



Subject-specific study and examination regulations for the consecutive English-taught master's programme in Finance offered by the Faculty of Mathematics and Economics at Ulm University of 15 July 2021

Based on § 32 (3) sentence 1 Federal State Higher Education Act Baden-Württemberg (*Landeshochschulgesetz* - LHG) in the version of 1 January 2005 (law gazette 1. 1 ff) last amended by article 1 of the fourth act amending higher education regulations (*Viertes Hochschulrechtsänderungsgesetz* – 4. HRÄG) of 17 December 2020 (law gazette no. 46, p. 1204 ff), the Senate of Ulm University, on a proposal of the Faculty of Mathematics and Economics, adopted the following Subject-specific study and examination regulations for the English-taught master's programme in Finance in its meeting of 26 May 2021. The President of Ulm University gave his consent on 15 July 2021 in accordance with § 32 (3) sentence 1 LHG.

I. General provisions

- § 1 Scope of application
- § 2 Programme objectives, academic degrees (§ 2 General Framework)
- § 3 Start of the programme (§ 3 General Framework)
- § 4 Standard period of study (§ 5 General Framework)
- § 5 Deadlines (§ 6 (8) and (9) General Framework)
- § 6 Courses and examinations in English (§ 7 General Framework)
- § 7 Subject examination board (§ 10 General Framework)
- § 8 Organisation of module examinations (§ 13 General Framework)
- § 9 Related study programmes (§ 14 General Framework)
- § 10 Regulations regarding the module master's thesis (§ 16c General Framework)
- § 11 Assessment of module examinations (§ 17 General Framework)
- § 12 Repetition of module examinations (§ 20 General Framework)

II. Master's programme in Finance

- § 13 Study content, admission to module examinations
- § 14 Subject-specific admission requirements for the master's thesis

III. Final provisions

- § 15 Effective date, transitional provisions

I. General provisions

§ 1 Scope of application

- (1) These Subject-specific study and examination regulations contain specific regulations for the master's programme in Finance.
- (2) These Subject-specific study and examination regulations supplement the General provisions on study and examination regulations for bachelor's and master's programmes at Ulm University (General Framework). In cases of doubt, the General Framework has precedence.

§ 2 Study objectives, academic degree (§ 2 General Framework)

- (1) The master's programme in Finance is designed to provide in-depth knowledge of modern quantitative techniques that are applied in professional activities in the field of financial services (such as the design of modern financial products, risk management, data analytics, regulatory issues). The Master's programme in Finance is an interdisciplinary programme that combines mathematics as well as finance and insurance in an integrative way. In addition, the study programme should also sensitise students to ethical issues.
- (2) The students' education is thus geared towards the employment profile of graduates in the professional field of financial services (banks, insurance companies, management consultancies) and regulatory institutions (such as the Bundesbank, supervisory authorities) in this field. The master's programme enables students to familiarise themselves with the important techniques and their mathematical foundations as well as their application in the professional field of financial services. Depending on prior knowledge and chosen specialisations, students can set different emphases.
- (3) The master's programme in Finance serves to provide in-depth knowledge and specialisation. A successfully completed master's degree should enable the student
 - (a) to work independently in financial services companies, industry, business and regulatory authorities,
 - (b) to lead projects that involve analysing, modelling and solving financial and insurance problems,
 - (c) to perform planning, development and research tasks in scientific and public institutions,
 - (d) to work as a research assistant at a university,
 - (e) to pursue a doctorate
 - (f) to pursue independent lifelong learning on the basis of in-depth methodological competence
- (4) The Faculty of Mathematics and Economics at Ulm University offers the consecutive master's programme in Finance with the degree "Master of Science" (abbreviated: "M.Sc.").

§ 3 Start of the programme (§ 3 General Framework)

Studies in the master's programme in Finance begin in the winter semester.

§ 4 Standard period of study (§ 5 General Framework)

The standard period of study for the master's programme is four semesters.

§ 5 Deadlines (§ 6 (8) and (9) General Framework)

Students must have achieved at least 75 CP by the end of the fourth semester in the master's programme in Finance. Students must have completed the master's examination, including the master's thesis, by the end of the sixth semester and have earned 120 CP. The right to examination expires if the credit points specified in sentences 1 and 2 have not been achieved in the time periods specified in sentences 1 and 2, unless the student is not responsible for not achieving the specified credit points in the given time.

§ 6 Courses and examinations in English or another foreign language (§ 7 General Framework)

As a rule, the courses and examinations in the master's programme in Finance are held in English.

§ 7 Subject examination board (§ 10 General Framework)

- (1) A subject examination board is formed for the master's programme in Finance.
- (2) The subject examination board consists of five members. It is composed of three full-time university lecturers and habilitated members employed full-time at Ulm University, one academic staff member and one student in an advisory capacity. The term of office shall be three years for the university lecturers, habilitated members employed full-time at Ulm University and the academic staff member, and one year for student members.

§ 8 Organisation of module examinations (§ 13 General Framework)

- (1) As a rule, written module examinations take place in accordance with the recommendation in § 13 (1) General Framework.
- (2) The form of examination is announced to the students by the examiner in a suitable manner at the beginning of the relevant course.

§ 9 Related study programmes (§ 14 General Framework)

Degree programmes related with Finance are, in particular, mathematics, mathematics and management as well as finance and actuarial science degree programmes with a strong quantitative component.

§ 10 Regulations regarding the module master's thesis (§ 16c General Framework)

- (1) The master's thesis corresponds to 30 CP. The time from admission to submission of the master's thesis is six months.
- (2) The master's thesis must be submitted in to print copies and in electronic form (pdf) to the *Studiensekretariat* (student administration and examinations office). With the consent of the examiners, the master's thesis can be submitted exclusively in electronic form.

§ 11 Assessment of module examinations (§ 17 General Framework)

- (1) In cases justified by their subject matter, written examinations can also take place by way of multiple choice. In this case, the module examination is passed if the student has achieved at least 60% of the total number of points or if the number of points achieved by the student does not fall below the average examination performance of all examinees of this examination by more than 20% and the student has achieved at least 50% of the possible total points.
- (2) The examinations counting towards the overall grade of the master's examination are, for students specialising in Financial Mathematics, the module (part) examinations specified in § 13 (2) no. 1 to 5 and no. 7 to 10; for students specializing in Financial Economics, the module (part) examinations specified in § 13 (3) no. 1 to 4 and no. 6 to 9; and, for students specializing in Actuarial Science, the module (part) examinations specified in § 13 (4) no. 1 to 5 and no. 7 to 10.
- (3) The overall grade of the master's examination is calculated according to § 17 (3) General Framework.
- (4) If compulsory elective modules are completed to a greater than their minimum extent, they shall be included in the overall grade with their actual weight. If the minimum number of credit points has already been achieved with a module, no further modules can be included in the calculation of the overall grade.

§ 12 Repetition of module examinations (§ 20 General Framework)

In the compulsory and compulsory elective modules, up to four module (part) examinations can be repeated a maximum of three times.

II. Master's programme in Finance

§ 13 Study content, admission to module examinations

- (1) Each module is completed with a module examination or several module part examinations.
- (2) The following modules must be completed:
 - a) Specialisation Financial Mathematics:
 1. Discrete Time Financial Mathematics (4 CP)
 2. Asset Pricing (7 CP)
 3. Stochastic Analysis (4 CP)
 4. Continuous Time Financial Mathematics (4 CP)

5. Compulsory elective modules corresponding to a minimum of 47 CP from the areas of Mathematics and Financial Economics; a minimum of 32 CP must be from the area of Mathematics and a minimum of 11 CP from the area of Financial Economics.
6. two seminars, one of them from the area of Mathematics (8 CP)
7. Practical Financial Engineering (4 CP)
8. Risk Management Roundup (4 CP)
9. modules from the areas of Additive transferable skills (ASQ) corresponding to a minimum of 8 CP
10. master's thesis (30 CP)

b) Specialisation Financial Economics:

1. Derivatives (7 CP)
2. Asset Pricing (7 CP)
3. Compulsory elective modules corresponding to a minimum of 32 CP from the area of Financial Economics
4. Compulsory elective modules corresponding to a minimum of 20 CP from the area of Quantitative Methods and Mathematics
5. Two seminars, one of them from the area of Financial Economics (8 CP)
6. Practical Financial Engineering (4 CP) or Project Class in Asset Management (4 CP)
7. Risk Management Roundup (4 CP)
8. Modules from the area of Additive transferable skills (ASQ) corresponding to a minimum of 8 CP
9. Master's thesis (30 CP)

c) Specialisation Actuarial Science:

1. Discrete Time Financial Mathematics (4 CP)
2. Derivatives (7 CP)
3. Compulsory elective modules corresponding to a minimum of 25 CP from the area of Actuarial Science
4. Compulsory elective modules corresponding to a minimum of 16 CP from the area of Mathematics
5. Compulsory elective modules corresponding to a minimum of 7 CP from the area of Financial Economics
6. Compulsory elective modules corresponding to a minimum of 7 CP from the areas of Actuarial Science, Financial Economics and Quantitative Methods or Mathematics.
7. Two seminars, one of them from the area of Actuarial Science (8 CP)
8. Practical Actuarial Science (4 CP)
9. Practical Financial Engineering (4 CP) or Risk Management Roundup (4 CP)
10. Modules from the areas of Additive transferable skills (ASQ) corresponding to a minimum of 8 CP
11. Master's thesis (30 CP)

- (3) The module handbook specifies which modules can be selected as compulsory elective modules from the areas of Actuarial Science, Quantitative Methods, Financial Economics and Mathematics.
- (4) In the area of Additive transferable skills (ASQ), no English language courses below the level of C1 or language courses in the respective native language of students can be selected. From the language course offer in "Deutsch als Fremdsprache" (German as a foreign language), only such modules can be selected as are offered especially for English-taught study programmes, again subject to sentence 1. In exceptional cases, the examination board can approve the recognition of other language courses from the category "Deutsch als Fremdsprache" as a module in the area of Additive transferable skills.
- (5) Admission to compulsory and compulsory elective module exams may be subject to coursework as defined in § 6 (3) of the General Framework. Required coursework is specified in the module handbook. Form and volume of the respective coursework are published in good time before the courses begin.
- (6) The specialisation must be selected by the beginning of the examination period of the second semester in the programme. The choice of specialisation is between "Financial Mathematics", "Financial Economics" and "Actuarial Science". It is no longer possible to change the specialisation once the examination period of the second semester in the programme has begun.

§ 14 Subject-specific admission requirements for the master's thesis

Admission to the master's thesis is subject to having earned a minimum of 60 CP from modules in the master's programme.

III. Final provisions

§ 15 Effective date, transitional provisions

- (1) These Study and examination regulations enter into effect with the start of the winter semester 2021/2022. They are published in the Official Bulletin of Ulm University. At the same time, the Subject-specific study and examination regulations for the non-consecutive English-taught Master's programme in Finance offered by the Faculty of Mathematics and Economics of Ulm University of 27 July 2017, published in the Official Bulletin of Ulm University No. 28 of 2 August 2017, page 404 - 409 shall cease to apply.
- (2) Paragraph 1 does not apply to students enrolled in the master's programme in Finance at Ulm University in the summer semester 2021. These students complete their studies under the Subject-specific study and examination regulations for the master's programme in Finance offered by the Faculty of Mathematics and Economics of 27 July 2017.

The above regulations have been approved. They are hereby executed and are to be published.

Ulm, 15 July 2021

Prof. Dr.-Ing. Michael Weber
- President -

Courtesy translation