

# Opasraportti

## OBS - Master of Science, Finance (2017 - 2018)

This guide describes the contents of this master's programme. More information about studying at the business school can be found in the general study guide for Oulu Business School's master level students.

### Master's Programme in Finance (MF)

The programme focuses on understanding the financial markets and financial market participants. Students will develop the skills necessary to analyze the interactions between the markets and participants. The program provides a strong foundation in the theoretical and empirical tools of modern finance. Topics covered include asset pricing, corporate finance, portfolio management and risk management. The approach is analytical and methodologically oriented.

### General Learning Outcomes:

- Analytical thinking and problem solving – our graduates are able to solve business and/or economic problems and make business decisions.
- Disciplinary knowledge – our graduates demonstrate deep and coherent understanding of an academic field of study.
- Business knowledge - our graduates demonstrate deep understanding of their own profession, and are able to use, process and analyze economic and/or business information.
- Globally responsible leadership – our graduates are able to act as future generators of sustainable value for business and society.
- Communication skills - our graduates demonstrate professional oral and written communication knowledge and skills appropriate for business situations.

### Degree structure

<http://webcgi.oulu.fi/studiag/index.php?kieli=2&kaavio=471>

### After completing the Master's Programme in Finance the student is able to:

- describe the fundamental concepts and theories in finance
- define and explain the efficient market hypothesis and its implication
- identify and explain the basic principles of corporate finance, portfolio management and risk management
- explain and apply the principles of asset valuation
- choose and apply basic quantitative methods in finance
- carry out small-scale programming (Excel, R-language, SAS)
- write a research report based on existing theory and empirical literature in the field
- recognize differences between traditional thinking and 'new facts' in finance

# Tutkintorakenteet

## Master of Science, Econ. & Bus. Adm. (Master's Programme in Finance, MF)

Tutkintorakenteen tila: published

Lukuvuosi: 2017-18

Lukuvuoden alkamispäivämäärä: 01.08.2017

### Major studies (vähintään 120 op)

Degree structure diagramme available at <http://webcgi oulu.fi/studiag/index.php?kieli=1&kaavio=471>.

Courses in Modules 2 and 3 may be replaced by other advanced level Finance courses.

Foreign degree students may include 6 ECTS credits of Finnish language studies in either module 2 or 3.

Internship 721065S or Special Issue 721336S may each be taken once in either module 2 or 3.

H635435: International MSc. Programme in Finance, 120 - 130 op

#### *Module 1*

- 721957S: Fundamentals of Finance, 6 op
- 721958S: Empirical Research in Finance I, 6 op
- 721338S: Mathematical Economics, 6 op
- 721066S: Principles of Econometrics, 6 op
- 721070S: Globally Responsible Business, 6 op

#### *Module 2: Select five of these courses*

- 721963S: Corporate Finance, 6 op
- 721960S: Financial Risk Management, 6 op
- 721961S: Entrepreneurial Finance, 6 op
- 721128S: Corporate Governance, 6 op
- 721137S: International Financial Reporting, 6 op
- 721190S: Advanced Firm Valuation, 6 op
- 721065S: Internship, 6 op

#### *Module 3: Select five of these courses*

- 721383S: Asset Pricing, 6 op
- 721952S: Portfolio Management, 6 op
- 721956S: Alternative Investments, 6 op
- 721954S: Financial Econometrics, 6 op
- 721317S: International Macroeconomics, 6 op
- 721959S: Empirical Research in Finance II, 6 op
- 721336S: Special Issue, 6 op

#### *Module 4*

- 721950S: Master's Thesis, Finance, 30 op

## Opintojaksojen kuvaukset

### Tutkintorakenteisiin kuuluvien opintokohteiden kuvaukset

H635435: International MSc. Programme in Finance, 120 - 130 op

**Voimassaolo:** 01.08.2010 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Study module

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

### *Module 1*

#### **721957S: Fundamentals of Finance, 6 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Perttunen, Jukka Olavi

**Opintokohteen kielet:** English

**Voidaan suorittaa useasti:** Kyllä

#### **ECTS Credits:**

6 credits / 160 hours of work

#### **Language of instruction:**

English

#### **Timing:**

Period A

#### **Learning outcomes:**

Upon completion of the course, the student understands the basic concepts of finance and is capable of applying them in financial problem solving. Students are also able to express their ideas analytically and effectively in written form.

#### **Contents:**

Interest rates and discounting, asset pricing, fixed-income securities, derivative securities, portfolio performance evaluation, corporate cash flows, firm valuation.

#### **Mode of delivery:**

Face-to-face teaching.

#### **Learning activities and teaching methods:**

36 hours lectures and exercises, including two mandatory intermediate exams. Independent studying 124 hours.

#### **Target group:**

Major students in finance. Elective for major students in accounting. The course is also available for the students, who need to complete their 25/60 ECTS credits minor in finance.

#### **Prerequisites and co-requisites:**

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#### **Recommended optional programme components:**

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#### **Recommended or required reading:**

Lecture notes.

#### **Assessment methods and criteria:**

During the course, there are two mandatory intermediate exams. In addition, the student has to complete a course project which includes a written report with a strict deadline. The final grade is assigned on the basis of the intermediate exams (50%) and the course project (50%).

**Grading:**

1-5

**Person responsible:**

Jukka Perttunen

**Working life cooperation:**

The course introduces the basic concepts and approaches which are necessary for any career in financial industry.

**Other information:**

The number of students is limited.

**721958S: Empirical Research in Finance I, 6 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Perttunen, Jukka Olavi

**Opintokohteen kielet:** English

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 credits / 160 hours of work

**Language of instruction:**

English

**Timing:**

Periods A-B

**Learning outcomes:**

Upon completion of the course, the student understands the nature of empirical research and is able to write a literature review of a specified topic in finance. The student knows current research topics in finance and the availability of empirical databases for financial research. The student is able to conduct basic empirical analyses of financial data using Excel and SAS. Students are also able to express their ideas analytically and effectively in written form.

**Contents:**

The nature of empirical research, writing of a literature review, writing of a research report, current research topics in finance, finance databases, Excel modeling, basics of SAS-programming.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

52 hours lectures and exercises. Independent studying 108 hours.

**Target group:**

Major students in finance.

**Prerequisites and co-requisites:**

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**Recommended optional programme components:**

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**Recommended or required reading:**

Materials provided by instructors.

**Assessment methods and criteria:**

The required minimum participation rate is 40 hours. The student has to write a 1) literature review of an assigned research topic in finance, and complete a home exercise in both 2) Excel modeling and 3) SAS-programming. The three assignments are graded with the scale 1-5. The final grade of the course is the arithmetic mean of the three subgrades.

**Grading:**

1-5

**Person responsible:**

Jukka Perttunen

**Working life cooperation:**

The course introduces the main empirical methods that are frequently applied in both academic research and financial services industry.

**Other information:**

The number of students is limited.

**721338S: Mathematical Economics, 6 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Matti Koivuranta

**Opintokohteen kielet:** English

**Leikkaavuudet:**

721220A Mathematical Economics 5.0 op

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 credits / 160 hours of work.

**Language of instruction:**

English.

**Timing:**

Period 1A.

**Learning outcomes:**

Upon completion of the course, the student will be able to apply mathematical methods needed in the courses in the Economic Theory module.

**Contents:**

The course introduces frequently used mathematical methods in the economic literature. Applicable parts from linear algebra, differential and integral calculus, mathematical optimization and dynamic analysis are covered.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

36 hours of lectures, 18 hours of exercises, exam 3 hours, preparing for the lectures, exercises and exam 103 hours.

**Target group:**

First year Master's students in Economics and Finance.

**Recommended or required reading:**

[Chiang A.C: Fundamental Methods of Mathematical Economics, 4th edition, McGraw-Hill. New York, NY, 2005.](#)

**Assessment methods and criteria:**

Written exam. Mandatory exercises.

**Grading:**

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**

Professor Mikko Puhakka, Doctoral student Matti Koivuranta.

**Working life cooperation:**

Students learn relevant mathematics and applications to analyse various types of economic situations.

**Other information:**

The number of students is limited.

**721066S: Principles of Econometrics, 6 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Sanna Huikari

**Opintokohteen kielet:** English

**Leikkaavuudet:**

721060A Introduction to Econometrics 5.0 op

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 credits / 160 hours of work

**Language of instruction:**

English

**Timing:**

Period 1B.

**Learning outcomes:**

After completing the course the student is familiar with the standard methods used in empirical analyses and with regression analysis relevant for analyzing economic data. In addition, the student can interpret and evaluate the outcomes of empirical analysis. Furthermore, he/she has basic knowledge of using statistical software in econometric analyses.

**Contents:**

Statistical basics of econometrics and the use of basic econometric models in the analysis of different economic phenomena. The main focus is on dealing with the basic regression models adapted to cross-section data and familiarizing with the use of statistical software.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

36 hours of lectures, 18 hours of exercises, exam 3 hours, preparing for the lectures, exercises and exam 103 hours.

**Target group:**

First year Master's students in Economics, Accounting and Finance.

**Prerequisites and co-requisites:**

It is highly recommended that the student has already passed the course 806116P Basic Methods in Statistics 1 (in Finnish: 806116P Tilastotiedettä kauppatieteilijöille, previously: 806109P Tilastotieteen perusmenetelmät 1) or has elementary knowledge of statistics and probability theory.

**Recommended optional programme components:**

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**Recommended or required reading:**

[Stock James H., Watson Mark W.: Introduction to Econometrics, 2. or 3. edition.](#) Other material announced during the lectures.

**Assessment methods and criteria:**

Written exam.

**Grading:**

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**

Professor Rauli Svento, Doctoral student Sanna Huikari

**Working life cooperation:**

In working life, when the skills of analyzing data are required, the skills learned during the course help a student in summarizing and interpreting the results of empirical studies. He/she can compare the results of various empirical studies and evaluate those critically. Student is able to independently carry out a small-scale econometric study by putting in practice the econometric methods (e.g. linear regression model and various statistical tests) discussed during the course.

**Other information:**

The number of students is limited.

**721070S: Globally Responsible Business, 6 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Anne Keränen

**Opintokohteen kielet:** English

**Leikkaavuudet:**

ay721070S Globally Responsible Business (OPEN UNI) 6.0 op

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 credits / 160 hours of work

**Language of instruction:**

English

**Timing:**

Period C.

**Learning outcomes:**

Upon completion of the course, students are able to demonstrate detailed knowledge of responsible behaviors in global and local business from the viewpoint of their major discipline. The students are able to work in multidisciplinary groups and create a collective approach for uniting economic with socially and environmentally responsible bottom lines within a global business context. Students are also able to express their ideas in written and oral form and communicate them online.

**Contents:**

The course deals with the diversity of contemporary business issues related to sustainability and responsibility when operating in the global marketplace. Based on the triple-bottom-line concept students are introduced to theoretical and practical perspectives from the disciplines of accounting, economics, finance, management/international business and marketing. Students learn to detect, analyze, and create different approaches of how to globally and locally achieve social and environmental goals in addition to economic objectives of a business.

**Mode of delivery:**

Online study methods.

**Learning activities and teaching methods:**

Independent study of the given material 70h, online discussions and groupwork 70h, and conducting individual assignments and learning reports 20h.

**Target group:**

Students from all OBS Master's programmes.

**Prerequisites and co-requisites:**

30 ects (5 Master level courses).

**Recommended optional programme components:**

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**Recommended or required reading:**

Course Book (to be announced later), articles and materials provided by the course instructors.

**Assessment methods and criteria:**

Individual contributions (reports, video, online exam) count for 60% and group contributions (blogpost, case report) 40%.

**Grading:**

The course utilizes a numerical grading scale 1-5. The course consist of five different parts and students acquire a grade by passing the five different parts in numerical order.

**Person responsible:**

Anne Keränen, Jan Hermes and Prof. Pauliina Ulkuniemi.

**Working life cooperation:**

The course includes global and local real life case examples and analyses. Course learning methods advance modern communication and interaction methods relevant in work life. Students gain abilities to perceive and develop responsibility in business.

**Other information:**

The course is available and obligatory for OBS Master level students.

*Module 2: Select five of these courses*

**721963S: Corporate Finance, 6 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Markku Vieru

**Opintokohteen kielet:** English

**Leikkaavuudet:**

721922A Theory of Corporate Finance 5.0 op

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 credits / 160 hours of work

**Language of instruction:**

English

**Timing:**

Period C

**Learning outcomes:**



Upon completion of the course, the student understands the key concepts of corporate finance theory. The student is able to analyze the capital structure and payout decisions, motivations behind mergers and acquisitions, and the effects of conflicts of interest between different corporate stakeholders on corporate decision making.

**Contents:**

Signaling theory, agency theory, optimal capital structure, dividend policy, mergers and acquisitions.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

36 hours lectures and exercises, including article presentations. Independent studying 124 hours.

**Target group:**

Major students in finance. Elective for major students in accounting. The course is also available for the students, who need to complete their 25/60 ECTS credits minor in finance.

**Prerequisites and co-requisites:**

-

**Recommended optional programme components:**

-

**Recommended or required reading:**

Lecture notes; [Copeland, Weston & Shastri: Financial Theory and Corporate Policy.](#)

**Assessment methods and criteria:**

Final exam.

**Grading:**

1-5

**Person responsible:**

Markku Vieru

**Working life cooperation:**

The course enables the student to understand the practical consequences of the different financial decisions on the value of the firm.

**721960S: Financial Risk Management, 6 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Perttunen, Jukka Olavi

**Opintokohteen kielet:** English

**Leikkaavuudet:**

721198A Derivative Securities 5.0 op

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 credits / 160 hours of work

**Language of instruction:**

English

**Timing:**

Period D

**Learning outcomes:**

Upon completion of the course, the student knows how to use derivative securities in financial risk management. The student understands the pricing of derivatives and is able to use the main analytical and numerical techniques for that purpose. Students are also able to express their ideas analytically and effectively in written form.

**Contents:**

Forward contracts, futures contracts, options, derivatives pricing models, numerical pricing techniques.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

36 hours lectures and exercises, including two mandatory intermediate exams. Independent studying 124 hours.

**Target group:**

Major students in finance. The course is also available for the students, who need to complete their 25/60 ECTS credits minor in finance.

**Prerequisites and co-requisites:**

-

**Recommended optional programme components:**

-

**Recommended or required reading:**

Lecture notes; [Hull: Options, Futures, and other Derivatives](#).

**Assessment methods and criteria:**

During the course, there are two mandatory intermediate exams. In addition, the student has to complete a course project which includes a written report with a strict deadline. The final grade is assigned on the basis of the intermediate exams (50%) and the course project (50%).

**Grading:**

1-5

**Person responsible:**

Jukka Perttunen

**Working life cooperation:**

The course provides the basic knowledge of how derivative securities are applied in corporate financial risk management and how financial services providers manage the risk involved with the selling of derivatives.

**Other information:**

The number of students is limited.

**721961S: Entrepreneurial Finance, 6 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Andrew Conlin

**Opintokohteen kielet:** English

**Leikkaavuudet:**

721371A Entrepreneurial Finance 5.0 op

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 credits / 160 hours of work

**Language of instruction:**

English

**Timing:**

Period B

**Learning outcomes:**

Upon completion of the course, the student will understand the issues faced when financing entrepreneurial ventures. The student will also understand the interaction between the strategy and the financing of a start-up venture. The course will focus on the decisions from the entrepreneur's point of view, while also exposing students to the financier's point of view.

**Contents:**

Entrepreneur vs self-employed, the amount, timing, and source of funding, the structure of the funding, agency issues.

**Learning activities and teaching methods:**

36 hours of lectures and 124 hours of independent studying.

**Target group:**

Major students in finance. The course is also available for the students, who need to complete their 60 ECTS credits minor in finance.

**Prerequisites and co-requisites:**

-

**Recommended optional programme components:**

-

**Recommended or required reading:**

Materials provided by instructors.

**Assessment methods and criteria:**

Final exam

**Grading:**

1-5

**Person responsible:**

Andrew Conlin

**Working life cooperation:**

The understanding of the special issues facing entrepreneurial ventures is essential for the development of successful financing practices of small and medium-sized enterprises.

**Other information:**

The number of students is limited.

**721128S: Corporate Governance, 6 op**

**Voimassaolo:** 01.08.2010 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Kallunki Juha-Pekka

**Opintokohteen kielet:** English

**ECTS Credits:**

6 ECTS credits.

**Language of instruction:**

English.

**Timing:**

Period B. It is recommended to complete the course during the Master's programme's 1<sup>st</sup> Fall semester.

**Learning outcomes:**

After passing the course, students are familiar with the agency theory and its various research and practical implications. They are also familiar with the elements of the governance system of the firm, are able to recognize the warning signs of the potential collapse of the governance system, can assess the features of different executive incentive system, and are able to recognize situations of likely accounting fraud. Students can act responsibly in difficult situations of being asked to act dishonestly. Finally, students are familiar with the practices of societally and environmentally sustainable business conduct and able to act professionally in teams, express their ideas analytically and effectively both in written and oral form.

**Contents:**

Lectures, case discussions and presentations, and videos simulating governance-related decisions.

**Mode of delivery:**

Face-to-face –teaching, case presentations and discussions.

**Learning activities and teaching methods:**

36 h of lectures, 6 h of class discussions/student, case works 50 h, self-study 70 h.

**Target group:**

Major students.

**Prerequisites and co-requisites:**

Not applicable.

**Recommended optional programme components:**

Not applicable.

**Recommended or required reading:**

[Kenneth Kim, John Nofsinger and Derek Mohr \(2010\), 'Corporate Governance', 3rd Edition, Pearson Prentice Hall](#); lecture notes; research articles; and cases.

**Assessment methods and criteria:**

Exam and case works.

**Grading:**

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**

Professor Juha-Pekka Kallunki.

**Working life cooperation:**

Lecturer of Practice Pertti Huuskonen teaches a part of the course. Visiting Professor Henrik Nilsson (Stockholm School of Economics) teaches another part of the course. The course focuses heavily on working life skills on how students should react in challenging corporate governance situations in organizations.

**Other information:**

The number of students is limited.

**721137S: International Financial Reporting, 6 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Anna Rossi

**Opintokohteen kielet:** English

**Leikkaavuudet:**

721170A Financial Analysis and Firm Valuation 5.0 op

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 ECTS credits.

**Language of instruction:**

English.

**Timing:**

Period A. It is recommended to complete the course during the Master's programme's 1<sup>st</sup> fall semester.

**Learning outcomes:**

Upon completion of the course, the student is able to prepare and interpret financial statements and knows how and why managers can utilize flexibility in financial reporting. A student develops understanding of the economics of different business transactions, the environment in which financial reporting choices are made and knows how to use the resultant accounting information for various types of decisions. In addition, the student is aware of the main differences in financial reporting practices allowed in U.S. GAAP and International Financial Reporting (IFRS).

**Contents:**

Application of the major concepts of financial accounting under U.S. GAAP and IFRS: accrual accounting, matching principle, revenue recognition, and measurement and recognition of assets and liabilities. Preparation and analysis of financial statements: income statement, balance sheet, and cash flow statement.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

Lectures (26 hours), exercises (10 hours), self-study (124h).

**Target group:**

Major students.

**Prerequisites and co-requisites:**

Basic course in bookkeeping or Stickney, Weil, Schipper & Francis: Financial Accounting: an Introduction to Concepts, Methods and Uses, South-Western Cengage Learning, 13th Edition, Chapters 1-6.

**Recommended optional programme components:**

Not applicable.

**Recommended or required reading:**

[Revsine, Collins, Johnson & Mittelstaedt: Financial Reporting and Analysis, 5th ed. \(2011\) McGraw-Hill/Irwin. Selected chapters.](#)

[Or: Revsine, Collins, Johnson, Mittelstaedt & Soffer: Financial Reporting and Analysis, 6th ed. \(2015\). McGraw-Hill/Irwin. Selected chapters.](#)

**Assessment methods and criteria:**

Exam.

**Grading:**

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**

Anna Elsilä

**Working life cooperation:**

This course provides essential knowledge and skills needed for working in accounting departments of companies following IFRS. Likewise investors, financial analysts and auditors working with such companies will need the skills developed during this course.

**Other information:**

The number of students is limited.

**721190S: Advanced Firm Valuation, 6 op**

**Opiskelumoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Kallunki Juha-Pekka

**Opintokohteen kielet:** English  
**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 ECTS credits.

**Language of instruction:**

English.

**Timing:**

Period D. It is recommended to complete the course during the Master's programme's 1<sup>st</sup> Spring semester.

**Learning outcomes:**

After passing the course students can use different firm valuation methods, can identify advantages and disadvantages of these methods, and can assess their usability in different valuation situations. Student can also analyze the determinants of the value creation of the firm, and can complete advanced analyses of profitability, financial leverage and growth of the firm. Students are also able to act professionally in teams, express their ideas analytically and effectively both in written and oral form.

**Contents:**

Lectures, exercises, and case discussions and presentations

**Mode of delivery:**

Face-to-face teaching, case presentations and discussions.

**Learning activities and teaching methods:**

32 h of lectures, 8 h of exercises and class discussions/student, case works 50 h , self-study 70 h.

**Target group:**

Major students.

**Prerequisites and co-requisites:**

The required prerequisite is the completion of the following courses prior to enrolling for the course unit: 721137S International Financial Reporting.

**Recommended optional programme components:**

Not applicable.

**Recommended or required reading:**

[Penman, S. A. \(2004\). Financial Statement Analysis and Security Valuation. McGraw-Hill](#); research articles; and cases.

**Assessment methods and criteria:**

Electronic exam and case works.

**Grading:**

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**

Professor Juha-Pekka Kallunki.

**Working life cooperation:**

The course focuses on working life skills on how financial analysts, corporate finance advisors and investors use firm valuation tools in daily tasks in their organizations.

**Other information:**

The number of students is limited.

**721065S: Internship, 6 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Practical training

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** English

**ECTS Credits:**

6 credits / 160 hours of work

**Timing:**

Free

**Learning outcomes:**

The internship offers the students the opportunity to learn how to solve problems and to learn organizational tasks and responsibilities related to their major subject. Furthermore, the internship supports students to establish relationships to both working colleagues and business management and develops their communication skills within the organization and its network. The internship offers the students the possibility to develop their skills how to apply their knowledge in working environment and to increase their competence.

**Contents:**

The content is made up of the job description which is related to the student's major subject and which is provided by the organization where the internship will be accomplished. To be eligible for advanced level internship, the student should work either in a managerial position or as an independent specialist who has a responsible position with a possibility to use organizational resources.

**Learning activities and teaching methods:**

The student will work under the supervision of the internship instructor appointed by the company. First, student should contact lecturer Sauli Pajari to agree on the practicalities and documentation of the internship. Upon completion of the internship the student reflects and describes the internship period in the written report (8-10 pages) which will be returned with a weekly diary and a copy of the employment certificate to Sinikka Moilanen and Sauli Pajari.

The written report should be 8-10 pages and contain:

1. Description of the organization/company where the internship was completed
2. Description of the tasks, responsibilities and working methods during the internship
3. Description of how the tasks and responsibilities relate to the other functions of the organization
4. Description of how the internship relates to future career plans
5. Business development ideas for the Internship organization
6. Reflection on what was learned during the internship, how the learning relates to what has been learned earlier in the bachelor's and master's studies, and connecting the learning to theoretical concepts of the discipline.
  - A description of the organization/company where the internship was completed.
  - A detailed description of the tasks, responsibilities and working methods during the internship.
  - Description of how the tasks and responsibilities relate to the other functions of the organization.
  - Reflection on what was learned during the internship, how the learning relates to what has been learned earlier in the bachelor's and master's studies, and connecting the learning to theoretical concepts of the discipline.

Description of how the internship relates to future career plans.

**Target group:**

Students of the OBS Master's programmes

**Prerequisites and co-requisites:**

Completed bachelor's studies.

**Recommended optional programme components:**

No

**Assessment methods and criteria:**

Written internship report

**Grading:**

Pass/Fail

**Person responsible:**

Sauli Pajari and Sinikka Moilanen

**Working life cooperation:**

The student will work in an organization improving professional skills related to the major subject and developing business knowledge (and personal network).

**Other information:**

The internship is an elective course. Internship may also be a business development case or other relevant project (e.g. Demola/Business Kitchen), which needs to be accepted following the general process described above.

*Module 3: Select five of these courses***721383S: Asset Pricing, 6 op**

**Voimassaolo:** 01.08.2008 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Juha Joenväärä

**Opintokohteen kielet:** English

**ECTS Credits:**

6 ECTS credits / 160 hours of work.

**Language of instruction:**

English.

**Timing:**

Period C.

**Learning outcomes:**

Upon completion of the course, the student will be able to state the theoretical foundations for asset pricing models, derive the stochastic discount factor and asset pricing models, empirically test these models using various methods, describe empirical evidence of some stylized facts about stock returns, analyze mutual fund performance and performance persistence.

**Contents:**

Market completeness, law of one price and discount factors, CAPM and various factor models, cross-sectional regressions, joint tests of significance, Fama-MacBeth procedure, mutual funds' alphas and persistence.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

36 hours lectures and exercises. Independent studying 124 hours.

**Target group:**

Major students in finance. The course is also available for the students, who need to complete their 60 ECTS credits minor in finance.

**Prerequisites and co-requisites:**

-

**Recommended optional programme components:**

-

**Recommended or required reading:**

Lecture notes; [Cochrane: Asset Pricing](#); other assigned literature.

**Assessment methods and criteria:**

Final exam (60%) and exercises (40%)

**Grading:**

1-5.



**Person responsible:**

Hannu Kahra

**Working life cooperation:**

The knowledge of the theoretical and empirical foundations of asset pricing models enables the student to implement different financial models for practical decision making.

**Other information:**

The number of students is limited.

**721952S: Portfolio Management, 6 op**

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Hannu Kahra

**Opintokohteen kielet:** English

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 ECTS credits / 160 hours of work.

**Language of instruction:**

English.

**Timing:**

Periods A-B

**Learning outcomes:**

Upon completion of the course, the student understands how factor exposures can be used to guide both individual and institutional investors.

**Contents:**

Asset owners, preferences, mean-variance investing, investing in the long-run, investing over the life-cycle, factor theory, factors, equities, bonds, alpha (and the low-risk anomaly), delegated investing and risk-parity portfolios.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

36 hours lectures and a group work. Independent studying and group work 124 hours.

**Target group:**

Major students in finance. The course is also available for the students, who need to complete their 60 ECTS credits minor in finance.

**Prerequisites and co-requisites:**

-

**Recommended optional programme components:**

-

**Recommended or required reading:**

[Ang: Asset Management – A Systematic Approach to Factor Investing.](#)

[Ilmanen: Expected Returns: An Investor's Guide to Harvesting Market Rewards](#), Wiley (suggested reading).

**Assessment methods and criteria:**

Assessment methods include a portfolio management project. Each student implements his/her personal portfolio management based on modern portfolio choice techniques.

**Grading:**

1-5.

**Person responsible:**

Hamed Salehi

**Working life cooperation:**

Understanding the techniques of portfolio management is necessary for any career in financial industry.

**Other information:**

The number of students is limited.

**721956S: Alternative Investments, 6 op**

**Voimassaolo:** 01.08.2010 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Juha Joenväärä

**Opintokohteen kielet:** English

**ECTS Credits:**

6 ECTS credits / 160 hours of work.

**Language of instruction:**

English.

**Timing:**

Period D.

**Learning outcomes:**

Upon completion of the course, the student knows the recent stylized facts about the performance of alternative asset classes. The student understands the risk and return characteristics of alternative asset classes and how to use alternative assets in portfolio management.

**Contents:**

Tradeable instruments, commodities, hedge funds, real estate.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

36 hours lectures and exercises. Independent studying 124 hours.

**Target group:**

Major students in finance. The course is also available for the students, who need to complete their 60 ECTS credits minor in finance.

**Prerequisites and co-requisites:**

-

**Recommended optional programme components:**

-

**Recommended or required reading:**

Material provided by the instructors.

**Assessment methods and criteria:**

Final exam

**Grading:**

1-5.

**Person responsible:**

Juha Joenväärä

**Working life cooperation:**

Understanding of how the inclusion of alternative asset classes in an investment portfolio affects the characteristics of the portfolio is essential from the point of view of practical portfolio management.

**Other information:**

The number of students is limited.

**721954S: Financial Econometrics, 6 op**

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Hannu Kahra

**Opintokohteen kielet:** English

**ECTS Credits:**

6 ECTS credits / 160 hours of work.

**Language of instruction:**

English.

**Timing:**

Period C.

**Learning outcomes:**

Upon completion of the course, the student is able to conduct empirical analyses of financial data using econometric methods. Students are also able to act professionally in teams.

**Contents:**

Properties of financial data, linear regression models, maximum likelihood estimation, risk and volatility (multivariate GARCH), factor models (principal components and Kalman-filters), option markets (estimating and testing Black-Scholes and its extensions, panel data models.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

36 hours lectures and 14 hours of optional tutorials, tutorial assignments using open-source R, and a group project. Independent studying and group work 124 hours.

**Target group:**

Major students in finance. Elective for major students in economics. The course is also available for the students, who need to complete their 60 ECTS credits minor in finance.

**Prerequisites and co-requisites:**

-

**Recommended optional programme components:**

-

**Recommended or required reading:**

[Hurn, Martin, Philips and Young: Financial Econometric Modelling \(forthcoming\)](#), lecture notes and the material provided by instructor.

**Assessment methods and criteria:**

Midterm test (10%), tutorials (20% bonus), group work (20%) and final exam (70%).

**Grading:**

1-5.

**Person responsible:**

Hannu Kahra

**Working life cooperation:**

The course introduces the main econometric techniques that are frequently applied in both academic research and financial services industry.

**Other information:**

The number of students is limited.

**721317S: International Macroeconomics, 6 op**

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Marko Korhonen

**Opintokohteen kielet:** English

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 credits / 160 hours of work

**Language of instruction:**

English

**Timing:**

Period 1C.

**Learning outcomes:**

Student is familiar with topics in international macroeconomics as well as to theories trying to account for the basic stylized facts in the field. . Students are also able to express their ideas analytically and effectively in written and oral form.

**Contents:**

Advanced theoretical and empirical analysis of contemporary international macroeconomic policy issues in both industrialized and developing economies. The topics covered include current account balance, dynamics of small open economy, real exchange rate and the terms of trade, uncertainty and international financial markets. Also, the issues of monetary union will be covered.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

12 hours of lectures, 18 hours of student presentations, exam 3 hours, preparing for the lectures, student presentations and exam 127 hours.

**Target group:**

First year Master's students.

**Prerequisites and co-requisites:**

Economic Theory I and Principles of Econometrics.

**Recommended optional programme components:**

-

**Recommended or required reading:**

[Feenstra and Taylor \(2014\): International Economics, part 6, 7 and 8;](#)

[De Grauwe \(2014\): Economics of Monetary Union.](#)

**Assessment methods and criteria:**

Written exam and student presentations

**Grading:**

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**

University lecturer Marko Korhonen

**Working life cooperation:**

The world economy impacts global business in increasingly significant ways. After the course students learn what are the impacts of international macroeconomics and international finance on the global business.

**Other information:**

The number of students is limited.

**721959S: Empirical Research in Finance II, 6 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Juha Joenväärä

**Opintokohteen kielet:** English

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 credits / 160 hours of work

**Language of instruction:**

English

**Timing:**

Periods C-D

**Learning outcomes:**

Upon completion of the course, the student is able to formulate an empirical research design for a specified research problem in finance. The student knows the essential methods of measurement in empirical finance research. The student is able to independently analyze empirical financial data using SAS.

**Contents:**

Empirical research design, building and analyzing empirical data matrices, reporting of estimation results, risk estimation, portfolio optimization, portfolio performance measurement.

**Mode of delivery:**

Face-to-face teaching.

**Learning activities and teaching methods:**

40 hours lectures and exercises. Independent studying 120 hours.

**Target group:**

Major students in finance.

**Prerequisites and co-requisites:**

-

**Recommended optional programme components:**

-

**Recommended or required reading:**

Materials provided by instructors.

**Assessment methods and criteria:**

The required minimum participation is 32 hours. The student has to complete eight home exercises which are with the scale 1-5. The final grade of the course is the arithmetic mean of the three subgrades.

**Grading:**

1-5

**Person responsible:**

Juha Joenväärä

**Working life cooperation:**

The course introduces the main empirical methods that are frequently applied in both academic research and financial services industry.

**Other information:**

The number of students is limited.

**721336S: Special Issue, 6 op**

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

**ECTS Credits:**

6 credits / 160 hours of work

**Language of instruction:**

Varies depending on the way of completion.

**Timing:**

Free.

**Learning outcomes:**

If taken as an individual research assignment, upon completion the students demonstrate knowledge of the theories, concepts, frameworks and empirical findings of chosen discipline and they are able to identify and solve relevant problems, and make critical judgments based on them.

**Contents:**

Varies depending on individually agreed on assignment.

**Mode of delivery:**

It may be, but is not limited to (1) An advanced level course passed in another university having different contents than those courses offered in the student's program, but otherwise fitting the structure of the studies. If necessary the course may be supplemented with additional tasks. (2) An essay/learning diary of about 20 pages, the requirements of which are agreed on in advance with the person responsible of the course within the major subject. (3) Ad hoc –course organized by OBS (4) A discipline-based business development case or other relevant project (e.g. Demola/Business Kitchen).

**Learning activities and teaching methods:**

Varies on the basis of individually agreed on assignment.

**Target group:**

Students of OBS's Master's Programs.

**Prerequisites and co-requisites:**

No

**Recommended optional programme components:**

-

**Recommended or required reading:**

To be agreed on with the person responsible of the course within the major subject

**Assessment methods and criteria:**

Assessment is based on the learning outcomes of the course and the Master's program. Method varies depending on the individually agreed on assignment.

**Grading:**

The course can utilize a numerical grading scale 1-5 or be evaluated as pass/fail. In the numerical scale zero stands for fail.

**Person responsible:**

To be named by major subjects

**Working life cooperation:**

Depends on the individually agreed on assignment.

**Other information:**

The number of students is limited.

*Module 4*

**721950S: Master's Thesis, Finance, 30 op**

**Opiskelumuoto:** Advanced Studies

**Laji:** Diploma thesis

**Vastuuyksikkö:** Oulu Business School

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish, English

**ECTS Credits:**

30 ECTS credits / 800 hours of work.

**Language of instruction:**

English. Master's thesis can be written in Finnish or in English.

**Timing:**

Periods A-D on the 2nd year of master's studies.

**Learning outcomes:**

Upon completion of the thesis students can choose and apply appropriate research methods to produce new knowledge and to apply that knowledge to typical business decision-making problems. Students are able to conduct scientific research and make reasonable recommendations for solving business and economic problems. Furthermore, students demonstrate deep and coherent understanding of an academic field of study within their own major. They are able to demonstrate knowledge of the theories, concepts, frameworks and empirical findings of their discipline and understand the connections between various theories in the chosen discipline.

Students will demonstrate deep understanding of their own profession, and are able to use, process and analyze economic and/or business information. Students understand various business processes and operations, and causal connections between them. Finally, students are able to express their ideas effectively and analytically, both in oral and written form.

**Contents:**

Most of the work is independent writing of the thesis report, but during the master's thesis work students participate in seminar sessions in which they present and report the status and advancement of their work. In the seminars they receive guidance and feedback from their supervisor on how to proceed in and complete their research report. Description of the process and other relevant information are available at <http://www oulu.fi/oulubusinessschool/mastersthesisprocess>

**Mode of delivery:**

Face-to-face teaching in seminar sessions.

**Learning activities and teaching methods:**

Independent work and face-to-face teaching in seminar sessions. Students prepare and present three reports during the course: 1) Research plan, 2) Intermediate report and 3) Manuscript. The works starts with a kick-off session and the progress and timing of the sessions is agreed on in the kick-off session.

**Target group:**

Students of the Master's program in Accounting, Finance, Economics, International Business Management or Marketing.

**Prerequisites and co-requisites:**

723020A Bachelor's Thesis or another university degree.

**Recommended optional programme components:**

-

**Recommended or required reading:**

Scientific articles and other theoretical and empirical materials collected by the students for their individual study.

**Assessment methods and criteria:**

Examination through written research report.

**Grading:**

The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for fail.

**Person responsible:**

Professors

**Working life cooperation:**

Working life cooperation is dependent on the particular project. However, the students will learn problem solving and analytical skills as well as oral and written presentation skills needed for a business graduate in working life. Students deepen their understanding of their own profession.

**Other information:**

Open only to students of the Master's program in Finance