

## I. Scope of the Master's examination

|    | Components   | Credits | Semester                                  |
|----|--|---------|---|
| 1. | Course-related examinations for the acquisition of credits in the required modules   | 6       | 1 <sup>st</sup> Semester                  |
|    | Course-related examinations for the acquisition of credits in the elective modules from the core area "Entrepreneurship"                   | 6       | 1 <sup>st</sup> Semester                  |
| 2. | Course-related examinations for the acquisition of credits in the elective modules from the core area „Finance and Information Management“ | 48      | 1 <sup>st</sup> /2 <sup>nd</sup> Semester |
| 3. | Course-related examinations for the acquisition of credits in the elective modules from the elective area                                  | 30      | 3 <sup>rd</sup> Semester                  |
| 4. | Master's Thesis according to § 46  | 30      | 4 <sup>th</sup> Semester                  |

## I. Exam modules

### Required Modules

Students must successfully complete 12 credits from the following required modules.

| Module no. | Module name   | Type of module | Teaching method SWS/ V Ü P | Sem.   | SWS | Credits | Type of examination | Duration of examination | Language of instruction |
|------------|---------------|----------------|----------------------------|--------|-----|---------|---------------------|-------------------------|-------------------------|
| WI001287   | Basics of FIM | Required       | 6 V                        | 1. Sem | 6   | 6       | Written exam        | 60                      | English                 |

### Elective modules from the core area „Entrepreneurship“

At least 6 credits must be selected from the core area within the framework of the elective modules. This exemplary elective module catalog is continuously updated; the applicable elective module catalog will be announced by the Faculty of Business and Economics in a suitable manner in good time before the start of lectures.

| Module no. | Module name  | Type of module | Teaching method SWS/ V Ü P | Sem.   | SWS | Credits | Type of examination | Duration of examination | Language of instruction |
|------------|--|----------------|----------------------------|--------|-----|---------|---------------------|-------------------------|-------------------------|
| WI000997   | Marketing Entrepreneurship Lab                                       | Elective       | 4S                         | 1. Sem | 4   | 6       | Research paper      | k.A.                    | English                 |
| WI001141   | Principled Entrepreneurial Decisions                                 | Elective       | 4S                         | 1. Sem | 4   | 6       | Research paper      | k.A.                    | English                 |
| WI100180   | Business Plan - Advanced Course (Business Models, Sales and Finance) | Elective       | 4S                         | 1. Sem | 4   | 6       | Research paper      | k.A.                    | English                 |

## Elective modules from the core area „Finance and Information Management“

At least 48 credits must be selected from the core area within the framework of the elective modules. These examination credits can be partially completed at the University of Bayreuth. These modules are accordingly assigned a module number beginning with the abbreviation WIBT. The applicable elective module catalog will be announced by the Faculty of Business and Economics in a suitable manner in good time before the start of lectures.

| Module no. | Module name                                       | Type of module | Teaching method<br>SWS/ V Ü<br>P | Sem.   | SWS | Credits | Type of examination | Duration of examination | Language of instruction |
|------------|---|----------------|----------------------------------|--------|-----|---------|---------------------|-------------------------|-------------------------|
| WI001267   | Advanced Corporate Finance                        | Elective       | V+Ü                              | 1. Sem | 4   | 6       | Written exam        | 60                      | English                 |
| WI001268   | Venture Capital                                   | Elective       | 4 V                              | 2. Sem | 4   | 6       | Research paper      | 120                     | English                 |
| WI000234   | Value Based Management                            | Elective       | 2 V+ 2 Ü                         | 2. Sem | 4   | 6       | Written exam        | 120                     | English                 |
| WI001269   | International Accounting                          | Elective       | 4 V                              | 1. Sem | 4   | 6       | Written exam        | 60                      | English                 |
| WI001270   | Behavioral Finance                                | Elective       | 4 V                              | 2. Sem | 4   | 6       | Research paper      | n.a.                    | English                 |
| WI100180   | Business Plan - Advanced Course                   | Elective       | 4 S                              | 2. Sem | 4   | 6       | Research paper      | n.a.                    | English                 |
| IN2028     | Business Analytics                                | Elective       | 2V+ 2Ü                           | 1. Sem | 4   | 6       | Written exam        | 90                      | English                 |
| WI001272   | Introduction to Deep Reinforcement Learning       | Elective       | V +Ü                             | 2. Sem | 4   | 6       | Research paper      | n.a.                    | English                 |
| WIBT0001   | Business Process Management & Digital Innovation  | Elective       | V                                | 1. Sem | 2   | 6       | mündliche Prüfung   | 20                      | English                 |
| WIBT0002   | Digital Energy Management                         | Elective       | V+Ü                              | 1. Sem | 4   | 6       | Written exam        | 60                      | English                 |
| WIBT0003   | Digital Disruption, Innovation and Transformation | Elective       | S                                | 2. Sem | 4   | 6       | Research paper      | n.a.                    | English                 |
| MA9972     | Discrete Time Finance                             | Elective       | 2 V + 2Ü                         | 1. Sem | 4   | 6       | Written exam        | 60 - 90                 | English                 |
| MA9973     | Continuous Time Finance                           | Elective       | 2 V + 2 Ü                        | 2. Sem | 4   | 6       | Written exam        | 60 - 90                 | English                 |

## Elective modules from the elective area

Within the framework of the elective modules from the elective area, at least one module from three of the four areas must be selected. In addition, further elective modules from the entire elective catalog must be selected from the elective area. A total of 30 credits from the elective catalog must be successfully completed. These examination credits can be partially completed at the University of Bayreuth. These modules are accordingly assigned a module number beginning with the abbreviation WIBT. This exemplary elective module catalog is continuously updated; the applicable elective module

catalog will be announced by the Faculty of Business and Economics in a suitable manner in good time before the start of lectures.

### Elective modules from the field of quantitative finance

| Module no. | Module name                           | Type of module | Teaching method<br>SWS/ V<br>Ü<br>P | Sem.   | SWS | Credits | Type of examination | Duration of examination | Language of instruction |
|------------|---------------------------------------|----------------|-------------------------------------|--------|-----|---------|---------------------|-------------------------|-------------------------|
| MA9976     | Financial Econometrics                | Elective       | 3 V                                 | 3. Sem | 3   | 6       | Written exam        | 90                      | English                 |
| MA3405     | Insurance Mathematics 1               | Elective       | 4 V + 2 Ü                           | 3. Sem | 6   | 6       | Written exam        | n.n                     | English                 |
| MA3703     | Fixed Income Markets                  | Elective       | 2 V + 1 Ü                           | 3. Sem | 3   | 6       | Written exam        | 60                      | English                 |
| MA9982     | Trading Seminar                       | Elective       | 1 S                                 | 3. Sem | 1   | 3       | Written exam        | 90                      | English                 |
| MA9981     | Investment Risk Management            | Elective       | 2 V + 1 Ü                           | 3. Sem | 3   | 3       | Research paper      | n.a.                    | English                 |
| MA9977     | Applied Capital Markets               | Elective       | 4 V                                 | 3. Sem | 2   | 3       | Written exam        | 60                      | English                 |
| WIB06771   | Cases in Finance (Seminar)            | Elective       | 4 S                                 | 3. Sem | 4   | 3       | Research paper      | n.a.                    | English                 |
| MA5709     | Investment Strategies                 | Elective       | 2 V + 1 Ü                           | 3. Sem | 3   | 6       | Written exam        | 60                      | English                 |
| MA5415     | Quantitative Risk Management          | Elective       | 2 V + 1 Ü                           | 3. Sem | 3   | 6       | Written exam        | 60                      | English                 |
| WIHN0020   | Empirical Research Methods in Finance | Elective       | 4 S                                 | 3. Sem | 4   | 6       | Research paper      | n.a.                    | English                 |
| WI000092   | Banking and Risk Management           | Elective       | 2 V                                 | 3. Sem | 2   | 3       | Written exam        | 60                      | English                 |
| WI001275   | Applied Econometrics                  | Elective       | 2 V + 2Ü                            | 3. Sem | 4   | 6       | Research paper      | n.a.                    | English                 |
| WI001273   | Advanced Econometrics                 | Elective       | 2 V + 2Ü                            | 3. Sem | 4   | 6       | Research paper      | n.a.                    | English                 |

### Elective modules from the field of Financial Management

| Module no. | Module name            | Type of module | Teaching method<br>SWS/ V<br>Ü<br>P | Sem.   | SWS | Credits | Type of examination | Duration of examination | Language of instruction |
|------------|------------------------|----------------|-------------------------------------|--------|-----|---------|---------------------|-------------------------|-------------------------|
| MA9976     | Financial Econometrics | Elective       | 3 V                                 | 3. Sem | 3   | 6       | Written exam        | 90                      | English                 |
| MA9982     | Trading Seminar        | Elective       | 1 S                                 | 3. Sem | 1   | 3       | Written exam        | 90                      | English                 |

|          |  |          |           |        |   |   |                |      |         |
|----------|--|----------|-----------|--------|---|---|----------------|------|---------|
| MA9981   | Investment Risk Management             | Elective | 2 V + 1 Ü | 3. Sem | 3 | 3 | Research paper | n.a. | English |
| MA9977   | Applied Capital Markets                | Elective | 4 V       | 3. Sem | 2 | 3 | Written exam   | 60   | English |
| WIB06771 | Cases in Finance (Seminar)             | Elective | 4 S       | 3. Sem | 4 | 3 | Research paper | n.a. | English |
| WIHN0020 | Empirical Research Methods in Finance  | Elective | 4 S       | 3. Sem | 4 | 6 | Research paper | n.a. | English |
| WI000092 | Banking and Risk Management            | Elective | 2 V       | 3. Sem | 2 | 3 | Written exam   | 60   | English |
| WI001187 | Private Equity                         | Elective | 2 V + 2Ü  | 3. Sem | 4 | 6 | Written exam   | 60   | English |
| WI001275 | Applied Econometrics                   | Elective | 2 V + 2Ü  | 3. Sem | 4 | 6 | Research paper | n.a. | English |
| WI001273 | Advanced Econometrics                  | Elective | 2 V + 2Ü  | 3. Sem | 4 | 6 | Research paper | n.a. | English |
| IN2359   | Blockchain-based Systems Engineering   | Elective | 4 V       | 3. Sem | 4 | 6 | Written exam   | 60   | English |
| IN2211   | Auction Theory & Market Design         | Elective | 2 V + 2Ü  | 3. Sem | 4 | 6 | Written exam   | 90   | English |
| WI001276 | Digitalization in Finance & Accounting | Elective | 2 S       | 3. Sem | 2 | 3 | Research paper | n.a. | English |
| WI001280 | FinTech in Consumer Finance (Seminar)  | Elective | 4 S       | 3. Sem | 4 | 3 | Research paper | n.a. | English |
| WIBT0006 | Emerging Digital Technologies          | Elective | V         | 3. Sem | 4 | 6 | Research paper | n.a. | English |
| WI000231 | Asset Management                       | Elective | 2V + 2Ü   | 3. Sem | 4 | 6 | Written exam   | 120  | English |
| WIHN0012 | Digital Finance                        | Elective | 4 V       | 3. Sem | 4 | 6 | Written exam   | 90   | English |

### Elective modules from the field of Business & Information Systems Engineering

| Module no. | Module name | Type of module | Teaching method SWS/ V Ü P | Sem. | SWS | Credits | Type of examination | Duration of examination | Language of instruction |
|------------|-------------|----------------|----------------------------|------|-----|---------|---------------------|-------------------------|-------------------------|
|------------|-------------|----------------|----------------------------|------|-----|---------|---------------------|-------------------------|-------------------------|

|          |   |          |          |        |   |   |                |      |         |
|----------|---|----------|----------|--------|---|---|----------------|------|---------|
| MA9976   | Financial Econometrics                          | Elective | 3 V      | 3. Sem | 3 | 6 | Written exam   | 90   | English |
| WI001275 | Applied Econometrics                            | Elective | 2 V + 2Ü | 3. Sem | 4 | 6 | Research paper | n.a. | English |
| IN2359   | Blockchain-based Systems Engineering            | Elective | 4 V      | 3. Sem | 4 | 6 | Written exam   | 60   | English |
| IN2211   | Auction Theory & Market Design                  | Elective | 2 V + 2Ü | 3. Sem | 4 | 6 | Written exam   | 90   | English |
| WI001276 | Digitalization in Finance & Accounting          | Elective | 2 S      | 3. Sem | 2 | 3 | Research paper | n.a. | English |
| WI001280 | FinTech in Consumer Finance (Seminar)           | Elective | 4 S      | 3. Sem | 4 | 3 | Research paper | n.a. | English |
| WIBT0006 | Emerging Digital Technologies                   | Elective | V        | 3. Sem | 4 | 6 | Research paper | n.a. | English |
| WI000231 | Asset Management                                | Elective | 2V + 2Ü  | 3. Sem | 4 | 6 | Written exam   | 120  | English |
| WIHN0012 | Digital Finance                                 | Elective | 4 V      | 3. Sem | 4 | 6 | Written exam   | 90   | English |
| WIBT0004 | Business & Information Systems Engineering      | Elective | n.n S    | 3. Sem | 2 | 3 | Research paper | n.a. | English |
| WIBT0006 | Emerging Digital Technologies                   | Elective | V        | 3. Sem | 4 | 6 | Research paper | n.a. | English |
| WIBT0007 | IT Due Diligence & Audit                        | Elective | V + Ü    | 3. Sem | 2 | 3 | Written exam   | n.n  | English |
| IN2087   | SEBA Master - Web Application Engineering       | Elective | 4 V      | 3. Sem | 4 | 6 | Project work   | n.a. | English |
| IN2323   | Machine Learning for Graphs and Sequential Data | Elective | 4V       | 3. Sem | 4 | 6 | Written exam   | 75   | English |

### Elective modules from the field of Sustainability and Technology

| Module no. | Module name                     | Type of module | Teaching method SWS/ V Ü P | Sem.   | SWS | Credits | Type of examination | Duration of examination | Language of instruction |
|------------|---------------------------------|----------------|----------------------------|--------|-----|---------|---------------------|-------------------------|-------------------------|
| MA9976     | Financial Econometrics          | Elective       | 3 V                        | 3. Sem | 3   | 6       | Written exam        | 90                      | English                 |
| WI001275   | Applied Econometrics            | Elective       | 2 V + 2Ü                   | 3. Sem | 4   | 6       | Research paper      | n.a.                    | English                 |
| WI000813   | Technology Entrepreneurship Lab | Elective       | 4 S                        | 3. Sem | 4   | 6       | Project work        | n.a.                    | Englisch                |

|          |  |          |           |        |   |   |                |      |          |
|----------|--|----------|-----------|--------|---|---|----------------|------|----------|
| WI001180 | Tech Challenge   | Elective | 4 S       | 3. Sem | 4 | 6 | Project work   | n.a. | Englisch |
| IN2359   | Blockchain-based Systems Engineering                       | Elective | 4 V       | 3. Sem | 4 | 6 | Written exam   | 60   | English  |
| IN2211   | Auction Theory & Market Design                             | Elective | 2 V + 2 Ü | 3. Sem | 4 | 6 | Written exam   | 90   | English  |
| WIBT0006 | Emerging Digital Technologies                              | Elective | V         | 3. Sem | 4 | 6 | Research paper | n.a. | English  |
| WIBT0004 | Business & Information Systems Engineering                 | Elective | n.n S     | 3. Sem | 2 | 3 | Research paper | n.a. | English  |
| WIBT0006 | Emerging Digital Technologies                              | Elective | V         | 3. Sem | 4 | 6 | Research paper | n.a. | English  |
| WI001279 | Energy Economics   | Elective | 2 V + 2 Ü | 3. Sem | 4 | 6 | Written exam   | 120  | Englisch |
| WIB36001 | Seminar Finance & Accounting: Electricity Market Economics | Elective | 4 S       | 3. Sem | 4 | 3 | Research paper | n.a. | Englisch |

## Master's Thesis

| Module no. | Module name   | Type of module | Teaching method SWS/ V Ü P | Sem.    | SWS | Credits | Type of examination | Duration of examination | Language of instruction |
|------------|---|----------------|----------------------------|---------|-----|---------|---------------------|-------------------------|-------------------------|
|            | Master's Thesis (Master Finance and Information Management) | Required       |                            | 4. Sem. |     | 30      |                     |                         | Englisch                |

### Explanations:

Sem. = Semester; SWS = Semesterwochenstunden (Semester hours per week); V = Vorlesung (Lecture); Ü = Übung (Exercise); VI = Vorlesung mit integrierter Übung (Lecture with integrated exercise); P = Praktikum (Internship), S = Seminar;

ZV = Zulassungsvoraussetzung (Admission requirement) (siehe § 43 Abs. 1)

In the column "duration of examination", the examination duration in minutes is listed for written and oral examinations.