationally and internationally. The programme incorporates the Biosciences, Chemistry, Computer Science (bioinformatics research focus), Pharmaceutical Science, Physics departments and departments from the Faculty of Medicine. Building off existing mathematical and scientific foundations, the programme gives students the skills required to solve current technical and scientific problems.

(2) Career applications: The technical, methodological and practical qualifications candidates acquire in the Research Master's BioMed degree programme provide them direct access to key professional fields in natural science research early in their career. The comprehensive scientific and methodological approach of the programme is unique in its breadth and enables students to conduct further independent research. The skills acquired during the programme, such as the ability to work on interdisciplinary projects, synthesize information in a structured manner as well as strong presentation and writing skills, allow graduates to also work in other fields such as industrial research and development.

Section 5

Types of academic instruction

The curriculum content is taught using the following types of academic instruction:

(1) Lectures ('V', standard class size = 100): Lectures courses serve as an introduction to a subject area and provide, for example, an overview of relevant research. They also provide suggestions for further reading on a topic and open the way to acquiring a deeper understanding of an area through subsequent exercise and problem-solving classes ('Ü'), practical skills classes ('P') and self-directed study.

(2) Practical skills classes ('P', standard class size = 10): Practical skills classes or projects offer a number of practical, subject-related topics that introduce students to the specific approaches and methods used in a particular discipline or field of study. The necessary theoretical knowledge underlying a specific topic is acquired by attending lectures and studying the relevant scientific literature. An additional goal of the practical skills classes is to provide students with the opportunity to gain practical experience with computer-aided methods.

(3) Seminars ('S', standard class size = 20): Seminars are a type of academic instruction with a limited number of participants in which students actively collaborate to generate results by participating in discussions or by giving presentations. Seminars aim to deepen student understanding of an academic field, help students acquire the skills needed for the effective presentation of scientific and academic content, and encourage students to engage in critical analysis and discussion of research results.

(4) Language courses ('SP'): Language courses help students develop skills in another language and improve their intercultural competence.

(5) Exercise and problem-solving classes ('Ü', standard class size = 20): Exercise and problem-solving classes are small-group sessions used to supplement and reinforce what was learned in the lectures. By working on representative problems students have the opportunity to apply and deepen the knowledge they acquired in the lectures, to assess their personal understanding of a specific area and to clarify any questions that they may have. Students may be required to successfully complete the assigned exercises and problems in order to register for an end-of-module assessment or examination.

Section 6 Proof of course attendance

Course attendance may be compulsory for certain seminars and practical training modules/laboratory courses. Students will be notified of this by the instructor at the beginning of the module or module element. The compulsory attendance requirement is normally deemed to have been met if a student was present for at least 85 per cent of the course sessions. If there are reasonable grounds for a student's absence, the student may be offered the option of completing alternative assignments.

Section 7 Structure and content of the programme

(1) To graduate from the Research Master's programme BioMed, students shall earn a total of 60 credits as defined by the European Credit Transfer System (ECTS). Of these, at least 52 credits and at most 60 credits shall be from graded assignments. As a rule, students are required to earn 30 credits per semester.

(2) The degree programme comprises 52 credits of mandatory modules and 8 credits of mandatory elective modules.

Section 8 Academic assessments and grading/marking scale

Module	Module element	Type	hrs/wk	Semester(s) for standard period of study ¹	Repeat cycle	ECTS credits	Assessment
Mandatory section, 52 credits							
Research module (22 credits)	Research Seminar	S	2	1	WS/SS	5	Presentation and report (b)
	Introduction to Academic Research	P	2	1	WS/SS	5	Presentation or report (u)
	Research projects	P	10	1	WS/SS	12	Presentation and report (b)
Master's thesis (30 credits)	Final thesis	Written thesis		2	WS/SS	30	Written thesis and thesis oral presentation on the Master's thesis (b)
Mandatory electives section: BioMed ²³ , 5 credits							
Experimental Biophysics		V+Ü	3+1	1	WS/SS	5	Preliminary assessments: Practice exercises (u), written or oral

¹The lower semester is meant as a guideline. The higher semester is the semester in which students typically take the course.

² Modules from biosciences, chemistry, computer science, pharmaceutical science, physics and the departments in the Faculty of Medicine can be chosen for the mandatory electives section. The Examination Board may decide to approve modules from other subjects. The modules listed are examples. An overview of possible modules will be made available on a suitable channel.

³ Students must complete at least one module comprising 5 credits from one of the BioMed subdisciplines.

							examination (b)
Data Science in Medicine		V+Ü	3+1	1	WS/SS	5	Preliminary assessments: Practice exercises (u), written or oral examination (b)
Single-Cell Bioinformatics for BioMed		V+Ü	3+1	1	WS/SS	5	Preliminary assessments: Practice exercises (u), written or oral examination (b)
Mandatory electives section: Languages, 3 credits							
Foreign languages ⁴	German <u>or</u> another foreign language	SP	2	1	Winter semester/ Summer semester	3	Written or oral examination (u)

Section 9 Requirements for registering for exams

The requirements for registering for exams are as follows:

- For the Master's thesis module, students must have successfully completed the academic assessments and examinations from the research module.

Section 10 Study plan

The Dean of Studies shall compile a programme-specific study plan based on the study regulations. The study plan shall be appended to the study regulations as a recommendation for students on how to structure their studies effectively. The study plan will be made available in suitable form.

Section 11 Student advisory services

(1) The Central Student Advisory Service (*Zentrale Studienberatung*) at Saarland University provides counselling and guidance to prospective students and enrolled students concerning the content, structure and requirements of academic study at Saarland University. It also can advise and assist students with respect to their study options as well as with planning and organizing their studies.

(2) Questions concerning curricular demands, learning objectives, admission requirements and programme-specific study planning and organization can be addressed to the programme adviser for the Research Master's BioMed.

⁴ Students who cannot provide proof of proficiency in German of at least B2 level on the Common European Framework of Reference for Languages must complete a 3-credit German course. Students with at least a B2 level in German can fulfil the language requirement by completing a course in another foreign language.

(3) Questions specific to individual modules should be addressed to the respective module coordinators.

Section 12 Studying abroad

Students do not have the opportunity to spend part of the programme studying abroad.

Section 13 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, 23 September 2025

Univ.-Prof. Dr. Ludger Santen
President of Saarland University