ΟΙΚΟΝΟΜΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ



ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS

# POSTGRADUATE STUDY GUIDE

# MASTER OF SCIENCE (M.Sc.) in FINANCE AND BANKING

SCHOOL OF ECONOMIC SCIENCES

DEPARTMENTS INTERNATIONAL AND EUROPEAN ECONOMIC STUDIES AND ECONOMICS

ATHENS, OCTOBER 2023

# PART I: INFORMATION ABOUT THE INSTITUTION

### **CONTACT DETAILS**

ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS (AUEB) Address: 76 Patission Str., GR-10434, Athens Telephone: +30-210-8203911 Website: https://www.aueb.gr e-mail: webmaster@aueb.gr Facebook: https://www.facebook.com/auebgreece Twitter: https://twitter.com/aueb Linkedin: https://twitter.com/aueb Linkedin: https://www.linkedin.com/school/athens-university-of-economics-and-business/mycompany/ Youtube: https://www.youtube.com/channel/UCPncunqp3bMuAHHeCikhalg Instagram: https://www.instagram.com/aueb.gr/

### **ACADEMIC AUTHORITIES**

The rectorate authorities consist of the Rector and the Vice Rectors:

Rector:

Professor Dimitris Bourantonis

Vice Rectors:

Vice Rector of Academic Affairs and Personnel Professor Vasilios Vasdekis

Vice Rector of Research and Lifelong Learning Associate Professor Georgios Lekakos

Vice Rector of Financial Planning and Infrastructure Professor Konstantinos Drakos

Vice Rector of International Cooperation and Development Professor Vasilios Papadakis

School of Economic Sciences Dean: Professor Thomas Moutos Department of International & European Economic Studies Chair: Professor George Economides Department of Economics Chair: Professor Evangelos Vasilatos

#### Master's Program in Finance and Baking

Director: Professor Nikolaos Topaloglou **Contact details** Address: 47A Evelpidon Str. & 33 Lefkados Str., Athens, GR 113 62 Telephone number: +30 210 8203 689 Email: <u>secretariat.financeandbanking@aueb.gr</u> Website: <u>www.dept.aueb.gr/el/financeandbanking</u> Facebook: <u>https://www.facebook.com/financeandbanking.aueb/</u> Linkedin: <u>https://www.linkedin.com/school/aueb-msc-in-finance-banking</u>

### ACADEMIC CALENDAR 2023-24 (FULL-TIME PROGRAM)

Fall Semester: 2/10/2023 - 19/01/2024 Christmas Recess: 23/12/2023 - 07/01/2024 Fall Semester Examination Period: 22/01/2024 - 2/02/2024 Spring Semester: 5/02/2024 - 24/05/2024 Eastes Recess: 29/04/2024-12/05/2024 Spring Semester Examination Period: 27/05/2024-21/06/2024

#### ACADEMIC CALENDAR 2023-24 (PART-TIME PROGRAM)

Fall Semester: 1<sup>ST</sup> YEAR STUDENTS: 2/10/2023 - 12/01/2024 2<sup>ND</sup> YEAR STUDENTS 18/09/2023-29/02/2024 Christmas Recess:23/12/2023 - 07/01/2024 Fall Semester Examination Period: 04-08/12/2023 (1<sup>ST</sup> YEAR), 08/01/2024- 12/01/2024, 11-15/03/2024 (2<sup>ND</sup> YEAR) Spring Semester: 15/01/2024 - 12/07/2024 Easter Recess: 01-08/05/2024 Spring Semester Examination Period: 08-12/04/2024, 15-19/07/2024 (1<sup>ST</sup> YEAR), 17-21/06/2024 (2<sup>ND</sup> YEAR)

#### **NATIONAL/BANK HOLIDAYS**

Friday, November 17,2023, The Anniversary of Polytechnio Tuesday, January 30, 2024, Three Hierarchs Monday, March 18, 2024, Annunciation of the Virgin Mary Monday, March 25, 2024, Anniversary of March 25 Wednesday, May 1, 2024, May Day Monday, June 24, 2024, Pentecost Monday

#### **AUEB's OPERATIONAL STRUCTURE**

The structure and operation of the Institution is defined by current legislation as in force. The Athens University of Economics and Business is under the supervision of the Ministry of Education and Religious Affairs. Its governing bodies include:

The Governing Council The Senate The Rector The Vice-Rectors The Executive Director

Until the Governing Council assumes its duties, administration is exercised by the University's Rector's Council

### AUEB'S ACADEMIC STRUCTURE

The Athens University of Economics and Business is structured by academic units of two (2) levels: a) the Schools, and b) the Departments

Each School is structured by at least two (2) Departments, covers a domain of related scientific areas, and ensures the interdisciplinary approach to teaching and research between its departments. The School is responsible for supervising and coordinating the operation of the Departments and the educational and research work produced, in accordance with the Internal Operating Regulations.

The bodies of the School, according to Law 4957/2022 (A 141) as applicable are: a) the Dean and b) the Dean's Council

The Department is the University's fundamental academic unit and aims to advance a specific field of science, technology, letters and arts through education and research. The Department consists of all the members of the Teaching & Research Staff (DEP), the members of the Special Education Staff (EEP), the members of the Laboratory Teaching Staff (EDIP) and the members of the Special Technical Laboratory Staff (ETEP).

Bodies of the Department according to Law 4957/2022 (A 141) as applicable are: a) the Assembly, b) the Board of Directors, c) the Head/Chair and d) the Deputy Head/Chair.

The Athens University of Economics and Business consists of three Schools & eight Departments:

## 1. SCHOOL OF ECONOMIC SCIENCES

Department of International and European Economic Studies

**Department of Economics** 

### 2. SCHOOL OF BUSINESS

Department of Management Science and Technology Department of Business Administration Department of Accounting and Finance Department of Marketing and Communication.

### 3. SCHOOL OF INFORMATION SCIENCE AND TECHNOLOGY

Department of Informatics

**Department of Statistics** 

#### ADMINISTRATIVE BODIES OF POSTGRADUATE STUDY PROGRAMS

Competent bodies for the organization and operation of the Postgraduate Study Programs are:

- a) the Senate,
- b) the Assembly of the Department,
- c) the Coordinating Committee (CC), and
- d) the Director of the Postgraduate Program.

Especially for inter-departmental, inter-institutional and joint programs, the responsibilities of the Department's Assembly are exercised by the Curriculum Committee

#### UNIVERSITY STAFF

The University staff consists of the following categories:

#### - TEACHING STAFF:

- Teaching & Research Staff (DEP)
- Emeritus Professors
- Visiting Professors
- Special Education Staff (E.E.P.)
- Laboratory Teaching Staff (E.DI.P.)
- Special Technical Laboratory Staff (E.T.E.P.)
- Auxiliary Teaching Staff
- Teaching Fellows
- Scientific Faculty Members
- Adjunct Instructors
- Secondet Teachers

#### - ADMINISTRATIVE STAFF

#### **SERVICES**

The Athens University of Economics and Business provides both administrative and other services (meals, housing, library, sport facilities etc.) aiming at serving both its students and staff. More information on the organization and operation of the University's services can be found on the University's website (http://www.aueb.gr/en).

#### **GENERAL DESCRIPTION OF THE UNIVERSITY**

The Athens University of Economics and Business (AUEB), as a Higher Educational Institution, is a legal entity governed by public law and supervised by the Ministry of Education, Research and Religious Affairs.

AUEB is, in order of seniority, the third Higher Education Institution of the country and the first in the fields of Economics and Business Administration. Later, the scientific fields of Informatics and Statistics were added. Since its founding, in 1920, AUEB has a rich and noteworthy tradition of significant academic achievements that define the present and create excellent prospects for the future.

The University as a center of excellence, in academic research and teaching, is rated as one of the leading universities in its subject areas in Greece and one of the best internationally. The high level of its staff, the quality in teaching and research, the modern curriculum/courses, but also the high demand of its graduates significantly enhance the University's brand name and reputation, in Greece and abroad.

Detailed information on the study programs is provided in the study guides and departmental websites.

## ADMISSION/REGISTRATION PROCEDURE

Chief Regulations of the University (including academic recognition procedures)

The regulations include, for example:

- The University's Internal Operating Regulations
- The Organization of Administrative Services
- The Regulations for the Operation of Postgraduate and Doctoral Study Programs
- The Internal Regulation for conducting postdoctoral research

## **AUEB'S ECTS COORDINATOR**

The University's ECTS Coordinator is the Quality Assurance Chairperson, who ensures the University's compliance with the principles and rules of the European credit accumulation and transfer systems, supervises compliance and implementation and is responsible for the full recognition and transfer of credit units.

# PART II: INFORMATION ABOUT THE INTERDEPARTMENTAL MASTER'S PROGRAMME IN FINANCE AND BANKING

#### **GENERAL DESCRIPTION**

The Interdepartmental Master's Programme entitled "**MSc in Finance and Banking**" of the Departments of International and European Economic Studies and Economics of the University of Athens, was reestablished with the no. 5053/10.07.2018 decision of the Senate of the Athens University of Economics.

In accordance with Greek law, the Programme is governed by:

- 1. The University's Senate
- 2. The Coordinating Committee of the programme
- 3. The Steering Committee of the programme
- 4. The Director of the Programme.

#### THE FIELD OF STUDIES OF THE PROGRAMME

The Interdepartmental **MSc Programme in Finance and Banking** aims at deepening the scientific knowledge and technical training of its students in the fields of **Finance and Banking**. The Programme specializes in these two areas of economics and focuses on them as follows:

a) In the **field of Finance**, the objective of the Programme is the specialization and training of students in the areas of valuation of securities, financial risks, optimal portfolio management, big data management in finance, forecasting, dividend policy and optimal financial structure of businesses, asymmetric information, regulation and efficiency of financial markets.

b) In the **field of Banking**, the Programme aims at the analysis and quantification of the risks of credit institutions, their credit policy and portfolio management, their regulatory framework at the European and international levels, the monetary policy and operation of central banks, as well as macroprudential policy for risks associated with extreme events.

c) In both of the above fields, the Programme provides all of the knowledge and techniques necessary to fully train the students.

#### THE ACADEMIC DEGREE AWARDED

The Interdepartmental Master's Programme awards the degree of MSc in Finance and Banking.

#### ENTRANCE REQUIREMENTS

To the MSc in Finance and Banking are accepted holders of a degree from the first cycle of academic education of the country and of Universities' Departments, with a relevant academic subject (including Departments of Finance, International & European Economic Studies, Economic and Regional Development, as well as Departments of Schools of Sciences (Engineering, Mathematics, Physics, Statistics, Informatics, etc.). Candidates with a first degree in a different academic subject from the above, who possess a basic level of knowledge of mathematics and statistics, may also be admitted to the postgraduate program.

The Interdepartmental Master's Programme "Finance and Banking" will accept up to 60 admissions into the full-time programme and up to 60 admissions into the full-time programme each academic year.

The selection of students is carried out in accordance with the relevant Greek laws and the Operating Regulations of the Programme.

The documents required to apply to the Programme, which are included every year in the announcement stating that applications are being accepted, are the following:

- The application (electronically) with a recent photograph.
- A copy of the undergraduate degree and a transcript of classes. Students of Higher Education Students in their final year of undergraduate studies must submit a statement (in accordance with Greek law 1599/86) that their acceptance into the Programme is contingent upon them having obtained their degree by the end of the upcoming September exam period.
- Certification of excellent or very good knowledge of the English language (at the C2 or C1 level). Students who do not have such certification when they submit their application must submit a statement (in accordance with Greek law 1599/86) that their acceptance into the Programme is contingent upon them acquiring the required certification of knowledge of English.
- Two letters of recommendation from professors (for candidates for full-time studies) and/or employers (for candidates for part-time studies).
- Verification of work experience (for candidates for part-time studies).

In the case of an application submitted by a candidate holding a degree from a foreign institution, the Postgraduate Programme's secretariat, to accept the application as eligible for examination, checks through DOATAP whether the institution is recognized, following the prescribed procedure in accordance with the written/texts provisions.

The selection of candidates is based on the grade of their basic degree as well as their performance in the individual interview. In the individual interview, various qualitative characteristics of the candidates are considered, among them, their existing scientific and cognitive background, as well as the content of the

letters of recommendation that have been granted to them by academic staff. In the evaluation of the candidates, it is positively counted if they have a recognized master's degree in a subject related to the master's program, or possibly professional experience.

### **EXPECTED LEARNING OUTCOMES / OBJECTIVES OF THE PROGRAMME**

The objectives of the Programme are:

- 1) the scientific education, specialization and professional training of postgraduate students, executives of companies and organizations to meet the needs of the private and public sectors,
- 2) the provision of specialized knowledge to, and the development of technical skills in, scientists active in businesses, and financial and banking institutions.

The Programme provides a concentration in the areas of **Finance and Banking** which are not specializations, and which are not listed on the transcript or the Diploma Supplement which the graduates receive.

### ACCESS TO FURTHER STUDIES/CAREER OPPORTUNITIES FOR GRADUATES

Graduates of the Programme can continue their studies at the Doctoral Level or find employment in financial and banking institutions and other companies in the field to meet the needs of the private and public sectors.

#### THE COURSES, WITH ECTS CREDITS, FOR THE FULL-TIME PROGRAMME

The duration of studies for the full-time programme is **three semesters** which includes the time for preparing the Master's dissertation and submitting it for approval. In order to obtain the Master's degree, students are required to attend and pass examinations in four compulsory courses that have 7.5 ECTS credits each, three compulsory courses corresponding to 6 ECTS credits each, two elective courses that have 6 ECTS credits each, and prepare a Master's dissertation equivalent to 30 ECTS credits.

The duration of studies for the part-time programme is **four semesters** which includes the time for preparing the Master's dissertation and submitting it for approval. In order to obtain the Master's degree, students are required to attend and pass examinations in four compulsory courses that have 7.5 ECTS credits each, three compulsory courses equal to 6 ECTS credits each, two elective courses corresponding to 6 ECTS credits each, and either (a) prepare a Master's dissertation equivalent to 30 ECTS credits, or (b) attend and pass examinations in three courses with 10 ECTS credits each, in place of the dissertation.

The total number of credits needed to graduate is **90 ECTS credits**. The courses are taught in Greek and/or English.

The distribution of courses for the full-time programme, by semester, is shown in the table below.

PREPARATORY COURSES			
COURSE CODE	COURSE TITLE	COURSE TYPE	ECTS
m44202s	MATHEMATICS	PREPARATORY	0
m44201p	STATISTICS	PREPARATORY	0
	1 <sup>st</sup> SEMESTER	1	
COURSE CODE	COURSE TITLE	COURSE TYPE	ECTS
m44103f	THE ECONOMICS OF FINANCIAL MARKETS	COMPULSORY	7,5
m44104f	FINANCIAL REPORTING AND ANALYSIS	COMPULSORY	7,5
m44105f	QUANTITATIVE METHODS	COMPULSORY	7,5
m44106f	CAPITAL MARKETS AND PORTFOLIO MANAGEMENT	COMPULSORY	7,5
TOTAL SEMESTI	ER'S CREDITS	1	30
	2 <sup>ND</sup> SEMESTER		
COURSE CODE	COURSE TITLE	COURSE TYPE	ECTS
m44107f	FINANCIAL DERIVATIVES	COMPULSORY	6
m44108f	BANKING AND RISK MANAGEMENT	COMPULSORY	6
m44110f	CORPORATE FINANCE	COMPULSORY	6
	ELECTIVE COURSE*	ELECTIVE	6
	ELECTIVE COURSE*	ELECTIVE	6
TOTAL SEMESTER'S CREDITS			30
	3 <sup>RD</sup> SEMESTER		
m44111f	DISSERTATION	COMPULSORY	30
TOTAL SEMESTER'S CREDITS			30

Below is an indicative list of elective courses offered:

- Companies' and Banks' Valuations and Mergers
- Credit Risk Management
- Financial Risk Management
- Special Issues in Finance and Investments (International Finance)
- Special Topics in Banking

- Market Microstructure with Statistical and Computational Methods
- Sustainable Finance
- Large Data and Statistical Learning
- Information Technologies, Trading & Investment Strategies

The distribution of courses by semester for the part-time programme is determined by the Programme's governing bodies and is included in the Programme's Studies Regulations.

Students in the **part-time programme** are given the option of attending and taking exams in three courses equal to 10 ECTS credits each, instead of writing a dissertation. The three courses are:

- 1. Special Issues in Finance and Investments (International Finance)
- 2. Special Topics in Banking
- 3. Information Technologies, Trading and Investment Strategies

The course program may include a series of educational activities aimed at deepening and consolidating at a high level the students' knowledge in scientific areas of the subject of the study program. The educational activities may include, seminar lectures-speeches by specialized persons, companiesorganizations and/or distinguished academics with relevant experience in the field of Master's Programme, experiential activities, educational trips, tutoring training/exercises in the context of curriculum courses, workshops, analysis of business case studies, educational simulation programs, educational events, preparation and acquisition of professional certifications, trainings, days of distinguished academics and invited speakers, development and conduct of business games.

It is possible for students to choose courses from other Master's Programmes in the School or in the University following a decision by the Programme's Coordinating Committee. The courses offered each year are decided upon by the Programme's Coordinating Committee.

Modification of the curriculum and redistribution of courses between semesters can be made following decisions of the governing bodies, in accordance with the Postgraduate Studies Regulations.

The part-time programme is aimed at candidates who are working. An application for the part-time programme may be accepted from a candidate who is not working, but who is unable to meet the full-time study obligations for a variety of reasons, such as health or family.

The **tuition fees** for attending the Interdepartmental Master's Programme are set at 5,400 euros for the full-time programme and 7,000 euros for the part-time programme and are paid in 5-7 instalments over the course of studies in the programme, on dates that are determined by the Interdepartmental Committee of the Programme.

1 <sup>st</sup> instalment paid with the acceptance of the position	1.000€
2 <sup>nd</sup> instalment paid until 31/10 of the 1st semester	1.000€
3 <sup>rd</sup> instalment paid until 31/1 of the 1st semester	1.000€
4 <sup>th</sup> instalment paid until 31/3 of the 2nd semester	1.000€
5 <sup>th</sup> instalment paid until 30/9 of the 3rd semester	1.400€
Total tuition fees	5.400 €

#### Part Time Program Instalments

Total tuition fees	7.000 €
7 <sup>th</sup> instalment paid until 31/5 of the 4th semester	500 €
6 <sup>th</sup> instalment paid until 31/1 of the 3rd semester	1.200€
5 <sup>th</sup> instalment paid until 30/9 of the 3rd semester	1.300€
4 <sup>th</sup> instalment paid until 31/3 of the 2nd semester	1.000€
3 <sup>rd</sup> instalment paid until 31/1 of the 1st semester	1.000€
2 <sup>nd</sup> instalment paid until 31/10 of the 1st semester	1.000€
1 <sup>st</sup> instalment paid with the acceptance of the position	1.000€

The Master's Programme can award scholarships or excellence awards to postgraduate students, based on academic criteria, by decision of the Departmental General Assembly.

Students who meet certain criteria determined by Greek law <u>article 86, Law 4957/2022</u>, are entitled to exemption from tuition fees upon decision of the Department's General Assembly.

The **Internship** is not a prerequisite for the completion of studies and is not mandatory. Students of the program can do an internship at an institution/company of their choice as long as their studies are not hindered.

## **REGULATIONS REGARDING EXAMS AND ASSESSMENT/GRADING**

Class attendance is mandatory. A student whose absences exceed 1/3 of the teaching hours in a given course is considered to have failed the course and must repeat it the very next time that it is taught. The Master's Coordinating Committee which examines the case and the reasons for exceeding the prescribed absences, may decide on the continuation or not of the studies of the student who exceeded the limit of absences. Attendance of preparatory courses is not compulsory.

The evaluation of students in the courses is done by written or oral examination, assignment, exculpatory assignment, or a combination of the above, in-person or with digital evaluation methods. When conducting written or oral examinations, as evaluation methods, the integrity of the process must be guaranteed. If the evaluation is carried out with final exams, the exams are carried out after the

completion of the teaching work of each course or the completion of each educational activity. Please note that there is no exam in the preparatory courses.

Determining the method and process of evaluating students in a course is the sole responsibility of the teacher who has been assigned to teach the course by the Master's Coordinating Committee. The formation of the final grade of each course is determined by the teachers. Students' individual and group work can contribute to it.

Attending the exams on the specific date announced as per the Exams' Program is compulsory. If a student does not attend the specific examination date of a course, he/she loses the examination period and is considered to have failed the course. If a student cannot attend the exam due to illness, he/she should inform the Secretariat as soon as possible. If he/she presents a medical certificate within two (2) days from the date of the examination, he may be examined later within the current examination period, provided that the teacher of the course agrees.

The grading scale ranges from zero (0) to ten (10), in increments of half or whole units. A grade of 5 and above is a passing grade. In the case of re-take examination, the grading scale ranges from (0) to five (5). A student who fails to appear for the exam in a given course on the specified date, without excuse, loses that examination period and is considered to have failed the given course.

Re-examination is not allowed in a course that has already been graded successfully, for the student to improve his/her grade. Correction of a grade after it has been announced by the Secretariat is allowed, if a justified detour or calculative error has occurred following a written request of the teacher and a decision of the Master's Coordinating Committee.

Failure in more than two courses (cumulative) in the exams of all the semesters results in the student being dropped from the Programme. However, at the discretion of the Coordinating Committee, the student who failed, may be allowed either to attend and be examined in the following academic year in these courses and, in case of success, the grade he/she will receive in them will be five (5), or to repeat the entire program from the beginning (all courses) in the following academic year paying half the tuition fees.

#### DISSERTATION

The Master's dissertation is mandatory for students in the **full-time programme** and is prepared during their 3<sup>rd</sup> semester, while for students in the **part-time programme**, it is not mandatory and, if they choose to do it, is prepared in their 4<sup>th</sup> semester. Issues related to the writing of the dissertation (such as completion date, language, font, instructions for the summary, content, structure and presentation of the work, preparation of the bibliography, and so forth) are explained in the Guidelines for Preparation of the Master's Dissertation.

The evaluation of the Master's dissertation is based on strict scientific criteria with regard to its originality, depth and analysis, composition and quality. If the student does not receive a passing grade on the dissertation, the student can be re-examined one additional time, not earlier than three months nor later

than six months after the original examination. If the student does not receive a passing grade on the dissertation from the second examination, the student is required to leave the Programme, upon decision of the Programme's Coordinating Committee.

#### AWARD AND GRADUATION DIPLOMA

To be awarded the Master's degree, a student must have received a passing grade in all the postgraduate courses and the dissertation. If this condition is not met within the stipulated deadline, the student is entitled only to a certificate verifying successful completion of the courses that were passed and the student's enrolment in the Programme ends.

Postgraduate students complete their studies and are awarded the Master's Degree when they have fulfilled all the requirements of the Programme, which are successful examination in the courses of the Programme, approval of the dissertation and payment of tuition fees.

The final grade for the Master's degree (MSc) is the average of the grades for the postgraduate courses and the grade for the dissertation.

The grade awarded to the Master's degree (MSc) certifies the successful completion of the postgraduate student's studies. The MSc degree which the student is awarded carries the designation of Good, Very Good, or Excellent which correspond to:

- $\Rightarrow$  "Excellent" from 8.51 to 10,
- $\Rightarrow$  "Very Good" from 6.51 to 8.50, and
- $\Rightarrow$  "Good" from 5 to 6.50.

## GRADUATE STUDENT PROFESSOR ADVISOR

For each postgraduate student, is assigned from the Programme's Coordinating Committee a faculty member as a Professor Advisor, with the aim of supporting him/her during his/her studies in accordance with the decision of the University's Senate (6th meeting/12-01-2023) and the Institution's Postgraduate and Doctoral Studies Program Regulations (article 12, B 3140/2023).

## EDUCATIONAL LABORATORY OF SCHOOL OF ECONOMICS (EconLAb)

Students in the Interdepartmental Master's Programme in Finance and Banking have access to the **Educational Laboratory of School of Economics (EconLAb)**, a fully-organized lab which is equipped with specialized software and databases which help not only in teaching the subject areas of finance and banking but also in the statistical processing and analysis of data with a complete series of statistical, mathematical and econometric packages and applications.

A series of lectures and educational seminars are conducted in the lab of the postgraduate programme, as well as in the applied labs in the main building of the University.

In addition, the students in the Programme are provided with:

- Educational Seminars:
  - Bloomberg seminar
  - o Introduction to SQL and Databases for Financial Applications
  - o PYTHON seminar
- Direct access to and practice with a series of databases, such as: Bloomberg
   Eikon / DataStream
- Direct access to econometric packages for data analysis, such as: EViews, Stata, R, MATLAB, SQL, SPSS, GAMS
- Access via the AUEB network to electronic journals and electronic databases.

The applied lab of the postgraduate programme is housed in AUEB's Postgraduate Studies and Research Building, located at 47A Evelpidon & 33 Lefkados Streets, 6<sup>th</sup> floor, Room 610.

### CERTIFICATION BY THE CFA INSTITUTE UNIVERSITY RECOGNITION PROGRAM

The Interdepartmental Master's Programme in Finance and Banking has been accepted into the **CFA Affiliated Program**. Through this recognition, the international organization **CFA®** (Chartered Financial **Analysts**) certifies that the Master's programme offers a curriculum which is consistent with the requirements of the Institute for the acquisition of the internationally-established professional title which is awarded by the **CFA® Institute**. As such, the Interdepartmental Master's Programme is eligible to award up to four (4) scholarships per academic year within the framework of the CFA Program Awareness Scholarships, to students who wish to take the exam to earn professional certification from the CFA. Scholarships take the form of partial exemption from the examination fees for certification.

The professional title awarded by the **CFA® Institute** has been recognized by the Hellenic Capital Market Committee and the Athens Stock Exchange and entitles the titleholders to exemption from the corresponding exams that are held in Greece. In the private sector, possession of this title from the **CFA® Institute** carries special weight and is an important qualification for all those who work or wish to work in investment, banking and, more generally, in the wider financial sector. Students in the Interdepartmental Master's Programme in Finance and Banking, in addition to the thorough academic training received in the subjects that are analysed in the curriculum, are prepared as well to attain a highly prestigious professional certification, thus acquiring a significant advantage in the labour market.

# **DESCRIPTION OF INDIVIDUAL COURSES**

#### FULL TIME PROGRAM

# PREPARATORY COURSES

Course title	MATHEMATICS
Course code	m44202s
Type of course	Preparatory
Level of course	Postgraduate
Year of study	1st
Semester/trimester	1st
Number of credits allocated	0
Name of lecturer	Gatsios Konstantine, Professor, Dept of Economics
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The aim of the course is to provide students with the necessary mathematical tools employed in the teaching of main courses of the Programme and used in the related literature, as well as to familiarize them with the application of mathematics in addressing economic problems.
Prerequisites	None.
Course contents	The topics covered by the course are: functions and equations; the time value of money (the present and the future value of money); matrices (matrix operations, transposes and inverses, determinants, Cramer's Rule); differential calculus (derivatives, rules of differentiation; Taylor Series expansion, maxima and minima of functions of one and of more than one variables, optimization with and without constraints); integral calculus (rules of integration, definite and indefinite integrals, improper integrals).
Recommended reading	Basic: Chiang A.: Fundamental Methods of Mathematical Economies, 3rd Edition, McGraw-Hill Watsham, J. T. and Parramore, K.: Quantitative Methods in Finance Additional: Silberberg E.: The Structure of Economies: A Mathematical Analysis, Mc Graw Hill Hands D. W.: Introductory Mathematical Economics
Teaching methods	Lectures, assignments.
Assessment methods	Exercise solving (there is no final examination or marking)
Language of instruction	Greek

Course title	STATISTICS
Course code	m44201s
Type of course	Preparatory
Level of course	Postgraduate
Year of study	1 <sup>st</sup>
Semester/trimester	1 <sup>st</sup>
Number of credits allocated	0
Name of lecturer	Demos Antonios, Professor, Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The main objective of the course is to remind student the basic notions in statistics so that they would be able to follow a course in Quantitative Analysis or Finance.
Prerequisites	None.
Course contents	Random Variables and their Probability Distributions: Discrete and Continuous Random Variables. Joint Distributions, Conditional Distributions, and Independence. Features of Probability Distributions: Expected Value, Median, Variance, Standardizing a Random Variable. Features of Joint and Conditional Distributions, Covariance, Correlation, Variance of Sum of Random Variables, Conditional Expectation. The Normal and Related Distributions. Population, Parameters, and Random Sampling. Finite Sample Properties of Estimators. Interval Estimation and Confidence Intervals: Confidence Intervals for the Mean from a Normally Distributed Population.
Recommended reading	Tsionas, Statistics with Economic Applications, AUEB (in Greek). Chalikias, Statistics, Rosili (in Greek). Chatzinikolaou, Statistics for Economists, (in Greek). Studenmund: Using Econometrics, Addison, Wesley, Longman Wooldridge: Introductory Econometrics, Thomson. <i>Heij, et al.: Econometric Methods with Applications</i> Notes: www.aueb.gr/users/demos/mbasta.pdf
Teaching methods	Lectures coupled with exercise solving and introduction to statistical analysis with R or e-views.
Assessment methods	Exercise solving (there is no final examination or marking)
Language of instruction	Greek/English

# COMPULSORY COURSES

Course title	ECONOMICS OF FINANCIAL MARKETS
Course code	m44103f
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1 <sup>st</sup>
Semester/trimester	1 <sup>st</sup>
Number of credits allocated	7,5
Name of lecturer	Economides George, Professor, Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The main goal of the course is for students to understand the relationship between the banking system and the financial markets. It focuses on how the liquidity in an economy is shaped, and what is the role of the commercial banking system in this process. The determinants of money supply are presented, whereas the various monetary policy tools as well as the role of a Central Bank are discussed. The money demand process is analyzed as well as the transmission mechanisms of monetary policy. Special attention is given to the presentation of the ECB and the Eurosystem.
Prerequisites	None
Course contents	<ol> <li>Why study Money, Banking and Financial Markets? An overview of the financial system. What is Money?</li> <li>Multiple Deposit Creation and the Money Supply Process. Determinants of the Money Supply. Tools of Monetary Policy. What should Central Banks Do? Monetary Policy Goals, Strategy and Tactics.</li> <li>The Demand for Money. The IS-LM model. Monetary and Fiscal Policy in the IS-LM model. Aggregate Demand and Supply Analysis.</li> <li>Transmission Mechanisms of Monetary Policy: The Evidence.</li> <li>Money and Inflation.</li> <li>Rational Expectations: Implications for policy.</li> <li>The Foreign Exchange Market. The International Financial System.</li> </ol>
Recommended reading	Mishkin S. F. [2013]: The Economics of Money, Banking and Financial Markets, 10th edition, Pearson Education, Inc., Boston. Begg D., S. Fischer and R. Dornbusch [2005]: Economics, McGraw-Hill, London, 8th edition. Blanchard O., A. Amighini and F. Giavazzi [2010]: Macroeconomics-A European Perspective, Prentice Hall International, Inc., New Jersey.

Teaching methods	Teaching in the class with physical presence and the use of slides.
Assessment methods	Final exam (100%).
Language of instruction	Greek/English

Course title	FINANCIAL REPORTING AND ANALYSIS
Course code	m44104f
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1st
Semester/trimester	1st
Number of credits allocated	7,5
Name of lecturer	Siougle Georgia, Professor, Dept of Accounting and Finance
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The aim of the course is to guide students in the area of Financial Reporting. The students taking this course should be able to evaluate alternatives and base their decisions by having a good understanding about the concepts and techniques of IFRS reporting practices. The key accounting issues will be explained considering rapid changes in the economic environment and global markets.
Prerequisites	None
Course contents	<ul> <li>Key components of financial reporting are discussed:</li> <li>Financial Reporting and Accounting Standards</li> <li>Conceptual Framework for Financial Reporting</li> <li>Statement of Financial Position and Statement of Cash Flows</li> <li>Essentials of Financial Statement Analysis</li> <li>Investments</li> <li>Revenue Recognition</li> <li>Accounting for Leases</li> <li>Statement of Cash Flows</li> </ul>
Recommended reading	Core Text : Intermediate Accounting : IFRS Edition (3rd edition) Kieso, Weygandt, Warfield Case Studies Furthermore, the course material consists of slides and other material made available electronically or in hardcopy.
Teaching methods	Lectures, Tutorials, Case Studies
Assessment methods	Written Exams-100 %
Language of instruction	Greek

Course title	CAPITAL MARKETS & PORTFOLIO MANAGEMENT
Course code	m44106f
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1 <sup>st</sup>
Semester/trimester	1 <sup>st</sup>
Number of credits allocated	7,5
Name of lecturer	Tzavalis Elias, Professor, Dept of Economics
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The aim of this course is to introduce students to the modern tools of investment analysis and appraisal, including investment decision under certainty and under uncertainty, pricing of risk, portfolio management, and asset pricing. It also covers topics on pricing fixed income securities, the term structure of interest rates and bond portfolio management. The course includes demonstrations/applications of the above techniques using computer software to see how they can be used, in practice. At the end of the course, the students would have learned the tools of the modern investment analysis and become familiar with their application, in practice.
Prerequisites	None
Course contents	Investment decisions under certainty, Investment decisions under uncertainty, Mean-variance portfolio analysis, The Capital Asset Pricing Model, Factor models and the Arbitrage Pricing Theory, Bond Markets, The term structure of interest rates: theory and practice, Bond portfolio management and International capital markets and portfolio management.
Recommended reading	<ul> <li>Bodie Z., A. Kane and A. Marcus (2009), Essentials of Investments</li> <li>Copeland T. and J. Weston and K. Shastri (2005), Financial Theory and Corporate</li> <li>Policy</li> <li>Danthine J. and Donaldson (2002), Intermediate Financial Theory</li> <li>Fabozzi, F., Kolm. P., Pachamanova, D and Focardi, S. (2007), Robust Portfolio</li> <li>Optimization and Management, Wiley.</li> <li>Fabozzi F. (2016), Bond Markets, Analysis and Strategies, Pearson</li> <li>Luenberger D. (1999), Investment Science</li> </ul>
Teaching methods	Lecturing, laboratory practicals, tutorials and external seminars
Assessment methods	Written exam and assignments
Language of instruction	Greek / English

Course title	QUANTITATIVE METHODS
Course code	m13105f
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1 <sup>st</sup>
Semester/trimester	1 <sup>st</sup>
Number of credits allocated	7,5
Name of lecturer	Vrontos Ioannis, Ass. Professor, Dept of Statistics
Objective of the course (preferably expressed in terms of learning outcomes and competences)	<ul> <li>The aim of this course is to provide students with the learning of using appropriate statistical and econometric methods, models and techniques required for data analysis. After successfully completing the course, students will be able to:</li> <li>Know and apply a wide range of econometric models to empirical economic and financial problems</li> <li>Learn the fundamentals in statistical/econometric inference allowing them to understand which type of analysis is necessary and how it can be correctly implemented</li> <li>Estimate the parameters of statistical and econometric models</li> <li>Conduct hypothesis testing and construct confidence intervals for model parameters</li> <li>Estimate regression and time series models, construct predictions and interpret the results of econometric analysis appropriately</li> <li>Estimate structural change-point and panel data models and apply them to empirical problems</li> <li>Be able to apply, using the R package, econometric models to empirical economical problems and applications</li> </ul>
Prerequisites	At least a graduate course on Econometrics and/or a course on Introduction in Statistics (m13201s).
Course contents	The course introduces and presents the fundamental theory of statistical and econometric models, methods and techniques, which are necessary in the research and empirical analysis of economic and financial data. First, the theory of regression models, single and multiple linear regression, is presented. The variable/model selection problem, the use of dummy variables, and the problem of multicollinearity are examined. Emphasis is given on the application of the theory, estimation of the model parameters, examination of the assumptions of residuals using diagnostic tests, and the interpretation of results. The theory and empirical application of time series models are introduced and presented in detail, and the Box-Jenkins methodology is developed. The course introduces the generalized linear models (logit/probit and log-linear models) used for the analysis of binomial and Poisson data, respectively. Break-point models and the corresponding tests for structural changes in economic data are presented and developed. Finally, panel data models, and the techniques for estimating their

	parameters are presented. The underline theory, methods and models are implemented to empirical economic and financial problems using the statistical package R.
Recommended reading	<ul> <li>Stock, J.H., and Watson, M.W. (2017). Introduction to Econometrics, 3rd edition, Pearson</li> <li>Weisberg, S. (2005). Applied Linear Regression, 3rd edition, Wiley</li> <li>Fox, J., and Weisberg, S. (2011). An R Companion to Applied Regression, 2nd edition, SAGE Publications Inc.</li> <li>Hamilton, J.D. (1994). Time Series Analysis. Princeton, New Jersey: Princeton University Press</li> <li>Enders, W. (2010). Applied Econometric Time Series. New York: Wiley</li> <li>Cowpertwait, P.S.P., and Metcalfe V. A.(2009). Introductory Time Series with R. New York: Springer Texts in Statistics</li> <li>Cryer, J.D., and Chan K.S. (2010). Time Series Analysis with Applications in R. Springer Texts in Statistics</li> <li>Gujarati, D.N. (2008). Basic Econometrics. New York: McGraw-Hill</li> <li>Pindyck, R.S. and Rubenfeld, D.S. (1991). Econometric Models and Economic Forecasts. New York: McGraw-Hill</li> <li>Shumway, R.H. and Stoffer, D.S. (2011). Time Series Analysis and Its Applications with R Examples. New York: Springer Texts in Statistics</li> <li>Tzavalis, E. (2008). Econometrics, AUEB</li> </ul>
Teaching methods	One three-hour lecture per week, study exercises, and programming exercises as homework (some to be submitted).
Assessment methods	The final grade is the average of the final examination grade (weight 80%) and the grade of the study and programming exercises to be submitted (weight 20%), provided that the final examination grade is at least 5/10. Otherwise, the final grade equals the final examination grade.
Language of instruction	Greek/English

Course title	BANKING AND RISK MANAGEMENT
Course code	m44108f
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	6

Name of lecturer	Sakellaris Ploutarchos, Professor, Dept. of Economics
Objective of the course (preferably expressed in terms of learning outcomes and competences)	<ul> <li>By the end of the course, the students should be able to:</li> <li>master the fundamentals of risk management (except for credit risk management) as well of compliance to bank regulatory procedures.</li> <li>Identify and measure risk exposure for a FI, applying methods such as Value-at-Risk (VaR) and Expected Shortfall.</li> <li>Understand and implement hedging strategies to offset portfolio and asset risk positions using derivative instruments such as futures, forwards, options, and swaps.</li> </ul>
Prerequisites	Introductory probability and statistics.
Course contents	A series of financial crises since 2007 has demonstrated the importance of recognizing and managing the multiple risks with which Financial Institutions (FI) are faced. This course will provide an integrated approach to managing risks faced by FIs: their recognition, measurement, and mitigation. We will place emphasis on the role that derivative products play in mitigating risk. The risk management framework of FIs consists both of internal systems as well as external rules of prudential supervision. We will cover both these dimensions. Innate deficiencies have led to failures in both self-regulation of FIs as well as in their official supervision. In the course, we will examine solutions to the risk management problems facing the modern financial system.
Recommended reading	J. C. Hull, Risk Management and Financial Institutions, (Wiley Finance), 6 <sup>th</sup> edition, 2023 Anthony Saunders, Marcia Cornett and Otgo Erhemjamts, Financial Institutions Management: A Risk Management Approach, McGraw Hill, 10 <sup>th</sup> edition, 2021. Steve Allen, Financial Risk Management: A Practitioner's Guide to Managing Market and Credit Risk (Wiley Finance), 2 <sup>nd</sup> edition, 2013. G. Sapountzoglou and C. N. Pentotis, Banking Economics, (vols A and B), G. Benou Editions, 2009 (In Greek) Nikolaos Th. Mylonas, Derivative Products and Markets, Hellenic Banks Association and Dardanos, 2005 (In Greek)
Teaching methods	Lectures, laboratory sessions, assistance sessions, computer applications
Assessment methods	Exams, problem sets, computer assignments
Language of instruction	Greek

Course title	FINANCIAL DERIVATIVES
Course code	m44107f
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	6
Name of lecturer	Topaloglou Nikolaos, Professor, Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	<ul> <li>The aim of this course is to introduce students to the theoretical and practical aspects of financial derivatives.</li> <li>Specifically, the course examines the pricing and use of financial derivatives including options, forward contracts, futures contracts, swaps and credit derivatives.</li> <li>The course will extensively focus on the theory and applications of derivatives in speculation and risk management.</li> <li>Moreover, the course includes a computational demonstration of the pricing models with excel.</li> </ul>
Prerequisites	The course Capital Markets and Portfolio Management is prerequisite.
Course contents	The course covers the main financial derivatives: futures and futures on various underlying values. Options on shares, indices, currencies and futures. Interest rate swaps and foreign exchange. The focus of the analysis are pricing and hedging derivatives or derivatives positions by financial institutions. Special topics covered include, inter alia, the Black - Scholes model, binomial trees, hedging deltas, as well as various applications such as real rights in finance.
Recommended reading	John C. Hull "Options, Futures, & Other Derivatives" Prentice Hall. Jarrow & Turnbull "Derivative Securities," South Western. Robert Whaley, "Derivatives: Markets, Valuation, and Risk Management", Wiley. Robert L. McDonald "Derivative Markets," Addison-Wesley Series in Finance. Don M. Chance & Robert Brooks, "An Introduction To Derivatives And Risk Management" Thomson Southwest Learning. Salih N. Neftci "An Introduction to the Mathematics of Financial Derivatives," Academic Press. Paul Wilmott "Derivatives: The Theory and Practice of Financial Engineering," Wiley.
Teaching methods	Lectures, assignments
Assessment methods	Problem sets, assignments, exams.
Language of instruction	Greek/English

Course title	CORPORATE FINANCE
Course code	m44110f
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1 <sup>st</sup>
Semester/trimester	2 <sup>nd</sup>
Number of credits allocated	6
Name of lecturer	Pagratis Spyridon, Associate Professor, Dept of Economics
Objective of the course (preferably expressed in terms of learning outcomes and	Corporate Finance is one of the seven core courses of the program. Students taking this course should be able to:
competences)	<ol> <li>Identify turning points in economic policy that could have a material impact on funding conditions and corporate decisions to access external financing.</li> </ol>
	<ol> <li>Navigate in the new era of extraordinary policy interventions by central banks that have a profound impact on asset valuations and the cost of corporate financing.</li> </ol>
	<ol> <li>Value investment projects, conduct capital budgeting exercises, and identify factors that affect corporate decisions to access different forms of financing.</li> </ol>
	4. Assess alternative ways of accessing capital markets.
	<ol> <li>Identify issues of first-order importance that are relevant to corporate financing, combine them to make informed decisions and negotiate funding terms with financiers.</li> </ol>
Prerequisites	The course Capital Markets and Portfolio Management is prerequisite.
Course contents	<ul> <li>Session 1. A primer on money creation in a modern economy <ul> <li>Quantitative Easing (QE) and asset valuations.</li> <li>Quantitative Tightening (QT) and capital market turbulence. A view to the future.</li> <li>Long-term refinancing operations, targeted operations, credit easing, outright monetary operations (OMT) and the Covid-19 pandemic emergency programs.</li> </ul> </li> <li>Session 2. Capital Structure: Optimal debt-equity choice. <ul> <li>Empirical patterns of corporate financing and possible explanations.</li> <li>Types of financial instruments and markets.</li> <li>Modigliani-Miller irrelevance proposition. An options-based approach to debt and equity valuations. The weighted average cost of capital (WACC)</li> </ul> </li> </ul>

	<ul> <li>Capital structure under financial frictions. Taxes, financial distress costs and the static trade off (STO) in practice.</li> <li>Debt-overhang: The underinvestment problem and the role of financial restructuring.</li> <li>Equity capital raising and the mechanics of rights issues.</li> <li>Incentives, asymmetric information and the pecking-order of financing choices.</li> <li>Session 3. Business plans: Risk, return, and free cash flow analysis</li> <li>WACC and the internal rate of return (IRR) in practice.</li> <li>Data sources: Equity risk premium (ERP), marginal tax rates, sectoral betas and growth rates on operating income (EBIT).</li> <li>Free cash flow analysis: Working capital, sunk costs, tax shields (amortization-depreciation and interest costs).</li> </ul>
Recommended reading	<ul> <li>The course packet contains an extensive set of self-contained slides (approx. 170 slides) that are structured in three main sections, following the section list above. It also incudes articles from business press (that students need to follow closely). These are optional but recommended to those students without prior exposure to finance.</li> <li><u>Auxiliary textbooks:</u> <ol> <li>Jean Tirole. "The Theory of Corporate Finance", Princeton University Press.</li> <li>Norelli A. and B. Merrill, "Quantitative Tightening: Many Moving Parts," J.P. Morgan Asset Management (Nov 2, 2017). Available at: <a href="https://blog.ipmorganinstitutional.com/2017/11/quantitative-tightening-many-moving-parts/">https://blog.ipmorganinstitutional.com/2017/11/quantitative-tightening-many-moving-parts/</a> </li> <li>McLeay M, Radia A., and R. Thomas, "Money creation in the modern economy," Bank of England Quarterly Bulletin (2014 Q1). Available at: <a href="https://www.bankofengland.co.uk/quarterly-bulletin/2014/q1/money-creation-in-the-modern-economy">https://www.bankofengland.co.uk/quarterly-bulletin/2014/q1/money-creation-in-the-modern-economy</a> </li> </ol></li></ul>
Teaching methods	Lecturing will be supported by video presentations, in-class case analyses, and occasional invited lectures by market experts. Students are expected to be prepared for class at all times and to contribute to class discussions.
Assessment methods	The course is evaluated through one final exam that counts for 100% of the course grade. The final exam is closed books and closed notes and lasts for 2 hours. It covers material from the entire course, including occasional invited lectures. Students are encouraged to use a calculator for the exam. This element is geared towards assessing students' ability to present concisely and quantitatively credible solutions to explicit corporate finance problems.
Language of instruction	English/Greek

# **ELECTIVE COURSES (INDICATIVE LIST)**

Course title	COMPANIES' AND BANKS' VALUATIONS AND MERGERS
Course code	m44225f
Type of course	Elective
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	6
Name of lecturer	Liapis Konstantinos, Professor, University of Panteion, Dept of Economic and Regional Development
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The objective of the course are the valuations and the mergers & acquisitions of companies and Banks. Issues such as: corporate finance, capital and alternative investments, financial reporting systems, business groups, capital structure and operations decisions, acquisition methods and strategies, corporate restructuring, stock valuations, terms of m&a's transactions and shareholders' agreements. The desired learning outcomes are a full understanding of the concepts, tools, and methods of valuing companies as well as technical mergers & acquisitions, they will also be able to apply the above knowledge, tools, and methods in practice.
Prerequisites	Without being a prerequisite, an introductory course in Accounting or Financial Analysis would be helpful.
Course contents	<ul> <li>Thematic units of the course are:</li> <li>Valuation, financial analysis, and corporate financing.</li> <li>Methods of capital structure, equity valuation and price changes in stock markets after changes in capital</li> <li>Accounting forecasts, provisions, and adjustments to the financial statements</li> <li>Business plans and proforma financial statements</li> <li>The types, methods and techniques of mergers and acquisitions</li> <li>Business Mergers and Inter-Corporate Investments</li> <li>Consolidation accounting</li> <li>Global operations, multinational corporations (MNEs) and banks (MNBs)</li> <li>Decision making for equity investments</li> <li>Mergers and acquisitions and corporate restructuring</li> <li>Venture capital</li> </ul>
Recommended reading	<ul> <li>Λιάπης Κ, Χύτης Ε, Γαλανός Χ Λογιστική Εταιρειών, Φορολογία και Εταιρικοί μετασχηματισμοί, 2021, εκδόσεις Μπένου.</li> </ul>

	<ul> <li>Brigham, E., &amp; Ehrhardt, M. (2013). Financial management: theory &amp; practice. Cengage Learning.</li> <li>CFA Program Level II, Corporate Finance, Mergers and Acquisitions, 2021, https://www.cfainstitute.org/en/membership/professional-development/refresher-readings/mergers-acquisitions</li> <li>Damodaran Aswath, Investment Valuation, Third Edition, Wiley Finance</li> <li>Fernαndez Pablo, The Equity Premium in 150 Textbooks, IESE Business School, November 16, 2010</li> <li>Gaughan, P. A. (2010). Mergers, acquisitions, and corporate restructurings. John Wiley &amp; Sons.</li> <li>International Accounting Standards Board. (2015). A Guide through IFRS<sup>®</sup> (Green Book). Kluwer.</li> <li>EDUCATIONAL MATERIAL ON FAIR VALUE MEASUREMENT, IFRS Foundation, 2013, https://www.ifrs.org/-/media/feature/supporting-implementation/ifrs-13/education-ifrs-13-eng.pdf</li> </ul>
Teaching methods	Lectures – discussions, case studies, methods' applications using excel
Assessment methods	Homework's per thematic unit, during the lectures: 40% of the final grade Final exam at the end of the course: 60% of the final grade.
Language of instruction	Greek and English

Course title	INFORMATION TECHNOLOGIES, TRADING & INVESTMENT STRATEGIES
Course code	m44217f
Type of course	Elective
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	6
Name of lecturer	Landis Conrad Felix Michel, Economist- Data Analyst
Objective of the course (preferably expressed in terms of learning outcomes and competences)	After the completion of the course the students will have an understanding of the activities of a financial institution's treasury department. They will acquire fundamental knowledge and skills on using financial databases, on trading mechanisms, on theoretical and empirical issues of different financial instruments, their valuation methodology, and their uses in risk and portfolio management. They will also gain experience in trading simulated securities in Bloomberg and Thomson Reuters EIKON Terminals.

Prerequisites	The MSc's compulsory courses are adequate preparation.
Course contents	Getting familiar with Thomson Reuters EIKON and BLOOMBERG platforms. Basic concepts of using financial databases and handling/analyzing financial data. Applied portfolio theory: asset pricing models and trading strategies. Portfolio management using derivatives.
Recommended reading	<ul> <li>Anatoly B. Schmidt, 2011. "Financial Markets and Trading: An Introduction to Market Microstructure and Trading Strategies", Wiley.</li> <li>John C. Hull, Options, Futures and Other Derivatives, Latest Edition, Wiley.</li> <li>Cochrane, John H., 2000, "New Facts in Finance". SSRN:https://ssrn.com/abstract=218869orhttp://dx.doi.org/10.2139/ssrn. 218869.</li> <li>Sharpe, William F. 1990, "Capital Asset Prices with and without Negative Holdings". https://www.nobelprize.org/uploads/2018/06/sharpe-lecture.pdf.</li> <li>Schwert, G. William, 2003. "Anomalies and market efficiency", Handbook of the Economics of Finance, http://schwert.ssb.rochester.edu/hbfech15.pdf</li> </ul>
Teaching methods	Lectures
Assessment methods	Evaluation will be based on a series of written empirical assignments (70%) and a final written exam (30%).
Language of instruction	Greek

Course title	LARGE DATA AND STATISTICAL LEARNING
Course code	m44227s
Type of course	Elective
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2st
Number of credits allocated	6
Name of lecturer	Papailias Fotios, Senior Lecturer, King's Business School
Objective of the course (preferably expressed in terms of	After successful completion of this course the students must have a good understanding of: • computational inference,

learning outcomes and competences)	<ul> <li>time series forecasting,</li> <li>data features (seasonalities, nonstationarities, etc.),</li> <li>how machine learning methods work (supervised and unsupervised machine leaning).</li> <li>Furthermore, students are expected to obtain the necessary skills to be able to: <ul> <li>use scientific software and develop codes independently,</li> <li>collect, handle and organise large panels of data,</li> <li>visualise data and extract features,</li> <li>apply machine learning techniques in practice and interpret the output in economic and finance applications.</li> </ul> </li> </ul>
Prerequisites	None formal pre-requisite, a basic level of maths/stats and econometrics is required.
Course contents	This course is designed to introduce students to the concepts of large data handling and analysis with machine learning techniques. We start with computational analysis and inference and discuss the Monte Carlo, Bootstrap, k- fold cross-validation and recursive and rolling estimation methodologies. We provide a solid basis for time-series forecasting based on predictive linear regressions as well as using the Kalman Smoother. Next, we discuss large data handling techniques and discuss its features (seasonalities, nonstationarities). We discuss how unsupervised machine learning methodologies (k-means clustering, principal component analysis and dynamic factor analysis) could be applied in economics and finance forecasting applications (including the construction of Financial Conditions Indexes and Uncertainty Indicators). Next, we introduce the penalised regression methodologies of ridge, lasso and elastic net. We extend our discussion to unbalanced datasets and use bridge equations, MIDAS and U-MIDAS models as suggested remedies. Finally, our special topics include adaptive learning and modelling and applications of machine learning in portfolio selection. On top of our theory discussions, the course has a "hands-on" approach where all these methods applied in real data using the R Project for Statistical Analysis as the main scientific software.
Recommended reading	<ul> <li>Main reading: supplied material.</li> <li>Supplementary readings include: <ul> <li>James, G., Witten, D., Hastie, T., Tibshirani, T. (2013). An Introduction to Statistical Learning with Applications in R. Springer, New York.</li> <li>Hyndman, R.J., Athanasopoulos, G. (2019). Forecasting: Principles and Practice, 3rd Edition, OTexts: Melbourne, Australia.</li> <li>Sheppard, K. (2020). Financial Econometrics Notes. University of Oxford. And various academic papers discussed throughout the module.</li> </ul> </li> </ul>
Teaching methods	<ul> <li>Weekly lectures (theory &amp; hands-on),</li> <li>Weekly tutorials (theory &amp; hands-on)</li> <li>Learning-by-doing approach.</li> </ul>
Assessment methods	<ul> <li>Weights in squared brackets.</li> <li>[10%] Weekly Assignments,</li> <li>[30%] Project 1 (essay and code),</li> </ul>

	<ul> <li>[30%] Project 2 (essay and code),</li> <li>[30%] Final Exam.</li> </ul>
Language of instruction	English (occasional use of Greek).

Course title	MARKET MICROSTRUCTURE WITH STATISTICAL AND COMPUTATIONAL METHODS
Course code	m44226f
Type of course	Elective
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	6
Name of lecturer	Chalamandaris George, Associate Professor, Dept of Accounting and Finance
Objective of the course (preferably expressed in terms of learning outcomes and competences)	<ul> <li>Market Microstructure is the field that deals with the organization of markets and their participants. Specifically, the dynamics of trade and price developments in different markets are examined by studying:</li> <li>the rules governing trading.</li> <li>the types of market-participants.</li> <li>their incentives, and</li> <li>the strategies they choose to achieve their objectives.</li> <li>The student will be able to interpret the very short-term market dynamics, as well as to assess the possible strategic decisions that traders face over the course of a day. The syllabus covers both theoretical work and empirical work.</li> </ul>
Prerequisites	None
Course contents	<ul> <li>The course covers the following topics:</li> <li>Market Industry: Buy/Sell side, dealers, brokers, clearing and settlement.</li> <li>Orders, Algos and algorithmic trading.</li> <li>The role of dealers, brokers.</li> <li>Main categories of market-users (profit-motivated, utilitarian, noise traders) and their incentives.</li> <li>Basic strategies of each of these categories and how they affect the market mechanism.</li> <li>Price discovery in exchanges and OTC markets.</li> <li>The incorporation of information in market prices and the informational content of trades.</li> <li>Market structures: Order-driven, Dealer-to-Customer, Crossing-networks and</li> </ul>

Recommended reading	<ul> <li>The nature of liquidity and volatility, their relationship and how they both affect market efficiency.</li> <li>Manifestations of asymmetric information, strategies for exploiting the information advantage and ways of protection against the risk arising from it.</li> <li>Key microstructure models: Garman, Roll, Glosten-Millgrom, Easley- O'Hara, Kyle, Glosten-Harris.</li> <li>Empirical Portfolio Analysis and trading strategies, with the use of software including Microsoft Office Excel and Python.</li> <li>The students will be given lecture notes and simulation software. In addition, we suggest the following books:         <ul> <li>L. Harris, "Trading and Exchanges – Market Microstructure for Practitioners", Oxford University Press, 2003</li> <li>J. Hasbrouck, "Empirical Market Microstructure – Economic and Statistical Perspectives on the Dynamics of Trade in Securities Market", Teaching Notes, 2003</li> <li>M. O'Hara, "Market Microstructure Theory", Basil Blackwell, Cambridge, 1995.</li> </ul> </li> </ul>
Teaching methods	Lectures and assignment
Assessment methods	Written Group assignment and individual oral examination
Language of instruction	Greek / English

Course title	SPECIAL ISSUES IN FINANCE AND INVESTMENTS (INTERNATIONAL FINANCE)
Course code	m44224f
Type of course	Elective
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	6
Name of lecturer	Tzavalis Elias - Topaloglou Nikolaos, Professors, Dept of Economics & Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The aim of this course is to present a number of risk management and investment applications to the students, which are used in practice. It covers topics in international portfolio risk management and currency risk, matual funds and portfolio performance evaluation, Investments strategies and value at risk (VaR) applications. At the end of the course, the students will have become familiar with techniques and concepts on international investing risk management procedures and diversification, performance evaluation procedures and security selection, investment strategies accounting for taxes and inflation, investor constrains,

<ul> <li>markets, CIRP and UIRP, PPP, ICAPM, pricing currency risk, home bias)</li> <li>Performance evaluation and active portfolio management (Risk-adjuste returns, style analysis, portfolio performance evaluation metrics, active portfoli management, security selection (the Treynor-Black model), portfolio constructio and alternative optimization techniques)</li> <li>Investment strategies and processes (Strategies accounting for Taxes an</li> </ul>		investment policies and VaR procedures. VaR procedures for asset portfolios and loans management will be demonstrated through an econometric package.
1.International portfolio management and investing (Currency risk, forwar markets, CIRP and UIRP, PPP, ICAPM, pricing currency risk, home bias)2.Performance evaluation and active portfolio management (Risk-adjuste returns, style analysis, portfolio performance evaluation metrics, active portfoli management, security selection (the Treynor-Black model), portfolio constructio and alternative optimization techniques)3.Investment strategies and processes (Strategies accounting for Taxes an inflation, Social Security, Investor constrains, investment policiesExpected utility risk aversion, certainty equivalence and risk, stochastic dominance).4.VaR (Value-at-Risk VaR) appliactions (Applications of VaR to stock, bond and foreign exchange Portfolios, economic capital, and credit, liquidity and operational risks)Recommended readingAllen Steven (2013), Financial Risk Management, A Practitioner's Guide to Managing Market and Credit Risk, John Wiley & Sons. Bodie Z., Kane A., and Marcus A.,, "Essentials of Investments", McGraw Hill Copeland T., Weston J. and Shastri K, "Financial Theory and Corporate Policy", Addison-WesleyTeaching methodsLectures, assignments, exams.	Prerequisites	
Managing Market and Credit Risk, John Wiley & Sons. Bodie Z., Kane A., and Marcus A.,, "Essentials of Investments", McGraw Hill Copeland T., Weston J. and Shastri K, "Financial Theory and Corporate Policy", Addison- WesleyTeaching methodsLectures, assignmentsAssessment methodsProblem sets, assignments, exams.	Course contents	<ol> <li>International portfolio management and investing (Currency risk, forward markets, CIRP and UIRP, PPP, ICAPM, pricing currency risk, home bias)</li> <li>Performance evaluation and active portfolio management (Risk-adjusted returns, style analysis, portfolio performance evaluation metrics, active portfolio management, security selection (the Treynor-Black model), portfolio construction and alternative optimization techniques)</li> <li>Investment strategies and processes (Strategies accounting for Taxes and inflation, Social Security, Investor constrains, investment policiesExpected utility, risk aversion, certainty equivalence and risk, stochastic dominance).</li> <li>VaR (Value-at-Risk VaR) appliactions (Applications of VaR to stock, bond and foreign exchange Portfolios, economic capital, and credit, liquidity and</li> </ol>
Assessment methods     Problem sets, assignments, exams.	Recommended reading	Managing Market and Credit Risk, John Wiley & Sons. Bodie Z., Kane A., and Marcus A.,, "Essentials of Investments", McGraw Hill Copeland T., Weston J. and Shastri K, "Financial Theory and Corporate Policy",
	Teaching methods	Lectures, assignments
Language of instruction Greek/English	Assessment methods	Problem sets, assignments, exams.
	Language of instruction	Greek/English

Course title	SPECIAL TOPICS IN BANKING
Course code	m44223f
Type of course	Elective
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	6
Name of lecturer	Vasia Panousi, Associate Professor, Dept of International and European Economic Studies

Objective of the course (preferably expressed in terms of learning outcomes and competences)	Understanding the role of the banking sector in the creation, transmission, and amplification of international financial crises. Critical understanding of recent examples and empirical data on banking functions, banking failures, and banking supervision and regulation.
Prerequisites	Program courses taught during the previous semesters.
Course contents	<ol> <li>Overview of the banking sector.</li> <li>The role of central banks.</li> <li>Banks and financial crises: historical experience.</li> <li>Crisis transmission mechanisms: budget constraints, net worth declines, credit crunches.</li> <li>Crisis amplification mechanisms: bank leverage, fire sales, asset price spirals, systemic risk.</li> <li>Crisis causes: mistakes, moral hazard.</li> <li>Maturity mismatch and bank runs.</li> <li>Leverage and information panics.</li> <li>Bank interconnectedness, counterparty risk, and bank panics.</li> <li>Economic policy of banking regulation and supervision.</li> <li>Technological developments, AI, and the future of banking.</li> <li>Banking in China and developing economies.</li> </ol>
Recommended reading	Presentation slides and additional bibliography per lecture/seminar.
Teaching methods	Weekly lectures.
Assessment methods	The final grade will be determined 30% by class participation and 70% by the final exam.
Language of instruction	Greek/English

Course title	SUSTAINABLE FINANCE
Course code	m44228f
Type of course	Elective
Level of course	Postgraduate
Year of study	1 <sup>st</sup>
Semester/trimester	2 <sup>nd</sup>
Number of credits allocated (based on the student workload required to achieve the objectives or learning outcomes)	6

Name of lecturer	Manthos Delis, Professor, Audencia Business School France Nikolas Topaloglou, Professor, AUEB, Evgenia Passari, Associate Professor, Université Paris Dauphine - PSL,
Objective of the course (preferably expressed in terms of learning outcomes and competences)	<ul> <li>Students should be able to:</li> <li>Explore the evolving sustainable investing landscape</li> <li>Understand how to incorporate ESG factors into investment decisions</li> <li>Gain insights into the climate risk inherent in investment opportunities</li> <li>Price green bonds</li> <li>Evaluation of sustainable investments</li> </ul>
Prerequisites	
Course contents	Sustainable Investing will equip you with the insights, frameworks, and skills to evaluate environmental, social, and governance (ESG) factors and measure and manage impact resulting from investments. You will explore the evolving sustainable investing landscape, understand how to incorporate ESG factors into investment decisions, gain insights into climate risk and how to incorporate those implications into financial models, and develop your own perspective on the interaction of investing and impact.
Recommended reading	"Principles of Sustainable Finance", Dirk Schoenmaker and Willem Schramade
Teaching methods	Lectures, assignments
Assessment methods	Problem sets, assignments, exams.
Language of instruction	Greek/English

Course title	APPLIED ECONOMETRICS IN ECONOMICS AND FINANCE
Course code	m13107s
Type of course	Elective
Level of course	Postgraduate
Year of study	1st
Semester/trimester	1st
Number of credits allocated (based on the student workload required to achieve the objectives or learning outcomes)	6
Name of lecturer	Dendramis Ionnnis, Assistant Professor, Dept. of Economics

Objective of the course (preferably expressed in terms of learning outcomes and competences)	<ol> <li>To develop your capacity to understand characteristics of time series such as stationarity, cointegration, causality, time dependence</li> <li>To provide you with a stronger understanding in important topics in economics and finance such as risk and expected return.</li> <li>To enlighten your insights on the benefits that modern econometrics offer on optimal decision making in economics and finance</li> <li>To give you hands-on experience in applying econometric techniques on economics and financial series, with the use of computational software.</li> <li>To develop your powers in forecasting economics series with large datasets</li> </ol>
Prerequisites	Undergraduate Econometrics and Statistics
Course contents	This course is an applied, time series econometrics course, that focuses on estimation, modelling, forecasting and simulation of time series econometrics models. It will cover core of the theory concepts such as stationarity, parameter estimation, hypothesis testing, projections, volatility models (arch, garch, egarch), and the analysis of non stationary time series models, with applications in financial and economic series.
Recommended reading	Tsay, Ruey S. Analysis of financial time series, John Wiley & Sons. Tsay, Ruey S. Multivariate Time Series Analysis: With R and Financial Applications, John Wiley & Sons.
Teaching methods	In-depth case analysis, academic and practitioner article analysis and discussion, group works, case studies of real world situations.
Assessment methods	Comprehensive Final Exam, Assignments
Language of instruction	Greek- English

## **DESCRIPTION OF INDIVIDUAL COURSES**

## PART TIME PROGRAM

## PREPARATORY COURSES

Course title	MATHEMATICS
Course code	m44202s
Type of course	Preparatory
Level of course	Postgraduate
Year of study	1st
Semester/trimester	1st
Number of credits allocated	0
Name of lecturer	Gatsios Konstantine, Professor, Dept of Economics
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The aim of the course is to provide students with the necessary mathematical tools employed in the teaching of main courses of the Programme and used in the related literature, as well as to familiarize them with the application of mathematics in addressing economic problems.
Prerequisites	None.
Course contents	The topics covered by the course are: functions and equations; the time value of money (the present and the future value of money); matrices (matrix operations, transposes and inverses, determinants, Cramer's Rule); differential calculus (derivatives, rules of differentiation; Taylor Series expansion, maxima and minima of functions of one and of more than one variables, optimization with and without constraints); integral calculus (rules of integration, definite and indefinite integrals, improper integrals).
Recommended reading	Basic: Chiang A.: Fundamental Methods of Mathematical Economies, 3rd Edition, McGraw-Hill Watsham, J. T. and Parramore, K.: Quantitative Methods in Finance Additional: Silberberg E.: The Structure of Economies: A Mathematical Analysis, Mc Graw Hill Hands D. W.: Introductory Mathematical Economics
Teaching methods	Lectures, assignments.
Assessment methods	Exercise solving (there is no final examination or marking)
Language of instruction	Greek

Course title	STATISTICS
Course code	m44201s
Type of course	Preparatory
Level of course	Postgraduate
Year of study	1 <sup>st</sup>
Semester/trimester	1 <sup>st</sup>
Number of credits allocated	0
Name of lecturer	Demos Antonios, Professor, Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The main objective of the course is to remind student the basic notions in statistics so that they would be able to follow a course in Quantitative Analysis or Finance.
Prerequisites	None.
Course contents	Random Variables and their Probability Distributions: Discrete and Continuous Random Variables. Joint Distributions, Conditional Distributions, and Independence. Features of Probability Distributions: Expected Value, Median, Variance, Standardizing a Random Variable. Features of Joint and Conditional Distributions, Covariance, Correlation, Variance of Sum of Random Variables, Conditional Expectation. The Normal and Related Distributions. Population, Parameters, and Random Sampling. Finite Sample Properties of Estimators. Interval Estimation and Confidence Intervals: Confidence Intervals for the Mean from a Normally Distributed Population.
Recommended reading	Tsionas, Statistics with Economic Applications, AUEB (in Greek). Chalikias, Statistics, Rosili (in Greek). Chatzinikolaou, Statistics for Economists, (in Greek). Studenmund: Using Econometrics, Addison, Wesley, Longman Wooldridge: Introductory Econometrics, Thomson. Heij, et al.: Econometric Methods with Applications Notes: www.aueb.gr/users/demos/mbasta.pdf
Teaching methods	Lectures coupled with exercise solving and introduction to statistical analysis with R or e-views.
Assessment methods	Exercise solving (there is no final examination or marking)
Language of instruction	Greek/English

## COMPULSORY COURSES

Course title	ECONOMICS OF FINANCIAL MARKETS
Course code	m44103p
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1 <sup>st</sup>
Semester/trimester	1 <sup>st</sup>
Number of credits allocated	7,5
Name of lecturer	Economides George, Professor, Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The main goal of the course is for students to understand the relationship between the banking system and the financial markets. It focuses on how the liquidity in an economy is shaped, and what is the role of the commercial banking system in this process. The determinants of money supply are presented, whereas the various monetary policy tools as well as the role of a Central Bank are discussed. The money demand process is analyzed as well as the transmission mechanisms of monetary policy. Special attention is given to the presentation of the ECB and the Eurosystem.
Prerequisites	None
Course contents	<ol> <li>Why study Money, Banking and Financial Markets? An overview of the financial system. What is Money?</li> <li>Multiple Deposit Creation and the Money Supply Process. Determinants of the Money Supply. Tools of Monetary Policy. What should Central Banks Do? Monetary Policy Goals, Strategy and Tactics.</li> <li>The Demand for Money. The IS-LM model. Monetary and Fiscal Policy in the IS-LM model. Aggregate Demand and Supply Analysis.</li> <li>Transmission Mechanisms of Monetary Policy: The Evidence.</li> <li>Money and Inflation.</li> <li>Rational Expectations: Implications for policy.</li> <li>The Foreign Exchange Market. The International Financial System.</li> </ol>
Recommended reading	Mishkin S. F. [2013]: The Economics of Money, Banking and Financial Markets, 10th edition, Pearson Education, Inc., Boston. Begg D., S. Fischer and R. Dornbusch [2005]: Economics, McGraw-Hill, London, 8th edition. Blanchard O., A. Amighini and F. Giavazzi [2010]: Macroeconomics-A European Perspective, Prentice Hall International, Inc., New Jersey.
Teaching methods	Teaching in the class with physical presence and the use of slides.

Assessment methods	Final exam (100%).
Language of instruction	Greek/English

Course title	FINANCIAL REPORTING AND ANALYSIS
Course code	m44104p
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1st
Semester/trimester	1st
Number of credits allocated	7,5
Name of lecturer	Anagnostopoulou Seraina, Professor, University of Piraeus, Dept of Banking and Financial Management
Objective of the course (preferably expressed in terms of learning outcomes and competences)	At the end of the course, students will have a hands-on understanding of the most important elements of a set of financial statements, and should be able to use this information for financial decision-making. They should also be able to perform basic financial statements analysis into the accounts of a company, be familiar with the expected value-relevance of sustainability reporting statements complementing financial statements, and understand the fundamental factors that shape and can deteriorate the quality of earnings, and financial reporting quality more generally.
Prerequisites	None
Course contents	The course aims at introducing the students into the key concepts and elements of financial accounting in detail (assets, liabilities and shareholders' equity), and also help them make decisions as future users of financial statements. The course further covers more specialised topics in accounting, such as topics that relate to the quality of earnings, and the basic elements of financial statements analysis, in addition to the coverage of topics on accounting for depreciation, impairment, uncollectible accounts and provisions, inventory, financial assets and liabilities, and the calculation of cash flows. The course further covers more specialised topics in the application of IFRS 9 and IAS 32 regarding the accounting treatment of financial instruments. Financial reporting concepts are presented according to the provisions of the International Financial Reporting Standards (IFRS). The course finally provides an introduction to current developments in sustainability reporting.
Recommended reading	Financial Accounting, Harrison, Horngren, Thomas, 10E/11E, Pearson, Chapters 1-3, 5-13 (Chapter 13 partly covered) Greek translation: 'Χρηματοοικονομική Λογιστική' - Harrison, Horngren, Thomas, Broken Hill Publishers

	Extensive use of module notes incorporated within PowerPoint slides
Teaching methods	<ul> <li>Lectures</li> <li>Use of Power Point, and of the online learning platform Eclass</li> <li>Both lecture participation and independent study are required</li> </ul>
Assessment methods	Compulsory written exam at the end of the semester. This involves providing answers to exercises, problems and case studies, using numerical data, and a critical evaluation and discussion of the results, and also possible answers to multiple choice questions and theoretical questions.
Language of instruction	Greek/English

Course title	CAPITAL MARKETS & PORTFOLIO MANAGEMENT
Course code	m44106p
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1 <sup>st</sup>
Semester/trimester	2 <sup>nd</sup>
Number of credits allocated	7,5
Name of lecturer	Tzavalis Elias, Professor, Dept of Economics
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The aim of this course is to introduce students to the modern tools of investment analysis and appraisal, including investment decision under certainty and under uncertainty, pricing of risk, portfolio management, and asset pricing. It also covers topics on pricing fixed income securities, the term structure of interest rates and bond portfolio management. The course includes demonstrations/applications of the above techniques using computer software to see how they can be used, in practice. At the end of the course, the students would have learned the tools of the modern investment analysis and become familiar with their application, in practice.
Prerequisites	None
Course contents	Investment decisions under certainty, Investment decisions under uncertainty, Mean-variance portfolio analysis, The Capital Asset Pricing Model, Factor models and the Arbitrage Pricing Theory, Bond Markets, The term structure of interest rates: theory and practice, Bond portfolio management and International capital markets and portfolio management.
Recommended reading	Bodie Z., A. Kane and A. Marcus (2009), Essentials of Investments Copeland T. and J. Weston and K. Shastri (2005), Financial Theory and Corporate Policy

	Danthine J. and Donaldson (2002), Intermediate Financial Theory Fabozzi, F., Kolm. P., Pachamanova, D and Focardi, S. (2007), Robust Portfolio Optimization and Management, Wiley. Fabozzi F. (2016), Bond Markets, Analysis and Strategies, Pearson Luenberger D. (1999), Investment Science
Teaching methods	Lecturing, laboratory practicals, tutorials and external seminars
Assessment methods	Written exam and assignments
Language of instruction	Greek / English

Course title	QUANTITATIVE METHODS
Course code	m44105p
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	7,5
Name of lecturer	Demos Antonios, Professor, Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The lectures target to familiarize the class participants with the basic theoretical principles and the understanding of financial models. The objective of the applications is to familiarize the students with the various estimation techniques, applied on real data, on the areas of Economics and Finance.
Prerequisites	At least one undergraduate course in Econometrics and/or Introduction to Statistics.
Course contents	Random Variables. Covariance-Correlation dependence of random variables. Hypothesis Testing. Linear Regression and hypothesis testing. Economic Applications, with emphasis on CAPM. Transformations of random variables and introduction of dummy variables. Misspecification (autocorrelation, heteroskedasticity). Economic significance of heteroskedasticity with emphasis on portfolios and fund formation. GMM and Maximum Likelihood. Binary dependent variables (Logit, Probit). Introduction to time series with emphasis on GARCH and VAR models.
Recommended reading	C. Heij, P. et al, Econometric Methods with applications in business and economics, Cambridge University Press. J. Johnston and J. DiNardo, Econometric Methods, McGraw-Hill

	E. Tzavalis Econometrics (in Greek) A. Demos: Financial Econometrics (in Greek)
Teaching methods	Lectures, where econometric notions and models are thoroughly presented. The applications part, where various econometric packages are employed such as, R (additional seminars), Stata, Eviews, etc. with real or simulated data
Assessment methods	20% written project 80% written exam.
Language of instruction	Greek/English

Course title	BANKING AND RISK MANAGEMENT
Course code	m44108p
Type of course	Compulsory
Level of course	Postgraduate
Year of study	2nd
Semester/trimester	3rd
Number of credits allocated	6
Name of lecturer	Vasia Panousi, Associate Professor, Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The course aims to deepen scientific knowledge in areas of Banking. It develops topics on the mediation function of credit institutions, the efficiency and effectiveness of banks, as well as the detection, measurement, and management and of risks, such as credit risk, interest rate risk, exchange rate risk, liquidity risk and the operational risk.
Prerequisites	Quantitative and Financial Analysis Basics.
Course contents	Monetary and Credit System, Financial Institutions & Banking Intermediation. Shadow Banks. Banking Risks: Interest Rates, Markets, Credit, Portfolio, Off-Balance-Sheet, Equity, Liquidity. Risk Management: Liabilities and Liquidity, Deposit Insurance, Capital Adequacy, Securitization. Role of Central Bank. Financial crises.
Recommended reading	<ul> <li>A. Saunders, M. M. Cornett, <i>"Financial Institutions Management: A Risk Management Approach"</i>, McGraw-Hill, Irwin Series in Finance, 9<sup>th</sup> Edition, New York, 2017.</li> <li>J. Sinkey, <i>"Commercial Bank Financial Management"</i>, Prentice Hall, 6<sup>th</sup> Edition, 2002.</li> </ul>

	<ul> <li>S. Heffernan, "Modern Banking in Theory and Practice", John Wiley and Sons, 1996.</li> <li>F. Mishkin, S. Eakins, "Financial Markets &amp; Institutions", Addison-Wesley World Student Series in Finance, 4<sup>th</sup> Edition, N.Y., 2003.</li> <li>J. P. Morgan, "Credit Metrics", International Edition, 1997.</li> <li>E. Altman, E. Hotchkiss, "Corporate Financial Distress and Bankruptcy", J. Wiley &amp; Sons (Wiley Finance), 3<sup>rd</sup> Edition, New Jersey, 2006.</li> <li>R. Brealey, S. Myers, "Principles of Corporate Finance", McGraw-Hill, Irwin Series in Finance, 7<sup>th</sup> Edition, N.Y., 2003.</li> <li>G. Sapountzoglou, H. Pentotis, «Banking Economics», Edition B' (updated), Editions E. Benou, (in Greek), Athens, 2017.</li> </ul>
Teaching methods	Live (in presence) teaching. Use of ppt and pdf files. Application Examples.
Assessment methods	Ongoing evaluation and in presence written examination. Grading scale: 0 – 10 units.
Language of instruction	Greek/English

Course title	FINANCIAL DERIVATIVES
Course code	m44107p
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	6
Name of lecturer	Topaloglou Nikolaos, Professor, Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	<ul> <li>The aim of this course is to introduce students to the theoretical and practical aspects of financial derivatives.</li> <li>Specifically, the course examines the pricing and use of financial derivatives including options, forward contracts, futures contracts, swaps and credit derivatives.</li> <li>The course will extensively focus on the theory and applications of derivatives in speculation and risk management.</li> <li>Moreover, the course includes a computational demonstration of the pricing models with excel.</li> </ul>
Prerequisites	

Course contents	The course covers the main financial derivatives: futures and futures on various underlying values. Options on shares, indices, currencies and futures. Interest rate swaps and foreign exchange. The focus of the analysis are pricing and hedging derivatives or derivatives positions by financial institutions. Special topics covered include, inter alia, the Black - Scholes model, binomial trees, hedging deltas, as well as various applications such as real rights in finance.
Recommended reading	<ul> <li>John C. Hull "Options, Futures, &amp; Other Derivatives" Prentice Hall.</li> <li>Jarrow &amp; Turnbull "Derivative Securities," South Western.</li> <li>Robert Whaley, "Derivatives: Markets, Valuation, and Risk Management", Wiley.</li> <li>Robert L. McDonald "Derivative Markets," Addison-Wesley Series in Finance.</li> <li>Don M. Chance &amp; Robert Brooks, "An Introduction To Derivatives And Risk Management" Thomson Southwest Learning.</li> <li>Salih N. Neftci "An Introduction to the Mathematics of Financial Derivatives," Academic Press.</li> <li>Paul Wilmott "Derivatives: The Theory and Practice of Financial Engineering," Wiley.</li> </ul>
Teaching methods	Lectures, assignments
Assessment methods	Problem sets, assignments, exams.
Language of instruction	Greek/English

Course title	CORPORATE FINANCE
Course code	m44110p
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1 <sup>st</sup>
Semester/trimester	2 <sup>nd</sup>
Number of credits allocated	6
Name of lecturer	Pagratis Spyridon, Associate Professor, Dept of Economics
Objective of the course (preferably expressed in terms of learning outcomes and competences)	<ul> <li>Corporate Finance is one of the seven core courses of the program. Students taking this course should be able to:</li> <li>1. Identify turning points in economic policy that could have a material impact on funding conditions and corporate decisions to access external financing.</li> <li>2. Navigate in the new era of extraordinary policy interventions by central banks that have a profound impact on asset valuations and the cost of corporate financing.</li> </ul>

<ol> <li>Value investment projects, conduct capital budgeting exercises, and identify factors that affect corporate decisions to access different forms of financing.</li> <li>Assess alternative ways of accessing capital markets.</li> <li>Identify issues of first-order importance that are relevant to corporate financing, combine them to make informed decisions and negotiate funding terms with financiers.</li> <li>The course <i>Capital Markets and Portfolio Management</i> is prerequisite.</li> </ol>
<ul> <li>Session 1. A primer on money creation in a modern economy <ul> <li>Quantitative Easing (QE) and asset valuations.</li> <li>Quantitative Tightening (QT) and capital market turbulence. A view to the future.</li> <li>Long-term refinancing operations, targeted operations, credit easing, outright monetary operations (OMT) and the Covid-19 pandemic emergency programs.</li> </ul> </li> <li>Session 2. Capital Structure: Optimal debt-equity choice. <ul> <li>Empirical patterns of corporate financing and possible explanations.</li> <li>Types of financial instruments and markets.</li> <li>Modigliani-Miller irrelevance proposition. An options-based approach to debt and equity valuations. The weighted average cost of capital (WACC) and WACC fallacies.</li> <li>Capital structure under financial frictions. Taxes, financial distress costs and the static trade off (STO) in practice.</li> <li>Debt-overhang: The underinvestment problem and the role of financial restructuring.</li> <li>Equity capital raising and the mechanics of rights issues.</li> <li>Incentives, asymmetric information and the pecking-order of financing choices.</li> </ul> </li> <li>Session 3. Business plans: Risk, return, and free cash flow analysis <ul> <li>WACC and the internal rate of return (IRR) in practice.</li> <li>Data sources: Equity risk premium (ERP), marginal tax rates, sectoral betas and growth rates on operating income (EBIT).</li> </ul> </li> <li>Free cash flow analysis: Working capital, sunk costs, tax shields (amortization-</li> </ul>
<ul> <li>depreciation and interest costs).</li> <li><i>The course packet</i> contains an extensive set of self-contained slides (approx. 170 slides) that are structured in three main sections, following the section</li> </ul>
<ul> <li>list above. It also incudes articles from business press (that students need to follow closely). These are optional but recommended to those students without prior exposure to finance.</li> <li><u>Auxiliary textbooks:</u></li> <li>Jean Tirole. "The Theory of Corporate Finance", Princeton University Press.</li> <li>Norelli A. and B. Merrill, "Quantitative Tightening: Many Moving Parts," J.P. Morgan Asset Management (Nov 2, 2017). Available at: <a href="https://blog.ipmorganinstitutional.com/2017/11/quantitative-tightening-many-moving-parts/">https://blog.ipmorganinstitutional.com/2017/11/quantitative-tightening-many-moving-parts/</a></li> <li>McLeay M, Radia A., and R. Thomas, "Money creation in the modern economy," Bank of England Quarterly Bulletin (2014 Q1). Available at: <a href="https://www.bankofengland.co.uk/quarterly-bulletin/2014/q1/money-creation-in-the-modern-economy">https://www.bankofengland.co.uk/quarterly-bulletin/2014/q1/money-creation-in-the-modern-economy</a></li> </ul>

Teaching methods	Lecturing will be supported by video presentations, in-class case analyses, and occasional invited lectures by market experts. Students are expected to be prepared for class at all times and to contribute to class discussions.
Assessment methods	The course is evaluated through one final exam that counts for 100% of the course grade. The final exam is closed books and closed notes and lasts for 2 hours. It covers material from the entire course, including occasional invited lectures. Students are encouraged to use a calculator for the exam. This element is geared towards assessing students' ability to present concisely and quantitatively credible solutions to explicit corporate finance problems.
Language of instruction	English/Greek

# **ELECTIVE COURSES (INDICATIVE LIST)**

Course title	COMPANIES' AND BANKS' VALUATIONS AND MERGERS
Course code	m44225p
Type of course	Elective
Level of course	Postgraduate
Year of study	2nd
Semester/trimester	3rd
Number of credits allocated	6
Name of lecturer	Liapis Konstantinos, Professor, University of Panteion, Dept of Economic and Regional Development
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The objective of the course are the valuations and the mergers & acquisitions of companies and Banks. Issues such as: corporate finance, capital and alternative investments, financial reporting systems, business groups, capital structure and operations decisions, acquisition methods and strategies, corporate restructuring, stock valuations, terms of m&a's transactions and shareholders' agreements. The desired learning outcomes are a full understanding of the concepts, tools, and methods of valuing companies as well as technical mergers & acquisitions, they will also be able to apply the above knowledge, tools, and methods in practice.
Prerequisites	Without being a prerequisite, an introductory course in Accounting or Financial Analysis would be helpful.
Course contents	<ul><li>Thematic units of the course are:</li><li>Valuation, financial analysis, and corporate financing.</li></ul>

	<ul> <li>Methods of capital structure, equity valuation and price changes in stock markets after changes in capital</li> <li>Accounting forecasts, provisions, and adjustments to the financial statements</li> <li>Business plans and proforma financial statements</li> <li>The types, methods and techniques of mergers and acquisitions</li> <li>Business Mergers and Inter-Corporate Investments</li> <li>Consolidation accounting</li> <li>Global operations, multinational corporations (MNEs) and banks (MNBs)</li> <li>Decision making for equity investments</li> <li>Mergers and acquisitions and corporate restructuring</li> <li>Venture capital</li> </ul>
Recommended reading	<ul> <li>Λιάπης Κ, Χύτης Ε, Γαλανός Χ Λογιστική Εταιρειών, Φορολογία και Εταιρικοί μετασχηματισμοί, 2021, εκδόσεις Μπένου</li> <li>Brigham, E., &amp; Ehrhardt, M. (2013). Financial management: theory &amp; practice. Cengage Learning.</li> <li>CFA Program Level II, Corporate Finance, Mergers and Acquisitions, 2021, https://www.cfainstitute.org/en/membership/professional-development/refresher-readings/mergers-acquisitions</li> <li>Damodaran Aswath, Investment Valuation, Third Edition, Wiley Finance</li> <li>Fernαndez Pablo, The Equity Premium in 150 Textbooks, IESE Business School, November 16, 2010</li> <li>Gaughan, P. A. (2010). Mergers, acquisitions, and corporate restructurings. John Wiley &amp; Sons.</li> <li>International Accounting Standards Board. (2015). A Guide through IFRS<sup>®</sup> (Green Book). Kluwer.</li> <li>EDUCATIONAL MATERIAL ON FAIR VALUE MEASUREMENT, IFRS Foundation, 2013, https://www.ifrs.org/-/media/feature/supporting-implementation/ifrs-13/education-ifrs-13-eng.pdf</li> </ul>
Teaching methods	Lectures – discussions, case studies, methods' applications using excel
Assessment methods	Homework's per thematic unit, during the lectures: 40% of the final grade Final exam at the end of the course: 60% of the final grade.
Language of instruction	Greek and English

Course title	CREDIT RISK MANAGEMENT
Course code	m44213p
Type of course	Elective
Level of course	Postgraduate
Year of study	2nd
Semester/trimester	3rd
Number of credits allocated	6
Name of lecturer	Topaloglou Nikolaos, Professor, Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	<ul> <li>By the course end, the students should be able to:</li> <li>Master the fundamentals of credit risk management as well of compliance to bank regulatory procedures.</li> <li>Pricing of credit and interest rate derivatives</li> <li>Master the fundamentals of hedging the interest rate risk using derivatives</li> </ul>
Prerequisites	
Course contents	The first section presents standard interest rates models. These are then used in practice to price option or futures on Treasury Bills and Bonds, as well as interest caps and floors. They can also be used to hedge against risky debt. Having introduced the above tools, the second section the course makes an introduction to the credit risk, credit ratings, estimation of default probabilities, calculates the credit risk on debt instruments, presents credit risky bonds, credit default swaps, futures and options on credit default swap spreads, options on swaps, and finally introduces the mortgage-backed securities. The latter can be found very useful for practitioners in the markets for their every day activities, while students will learn all the necessary tools for credit risk management.
Recommended reading	<ul> <li>Hull J (2008), Options, futures and other derivatives, Prentice Hall</li> <li>Jarrow R.A and Turnbull (1996), Derivative Securities, South-Western</li> <li><u>De Servigny</u> A. and <u>Renault</u> O. (2004), Measuring and Managing Credit Risk,</li> <li>Standard &amp; Poor's Press</li> <li><u>Loeffler</u> G. and <u>Posch</u> P.N. (2007), Credit Risk Modelling Using Excel and</li> <li>VBA , The Wiley Finance Series</li> <li>Felsenheimer J, Gisdakis P and Zaiser M. (2005), Active Credit Portfolio</li> <li>Management: A Practical Guide to Credit Risk Management Strategies,</li> <li>Wiley.</li> </ul>
Teaching methods	Lectures, assignments
Assessment methods	Problem sets, assignments, exams.
Language of instruction	Greek/English

Course title	FINANCIAL RISK MANAGEMENT
Course code	m44214p
Type of course	Elective
Level of course	Postgraduate
Year of study	2nd
Semester/trimester	3rd
Number of credits allocated	6
Name of lecturer	Chalamandaris Georgios, Associate Professor, Dept of Accounting and Finance
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The educational aim of the course is to provide an integrated overview of the models of asset dynamics for different risk types (Equities, Interest Rates, FX & Credit) and the key techniques of identification, measurement and management of financial risk.
Prerequisites	A working knowledge of basic financial and statistical concepts strongly recommended. Working knowledge of derivatives a plus.
Course contents	Part 1: review of basic concepts of securities and derivatives Part 2: theory of risk (statistics and metrics) Part 3: Value at risk: Historical simulation, parametric evaluation and Monte Carlo simulation
Recommended reading	Jorion, Value at Risk Luenberger, Investment Science Crouhy, Risk Management
Teaching methods	Lectures and worked examples. Spreadsheet with built-in calculators to be provided on-line
Assessment methods	2 extended exercises (0 – 20% of the grade each); 1 final exam (60% - 100% of the grade)
Language of instruction	Greek / English

Course title	GAME THEORY & STRATEGIC DECISIONS: WITH APPLICATIONS IN ECONOMICS
Course code	m44212p
Type of course	Elective
Level of course	Postgraduate
Year of study	2nd

Semester/trimester	3rd
Number of credits allocated	6
Name of lecturer	Gatsios Konstantine, Professor, Dept of Economics
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The chief purpose of this course is to enable the student to set up, study and solve games, especially games that arise in business and economics. To acquire a taste of the type of situations we would be interested in as well as the type of questions we would be asking, think of the following "real-life" situation.
Prerequisites	It does not require knowledge of economics (or any other science), despite the fact that it is necessary for an in-depth understanding of many economic (and not only) problems. The use of mathematical tools in the course is also quite limited.
Course contents	This course is designed for people in business, for managers. It is as theoretical as necessary for providing an introduction to the science of game theory; and practical in that it offers many applications and case studies to make it attractive to managers in both the commercial and non-profit sectors, as well as to students in business.
Recommended reading	Prajit K. Dutta, <i>Strategies and Games, Theory and Practice</i> , MIT Press. Osborne, M: An Introduction to Game Theory, εκδ. Κλειδάριθμος. Gibbons, R: <i>A Primer in Game Theory</i> , 1992
Teaching methods	Lectures, assignments, laboratory sessions.
Assessment methods	75% Exams, 20% homework, 5% participation in the course
Language of instruction	Greek

Course title	LARGE DATA AND STATISTICAL LEARNING
Course code	m44227p
Type of course	Elective
Level of course	Postgraduate
Year of study	2nd
Semester/trimester	3rd
Number of credits allocated	6
Name of lecturer	Papailias Fotios, Senior Lecturer, King's Business School

Objective of the course (preferably expressed in terms of learning outcomes and competences)	<ul> <li>After successful completion of this course the students must have a good understanding of: <ul> <li>computational inference,</li> <li>time series forecasting,</li> <li>data features (seasonalities, nonstationarities, etc.),</li> <li>how machine learning methods work (supervised and unsupervised machine leaning).</li> </ul> </li> <li>Furthermore, students are expected to obtain the necessary skills to be able to: <ul> <li>use scientific software and develop codes independently,</li> <li>collect, handle and organise large panels of data,</li> <li>visualise data and extract features,</li> <li>apply machine learning techniques in practice and interpret the output in economic and finance applications.</li> </ul> </li> </ul>
Prerequisites	None formal pre-requisite, a basic level of maths/stats and econometrics is required.
Course contents	This course is designed to introduce students to the concepts of large data handling and analysis with machine learning techniques. We start with computational analysis and inference and discuss the Monte Carlo, Bootstrap, k-fold cross-validation and recursive and rolling estimation methodologies. We provide a solid basis for time-series forecasting based on predictive linear regressions as well as using the Kalman Smoother. Next, we discuss large data handling techniques and discuss its features (seasonalities, nonstationarities). We discuss how unsupervised machine learning methodologies (k-means clustering, principal component analysis and dynamic factor analysis) could be applied in economics and finance forecasting applications (including the construction of Financial Conditions Indexes and Uncertainty Indicators). Next, we introduce the penalised regression to unbalanced datasets and use bridge equations, MIDAS and U-MIDAS models as suggested remedies. Finally, our special topics include adaptive learning and modelling and applications of machine learning in portfolio selection. On top of our theory discussions, the course has a "hands-on" approach where all these methods applied in real data using the R Project for Statistical Analysis as the main scientific software.
Recommended reading	<ul> <li>Main reading: supplied material.</li> <li>Supplementary readings include: <ul> <li>James, G., Witten, D., Hastie, T., Tibshirani, T. (2013). An Introduction to Statistical Learning with Applications in R. Springer, New York.</li> <li>Hyndman, R.J., Athanasopoulos, G. (2019). Forecasting: Principles and Practice, 3<sup>rd</sup> Edition, OTexts: Melbourne, Australia.</li> </ul> </li> </ul>

	<ul> <li>Sheppard, K. (2020). Financial Econometrics Notes. University of Oxford.</li> <li>And various academic papers discussed throughout the module</li> </ul>
Teaching methods	<ul> <li>Weekly lectures (theory &amp; hands-on),</li> <li>Weekly tutorials (theory &amp; hands-on)</li> <li>Learning-by-doing approach.</li> </ul>
Assessment methods	<ul> <li>Weights in squared brackets.</li> <li>[10%] Weekly Assignments,</li> <li>[35%] Project 1 (essay and code),</li> <li>[35%] Project 2 (essay and code),</li> <li>[20%] Final Exam.</li> </ul>
Language of instruction	English (occasional use of Greek).

## **REPLACING MASTER THESIS**

Course title	SPECIAL TOPICS IN BANKING
Course code	m44223p
Type of course	Replacing Master's Thesis
Level of course	Postgraduate
Year of study	2nd
Semester/trimester	4th
Number of credits allocated	10
Name of lecturer	Zanias Georgios, Professor, Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Linking theory with practice by focusing on almost all the sectors of a bank and taught by top experts of the Greek banking system.
Prerequisites	The individual courses of the programme itself taught during the previous semesters.
Course contents	<ul><li>1.The banking sector in Greece</li><li>2.Overview of the functioning of a bank and the new trends for future banking</li><li>3.Banking supervision and the European Banking Union</li></ul>

	<ul> <li>4.Technology in banking (IT, Digital, Fintech, Cybersecurity)</li> <li>5.Case studies of financing large corporates and infrastructure projects</li> <li>6.Risk management in banking</li> <li>7.Capital markets and banks</li> <li>8.Financial reporting</li> <li>9. Compliance (including Money Laundering)</li> <li>10. Climate risk and ESG</li> </ul>
Recommended reading	Powerpoint presentations and additional bibliography per lecture/seminar.
Teaching methods	Lectures and seminars
Assessment methods	Multiple choice questions
Language of instruction	Greek/English

Course title	SPECIAL ISSUES IN FINANCE AND INVESTMENTS (INTERNATIONAL FINANCE)
Course code	m44224p
Type of course	Replacing Master's Thesis
Level of course	Postgraduate
Year of study	2nd
Semester/trimester	4th
Number of credits allocated	10
Name of lecturer	Tzavalis Elias - Topaloglou Nikolaos, Professors, Dept of Economics & Dept of International and European Economic Studies
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The aim of this course is to present a number of risk management and investment applications to the students, which are used in practice. It covers topics in international portfolio risk management and currency risk, matual funds and portfolio performance evaluation, Investments strategies and value at risk (VaR) applications. At the end of the course, the students will have become familiar with techniques and concepts on international investing risk management procedures and diversification, performance evaluation procedures and security selection, investment strategies accounting for taxes and inflation, investor constrains, investment policies and VaR procedures. VaR procedures for asset portfolios and loans management will be demonstrated through an econometric package.
Prerequisites	
Course contents	The course covers the topics:1.International portfolio management and investing (Currency risk, forward markets, CIRP and UIRP, PPP, ICAPM, pricing currency risk, home

	bias) 2. <b>Performance evaluation and active portfolio management</b> (Risk- adjusted returns, style analysis, portfolio performance evaluation metrics, active portfolio management, security selection (the Treynor-Black model), portfolio construction and alternative optimization techniques)
	<ol> <li>Investment strategies and processes (Strategies accounting for Taxes and inflation, Social Security, Investor constrains, investment policiesExpected utility, risk aversion, certainty equivalence and risk, stochastic dominance).</li> <li>VaR (Value-at-Risk VaR) appliactions (Applications of VaR to stock,</li> </ol>
	bond and foreign exchange Portfolios, economic capital, and credit, liquidity and operational risks)
Recommended reading	Allen Steven (2013), Financial Risk Management, A Practitioner's Guide to Managing Market and Credit Risk, John Wiley & Sons. Bodie Z., Kane A., and Marcus A.,, "Essentials of Investments", McGraw
	Hill Copeland T., Weston J. and Shastri K, "Financial Theory and Corporate Policy", Addison- Wesley
Teaching methods	Lectures, assignments
Assessment methods	Problem sets, assignments, exams.
Language of instruction	Greek/English

Course title	INFORMATION TECHNOLOGIES, TRADING & INVESTMENT STRATEGIES
Course code	m44109p
Type of course	Replacing Master's Thesis
Level of course	Postgraduate
Year of study	2nd
Semester/trimester	3rd
Number of credits allocated	10
Name of lecturer	Landis Conrad Felix Michel, Economist- Data Analyst
Objective of the course (preferably expressed in terms of learning outcomes and competences)	After the completion of the course the students will have an understanding of the activities of a financial institution's treasury department. They will acquire fundamental knowledge and skills on using financial databases, on trading mechanisms, on theoretical and empirical issues of different financial instruments, their valuation methodology, and their uses in risk and portfolio management. They will also gain experience in trading simulated securities in Bloomberg and Thomson Reuters EIKON Terminals.

Prerequisites	The MSc's compulsory courses are adequate preparation.
Course contents	Getting familiar with Thomson Reuters EIKON and BLOOMBERG platforms. Basic concepts of using financial databases and handling/analyzing financial data. Applied portfolio theory: asset pricing models and trading strategies. Portfolio management using derivatives.
Recommended reading	<ul> <li>Anatoly B. Schmidt, 2011. "Financial Markets and Trading: An Introduction to Market Microstructure and Trading Strategies", Wiley.</li> <li>John C. Hull, Options, Futures and Other Derivatives, Latest Edition, Wiley.</li> <li>Cochrane, John H., 2000, "New Facts in Finance". SSRN:https://ssrn.com/abstract=218869orhttp://dx.doi.org/10. 2139/ssrn.218869.</li> <li>Sharpe, William F. 1990, "Capital Asset Prices with and without Negative Holdings". https://www.nobelprize.org/uploads/2018/06/sharpe- lecture.pdf.</li> <li>Schwert, G. William, 2003. "Anomalies and market efficiency", Handbook of the Economics of Finance, <u>http://schwert.ssb.rochester.edu/hbfech15.pdf</u></li> </ul>
Teaching methods	Lectures
Assessment methods	Evaluation will be based on a series of written empirical assignments (70%) and a final written exam (30%).
Language of instruction	Greek

# PART III: STUDENT INFORMATION

## **General Information for students**

The Athens University of Economics and Business provides not only high-quality education but also highquality student services. The adoption of the Presidential Decree 387/83 and Law 1404/83 defines the operation, organization, and administration of Student Clubs at Universities, which aim at improving the living conditions of the students and enhance their social and intellectual wellbeing through engagement and socialization initiatives.

To fulfill this objective the University ensures the required infrastructure for housing, meals, and sports activities through the operation of a student restaurant, reading rooms, library, organization of lectures, concerts, theatrical performances, and excursions in Greece and abroad. Further in this context, the University supports the development of international student relations, organizes foreign language classes, computer/software literacy classes, and courses in modern Greek as a foreign language for foreign students and expatriated Greek students.

Detailed information on meals, housing, fitness, foreign languages, cultural activities, scholarships, financial aid, is provided on the website of AUEB's Student Club at <a href="https://lesxi.aueb.gr/">https://lesxi.aueb.gr/</a>

#### **Electronic Services**

A significant number of procedures related to both attendance and student care are carried out electronically through applications of the University or the Ministry of Education and Religious Affairs. All applications are accessible with the same codes (username & password).

### • E-mail account:

Detailed instructions for using the Webmail Service are provided at

https://www.aueb.gr/el/content/webmail-manual

### • Electronic Secretariat (Student Register)

The <u>Electronic Secretariat</u> application is the information system through which students can be served by the Department's Secretariat via the web.

#### • Wireless network

Using their personal codes, students have access to a wireless network in all areas of the Athens University of Economics and Business buildings/campus. <u>https://www.aueb.gr/en/content/wi-fi-connection</u>

### • E-Learning Platform – ECLASS

The Open eClass platform is an integrated Electronic Course Management System and is the proposal of the Academic Internet (GUnet) to support Asynchronous Distance Education Services.

Instructions are provided at https://eclass.aueb.gr/info/manual.php

## Medical Services, Insurance / Healthcare

Undergraduate, postgraduate and PhD students at the University who have no other medical and hospital care are entitled to full medical and hospital care in the National Health System with coverage of the relevant costs by the National Health Service Provider. The doctor's office is located in the main building and operates on some working days as announced. A psychiatric counseling service also operates at the University, staffed with a physician specializing in the treatment of mental health issues. More information can be found at <a href="https://www.aueb.gr/en/content/health-care">https://www.aueb.gr/en/content/health-care</a> .

## Services/Facilities to Students with Special Needs

The Athens University of Economics and Business ensures the facilitation of students with special needs, through the design, implementation, and environmental adaptations, for access to the university building facilities. In the main building there are specially configured lifting machines, ramps, and elevators. There are also special regulations for conducting exams for students with special needs.

The Athens University of Economics and Business has established a Committee for Equal Access for people with disabilities and people with special educational needs. The Commission is an advisory body and submits recommendations to the competent bodies for the formulation and implementation of the policy of equal access for persons with disabilities and persons with special educational needs.

Through the Library services, students with physical disabilities are granted electronic access to the recommended Greek bibliography of the courses taught at the University. In this context, the Association of Greek Academic Libraries (SEAB) has developed a multimodal electronic library called AMELib.

More information is available at <u>https://www.aueb.gr/en/lib/content/users-additional-needs</u> .

### **Studies Advisor**

The Studies Advisor is the point of contact for students in matters related to their academic progress, their participation in the academic community and their professional development and has the following responsibilities. His role is to inform and support students regarding:

- the programme, the courses offered, their content and requirements.
- Provides counseling and guidance in choosing a thesis topic, suggests solutions, where possible, in case of learning and course attendance difficulties.
- Advises and directs in matters of studies and professional development possibilities after the end of the programme.
- Provides support in case that problems (e.g. personal, academic, learning difficulties) create obstacles and difficulties in students' studies and performance

The Studies Advisor of the MSc in Finance and Banking for the academic year 2023-24 is the Associate Professor <u>Ioannis Dendramis</u>

## Library and Study Rooms

The Library & Information Center of the University operates at the University's main building. The AUEB Library is a member of the Hellenic Academic Libraries Association (Heal-LINK), the European Documentation Centers Europe Direct and the Economic Libraries Cooperation Network (DIOBI).

Three Documentation Centers operate within the library:

- The European Documentation Center
- The Organization for Economic Cooperation and Development (OECD) Documentation Center
- The Delegation Center of the World Tourism Organization (WHO)

The library contributes substantially both to meeting the needs for scientific information of the academic community and to supporting studying and research. The library provides access to:

- printed collection of books and scientific journals,
- course books used in modules,
- collection of electronic scientific journals& books
- postgraduate theses and doctoral theses that are produced in Athens University of Economics and Business and deposited in digital form at the PYXIDA institutional repository
- sectoral studies
- statistical series by national and international organizations
- audiovisual material
- information material (encyclopedias, dictionaries)
- databases on the topics used by the University
- printed collections of other academic libraries

The library lends all its printed collections, except for magazines and statistical series, in accordance with its internal rules of operation. The Library and Information Center offers reading rooms, computer workstations for visitors, photocopiers and printing machines, and interlibrary loan of books and journal articles from other academic libraries that are members of its network. More information at <a href="https://www.aueb.gr/en/library">https://www.aueb.gr/en/library</a> .

### International Programmes and Information on International Student Mobility

Athens University of Economics and Business is actively involved in the Erasmus+ Program since 1987 promoting cooperation with universities, businesses, and international organizations of the European Union (EU) as well as in the mobility of students, teaching, and administrative staff.

In addition, strengthening its internationalization objectives, it creates new opportunities through the Erasmus+ International Mobility Program. Within this framework, mobility scholarships are granted through the State Scholarships Foundation (SSF) to incoming and outgoing students of the three study cycles, according to the funding approved each year by the State Scholarship Foundation for the University. Outgoing students have the possibility to spend a period of study at a Partner Institution outside the EU with full academic recognition through the application of the ECTS credits system. More information can be found at <a href="https://www.aueb.gr/en/erasmus">https://www.aueb.gr/en/erasmus</a>

## Career Office (https://www.aueb.gr/el/career)

Its main mission is to support students and graduates of undergraduate and postgraduate study programs for their smooth integration into the labor market through the publication of job advertisements, promotion of CVs, the "OPA Career Days" event. The consulting services aim at providing information about their work and educational future and the most effective job search strategy through personalized counseling sessions, organization of small-member workshops and events, conducting psychometric and self-awareness tests etc.

## Student Associations

Various student clubs and associations are active within the community of the Athens University of Economics and Business (<u>https://www.aueb.gr/en/content/student-clubs</u>).

### Alumni Network

Adhering to a long tradition of educating future top executives in the economic, social, and political life of the country, AUEB is proud that thousands of its graduates hold leading positions in companies, organizations, research institutes and universities in Greece and abroad. Understanding the importance of developing and strengthening the bond with its graduates, AUEB created its Alumni network including a platform https://alumni.aueb.gr where all graduates of the University can register. The main objectives of the Network are the connection of the graduates with their colleagues and former fellow students, and diffusion of information about activities, services, and events in and around the University that concern them. More information can be found at https://alumni.aueb.gr/en

### Volunteer Program

Within the framework of its strategies, the "AUEB Volunteers" Volunteering Program was launched in September 2017. The aim of the Program is to highlight important social issues and the value of participation and practical contribution, but also to raise community awareness regarding the 17 UN Sustainable Development Goals. Actions are developed around two pillars: (a) actions addressed to AUEB's Community, which have as their main objective the maintenance of the quality of the University's infrastructure based on their aesthetics and functionality, and (b) actions addressed to Greek society. More information can be found at https://auebvolunteers.gr/english-intro/

#### **Quality Assurance**

The Athens University of Economics & Business implements a quality assurance policy to continuously improve the quality of its study programs, research activities and administrative services, and upgrade the academic and administrative processes and the University's operations. The Quality Assurance Unit (MODIP) operating at AUEB coordinates and supports evaluation processes. Particularly the quality assurance of the educational process is achieved using the module/teaching evaluation questionnaire completed by AUEB students. More information can be found at <a href="https://aueb.gr/modip">https://aueb.gr/modip</a>.

## Training and Lifelong Learning Center

The Center for Training and Lifelong Learning (KEDIVIM) is an AUEB unit which ensures the coordination and interdisciplinary cooperation in the development of training programs, continuing education, training and in general lifelong learning, which complement, modernize and/or upgrade knowledge, competences, and skills, acquired from formal education, vocational education and initial vocational training systems or from work experience, facilitating integration or reintegration in the labor market, job security and development. More information be found professional and personal can at https://www.aueb.gr/en/content/kedivim-opa.