ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS

POSTGRADUATE PROSPECTUS FOR THE MASTER'S PROGRAMME IN
Applied Economics and Finance

Department of Economics
School of Economic Sciences

Director: Professor E. Tzavalis

ATHENS, OCTOBER 2023

PART I: INFORMATION ABOUT THE INSTITUTION

ACADEMIC AUTHORITIES

The rectorate authorities consist of the Rector and the Vice Rectors, as per below:

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 Economics
Chair: Professor Evangelos Vasilatos
Department of International & European Economic Studies
Chair: Professor George Economides

Master's Program in Applied Economics and Finance
Director Professor Elias Tzavalis
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9th floor, Office No: 909
Telephone number: (+30) 210 8203649
Email: post.econ.st@aueb.gr

Website: ΠΜΣ Εφαρμοσμένα Οικονομικά και Χρηματοοικονομικά | Οικονομικό Πανεπιστήμιο Αθηνών (aueb.gr)
LinkedIn: MSc in Applied Economics and Finance | LinkedIn
Facebook: ΠΜΣ Εφαρμοσμένα Οικονομικά & Χρηματοοικονομικά ΟΠΑ | Athens | Facebook
Instagram: AppliedEconomicsOpa (@appliedeconomicsopa) • Instagram photos and videos

ACADEMIC CALENDAR

FALL SEMESTER

Classes begin:	Monday, October 02, 2023
Break before Christmas Holidays:	Saturday, December 23, 2023
Classes restart:	Monday, January 8, 2024
Classes end:	Friday, January 12, 2024

Exam period January-February 2024

Start of Exams:	Monday, January 22, 2024
End of Exams:	Friday, February 02, 2024

SPRING SEMESTER

Classes begin:	Monday, February 05, 2024
Break before Easter Holidays:	Monday, April 29, 2024
Classes restart:	Monday, May 24, 2024
Classes end:	Friday, May 17, 2024

Exam period June 2024

Start of Exams:	Monday, May 26, 2024
End of Exams:	Friday, June 21, 2024

Holidays
The Anniversary of Polytechneio, Friday, November 17, 2023
Three Hierarchs, Tuesday, January 30, 2024
Clean Monday, Monday, March 18, 2024
Annunciation of the Virgin Mary-Anniversary of March 25, Monday March 25, 2024
May Day, Wednesday 01 May 2024
Pentecost Monday, Monday, June 24, 2023

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, Research 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

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

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
- Seconded Teachers

- **ADMINISTRATIVE STAFF**

STUDENT SERVICES & FACILITIES
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
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 scientific 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.

LIST OF DEGREE PROGRAMMES

Athens University of Economics and Business offers the following Degrees and streams:

A/A	DEPARTMENTS	SPECIALIZATIONS
1.	International and European Economic Studies	1. International Economics and Finance 2. International and European Political Economy
2.	Economics	1. Economic Theory and Policy 2. Business Economics and Finance 3. International and European Economics
3.	Management Science and Technology	1. Operations Research and Business Analytics 2. Operations and Supply Chain Management 3. Software and Data Analysis Technologies 4. Information Systems and Electronic Business 5. Strategy, Entrepreneurship and Human Resources
4.	Business Administration	1. Business Administration 2. Information Systems Management 3. Accounting and Financial Management 4. Marketing
5.	Accounting and Finance	1. Accounting 2. Finance
6.	Marketing and Communication	1. International Management, Innovation and Entrepreneurship 2. Human Resource Management 3. Business Analytics 4. Digital Marketing
7.	Informatics	1. Theoretical Computer Science 2. Computer Systems and Networks 3. Information Systems and Information Security 4. Databases and Knowledge Management 5. Operational Research and Economics of Information Technology 6. Computational Mathematics and Scientific Calculations
8.	Statistics	No specializations are offered

Detailed information about programs and curriculum is provided in each department's study guide and website.

ADMISSION/REGISTRATION PROCEDURE

Admission for undergraduate students to each department is accomplished through central University entrance exams (Pan-Hellenic examinations). The registration of the successful

candidates of these exams, in the Schools and Departments of the University takes place in September on the platform of mandatory electronic registration, according to the guidelines of the Ministry of Education, Research and Religious Affairs.

MAIN UNIVERSITY REGULATIONS (INCLUDING ACADEMIC RECOGNITION PROCEDURES)
The regulations include:
- 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.

ECTS COORDINATOR OF THE UNIVERSITY
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 Master's Programme in Applied Economics and Finance

A) General description

✓ Contact Information

Secretariat of the Master's Programme in Applied Economics and Finance
47^A Evelpidon and 33 Lefkados Streets, 11362 Athens, 9th floor, office no. 909
Monday to Friday, 10:00-18:00

Telephone: +30 210 8203649
Email: post.econ.st@aueb.gr
Webpage: MSc in Applied Economics and Finance | Athens University of Economics and Business (aueb.gr).

✓ Description of the Programme – Who is it designed for? Why choose this Programme? Career options

Description of the Programme – Who is it designed for?

The full-time Master's Programme in Applied Economics and Finance is designed for university graduates in Economics and/or the Sciences who want to specialize their studies in order to pursue careers as senior executives in large private companies, public organizations, financial institutions, ministries, public authorities and others.

The objective of the Master's Programme (MSc) in **Applied Economics and Finance** is to augment the scientific training of its students in **Applied Economics and Finance.**

The subjects which the Programme covers are:

Economic Analysis for Business Decisions, Applied Microeconomics, Industrial Organization, Competition and Regulation Policy, Games and Strategic Decisions, Applied Econometrics and Data Analysis, Financial Analysis and Portfolio Investment, Securities Valuation, Derivatives, Efficiency and Regulation of Capital Markets, Financial Econometrics, Real Estate Economics, Environmental and Energy Economics, Banking Strategy, Labor Economics, Financial History, International Economy and Markets, Antitrust Economics.

Why choose this Programme? Career options

The priority of the Master's Programme in **Applied Economics and Finance** is to bring together high-quality students, who are interested in applications of contemporary economics to practical problems in the private and public sectors, with the high-level academic staff of the Department of Economics at Athens University of Economics and Business.

More specifically, the objectives of the Programme are:

- Preparation of students to deal with problems in the real economy, by providing them with solid foundations in the theory and application of economic analysis, as well as cultivation of communication and collaboration skills.
- Application of the scientific knowledge that is taught, with special emphasis on the use of appropriate contemporary quantitative tools in teaching.
- Cultivation of an entrepreneurial and innovative outlook through the organization of lectures by prominent business executives.
- Following the progress of research developments in the field of economics at the international level, through the organization of lectures and presentations by distinguished scientists.
- Observation and analysis of economic developments in Greece and the world through seminars and lectures provided by executives in the business world.
- Contribution to the modernization and development of the Greek economy, and improvement in the country's competitiveness, through the development of the skills and knowledge of the Programme's students about new methods and practices in economic analysis.

In addition to its important scientific work, the Programme also provides a social contribution as unemployment among the Programme's graduates is very low. It has supplied the labor market with more than 1000 graduates who have assumed positions of responsibility and high influence in the public as well as the private sectors. It has also served as a springboard for distinguished academic careers both in Greece and abroad.

Graduates of the Master's Programme in "Applied Economics and Finance" have excellent prospects of finding employment in the private sector, in banks, financial institutions and consulting companies, both in Greece and abroad, but also in public services and organizations such as tax offices, independent authorities, the Hellenic Competition Commission, the Hellenic Capital Market Commission, the Hellenic Fiscal Council, the Parliamentary Budget Office and others.

Some of the most common career paths followed by the Programme's graduates include:

Economist, Financial risk analyst, Data analyst, Financial planner, Accountant, Economic researcher, Financial consultant, Investment analyst, and Public sector positions.

✓ **Academic degree awarded**

The Master's Programme awards a **Master's Degree (MSc) in Applied Economics and Finance.**

✓ **Entrance requirements – Selection criteria**

To the MSc in Applied Economics and Finance are accepted holders of a degree from the first cycle of academic education of the country, who are graduates of the School of Economics of the Athens University of Economics and Business (Department of Economics, Department of International and European Economic Studies) and other Universities' Departments, with a relevant academic subject (including Departments of Finance, Economic and Regional Development, Administrative Science and Technology, etc. .etc.), as well as Departments of Schools of Sciences (Mathematics, Physics, Statistics, Engineering, Informatics, etc.) or equivalent recognized Institutions abroad (level six (6) of the National and European Qualifications Framework in accordance with article 47 of Law 4763/2020).

Applications for admission to the Programme are submitted during the months of February-June, to the Programme Secretariat, which also issues announcements relevant to the Programme. The selection process runs continuously throughout the application period. The number of admissions to this full-time study Master Program per year is set at a maximum of sixty (60).

The required supporting documents submitted by each candidate are as follows:

a) Application with a recent photograph.
b) Copy of diploma with detailed score or certificate of completion of studies with detailed score. Final students must submit a declaration of Law 1599/1986 that their acceptance is conditional on obtaining a degree (or obtaining a certificate of completion of studies) before the examination period of the following September.
c) Certificate of very good or excellent knowledge of the English language (level C1/C1 or C2/C2). Those who do not hold the required certificate during the application period must submit a declaration of Law 1599/1986 that their acceptance is conditional on obtaining the required certificate of knowledge of English and the presentation of this is a necessary condition for their graduation.
d) Two letters of recommendation from academic teaching staff.

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.

✓ **Tuition fees**

In order to participate in the Master's Programmes at the University, students pay tuition fees. The tuition fees for attending the Master's Programme in "Applied Economics and Finance" are shown below.

The tuition fees for the Full-time Programme are **5,400€,** which are paid in four installments as follows:

1st installment: 900€ (during the acceptance of the position)

2nd installment: 900€ (during registration period /October of each academic year)

3rd installment: 1,800€ (at the beginning of the 2nd semester/March of each academic year)

4th installment: 1,800€ (at the beginning of the 3rd and last semester of the academic year)

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 are entitled to exemption from tuition fees upon decision of the Department's General Assembly.

✓ **Expected learning outcomes of the Master's Programme**

After completing their studies, the Programme's graduates:

- Will be able to understand and analyze the decisions and choices of individuals and businesses within the context of economic theory, such as consumer and demand theory, production theory and game theory.
- Will be able to use contemporary econometric models and statistical techniques in order to quantitatively analyze the relationships between economic variables, and to use the most up-to-date statistical/econometric packages.
- Will know, in addition, how to create and evaluate asset portfolios, and to properly value stocks and bonds; how to manage asset valuation models; and the methods for calculating the present value of investment plans.
- Will be able, moreover, to develop strategic thinking and to make strategic decisions; to evaluate issues about competition in the pricing of goods and services; to analyze and evaluate issues dealing with regulation of markets (such as the energy and telecommunications markets); and to analyze the complex phenomena observed in today's capital markets.

✓ **Access to further studies**

The Programme's graduates have access to the third cycle of studies, in accordance with the Department's Doctoral Studies Regulations. The solid foundations of knowledge acquired by the graduates of the Master's Programmes of the Department of Economics, in a wide range of theoretical and quantitative tools, enables them to be accepted in top-level study programmes

in Greece and internationally, with specialization in *Economics, Econometrics, Finance, Economic Policy and Applied Economics*

✓ **List of courses in the curriculum, with ECTS credits (90 total)**

The duration of study of the full-time MSc in "Applied Economics and Finance" is set at three (3) semesters, including the time for preparing the dissertation.
The total number of ECTS credits for the Programme is 90. This includes:

o   seven compulsory courses, four of which are taken in the first semester of studies and have 7.5 ECTS credits each, and three of which are taken in the second semester and have 6 ECTS credits each;
o   two elective courses taken in the second semester, which have 6 ECTS credits each; and
o   the preparation of a Master's dissertation in the third semester which has 30 ECTS credits.

Before the Programme starts, two preparatory courses are offered, without ECTS credits.
Course attendance is mandatory. The courses are taught in Greek and/or English.

The distribution of courses that are taught and examined in the full-time programme, by semester, is shown in the table below:

Preparatory Courses	ECTS credits
Introduction to Statistic Theory	0
Introduction to Microeconomic Theory	0
First Semester	**ECTS credits**
Industrial Organization and Strategy	7.5
Market Analysis and Portfolio Management	7.5
Quantitative Methods	7.5
Game Theory and Strategic Decisions: with applications in Economics	7.5
Total credits for 1st semester	**30**
Second Semester	
Corporative Finance	6
Business Finance and Strategic Business Decisions	6
Econometrics Applications in Economics and Finance	6
Elective Course 1 *	6
Elective Course 2 *	6
Total credits for 2nd semester	**30**
Third semester	
Master's Dissertation	**30**

Total credits for 3rd semester	*30*
TOTAL CREDITS	**90**

* Below is an indicative list of elective courses offered:

- o Large Data and Statistical Learning.
- o Banking and Risk Management.
- o Behavioral Economics.
- o Financial Derivatives.
- o Corporative Governance.

The courses offered each year are decided upon by the Departmental General Assembly following a recommendation by the Programme's Coordinating Committee.

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 Departmental General Assembly.

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, companies-organizations 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.

✓ **Final examinations**

Course attendance is mandatory. In case the absences on a course exceed 1/3 of its teaching hours, the student is considered to have failed that course. The Assembly of the Department, following the recommendation of 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 Department Assembly.

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 is defined from zero (0) to ten (10) with graduations of the whole or half unit. The grade of success on a course is 5 and higher. However, in case of re-examination of a course (due to failure or unjustified non-appearance in the regular examination), the grading scale is set from zero (0) to five (5).

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 Department Assembly.

Each postgraduate student may fail up to two (2) courses camulatively throughout their studies. The student has the right to be re-examined in these courses only once and this re-examination takes place in the re-examination period of September of the academic year.

Failure in more than two (2) courses (cumulative) in all the semesters or failure in the re-examination, entails the deletion of the student from the Master 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.

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 on the Programme ends.

<u>Postgraduate students are awarded the Master's Degree when they have fulfilled the requirements below:</u>

a) Mandatory attendance and successful examination in courses which correspond to sixty (60) Credit Units.
b) Elaboration of the dissertation, which corresponds to thirty (30) Credit Units.
c) The fulfillment of any financial or any other outstandings (e.g., certified copies of certificates) regarding the Program.
The elaboration of the thesis is compulsory and takes place in the 3rd semester. Issues related to the writing of the thesis, (such as completion dates, language, font, instructions for the summary,

content, structure and presentation of the work, bibliography issues, etc.), are referred to in the Thesis' Drafting Guide.

B) Description of individual course units

Preparatory Courses

Course title	**Introduction to Microeconomic Theory**
Course code	**m12102s**
Type of course	Preparatory Course
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)	0
Name of lecturer	**Zacharias El.,** Assistant Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	By the end of the course students will be able to: Understand the way consumers derive the demand curve. Understand the way the supply curve is derived in competitive market. To analyze the characteristics of the four market structures. To Understand the concept of Nash equilibrium.
Prerequisites	-
Course contents	The course analyzes the basic principles of economics. In particular, we examine the way in which consumers decide how to spend their income. We also analyze how companies decide what and in what quantities they will produce. We examine the properties of the different market structures are and we compare to their characteristics. In many markets, companies consider the strategies of their rivals and the analysis is conducted by game theory. We introduce to the basic principles of game theory and the concept of Nash equilibrium. Finally, we analyze the equilibrium price and quantity of markets in which companies compete either by setting quantities or by setting prices.

Recommended reading	
	1. Ζαχαριάς Ε., «Εισαγωγή στην Οικονομική Επιστήμη», ΟΠΑ, 2. Κατσουλάκος Ι., «Θεωρία Βιομηχανικής Οργάνωσης», Gutenberg. 3. Nicholson W. (2005) "Microeconomic Theory", Thomson, South-Western. 4. Sloman J. and Wride A., «Economics», Prentice Hall.
Teaching methods	In class lectures
Assessment methods	Not required
Language of instruction	Greek/English

Course title	Introduction to Statistic Theory
Course code	m12101s
Type of course	Preparatory course
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)	0
Name of lecturer	**Vrondos I,** Assistant Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The aim of the course is to provide students with statistical techniques and methods to analyze empirical problems. At the end of the course, students will be able to: • Compute useful descriptive measures and construct appropriate diagrams. • Understand the basic distributions and their usefulness in practice. • Calculate probabilities using basic distributions. • Apply parameter estimation methods such as the maximum likelihood method. • Understand the sampling distribution and its usefulness. • Construct confidence intervals and conduct hypothesis testing. • Apply statistical techniques and methods using the R package.
Prerequisites	None.

Course contents	The aim of the course is to present, develop and apply basic concepts of statistics. Descriptive statistical measures and diagrams useful for data exploration are presented, and the theory of basic continuous and discrete distributions is introduced. Methods and techniques for obtaining point estimators such as the maximum likelihood method and the least squares method are developed. The properties of the estimators and the sampling distributions that are used in statistical inference are presented. The construction of confidence intervals and the implementation of hypothesis testing are introduced and presented. Statistical techniques and methods are applied using the R package.
Recommended reading	• Newbold, P., Carlson, W. and Throne, B. (2012). Statistics for Business and Economics, 8th edition, Pearson. • Casella, G. and Berger R.L. (2001). Statistical Inference, 2nd edition, Duxbury Press. • Barrow, M. (2006). Statistics for Economics, Accounting and Business Studies, 4th edition, Prentice Hall. • Stine, R. and Foster, D. (2014). Statistics for Business Decision Making and Analysis, Pearson.
Teaching methods	One three-hour lecture per week, study exercises, and programming exercises as homework (some to be submitted).
Assessment methods	Exercise solving (there is no final examination or marking)
Language of instruction	Greek/English

1st SEMESTER Compulsory Courses

Course title	**Industrial Organization and Strategy**
Course code	**m12108f**
Type of course	Compulsory course
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)	7,5
Name of lecturer	**Antoniou F.,** Assistant Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	After successful completion of this course the students must have understood (a) the appropriate tools to analyze different product markets, (b) to expose students to the policy issues related to competition and regulation and (c) develop strategic thinking.
Prerequisites	Principles of Microeconomics

Course contents	The course deals with Industrial Organization and antitrust and regulation policy. Examines the structure and the various ways firms are competing in imperfect markets as well as the necessary policies to improve market efficiency and productivity. Various models of optimal pricing, static and dynamic are analyzed and several case studies are studied.
Recommended reading	Κατσουλάκος Γ., «Θεωρία Βιομηχανικής Οργάνωσης – Αγορές, Επιχειρησιακές Στρατηγικές και Πολιτική Ανταγωνισμού», εκδ. Gutenberg, 2015. Βέττας Ν. και Γ. Κατσουλάκος, «Πολιτική Ανταγωνισμού και Ρυθμιστική Πολιτική», εκδ. Τυπωθήτω 2004. Bellflamme P. and M. Peitz, «Βιομηχανική Οργάνωση – Αγορές και Στρατηγικές», εκδ. Σοφία, 2016. Besanko, D. et al. (2017), Economics of Strategy (7th edition), John Wiley and Sons, N.Y (February 2017). Cabral Luis, «Βιομηχανική Οργάνωση», εκδ. Κριτική, 2018. Lynne Pepall, Dan Richards, George Norman, « Βιομηχανική Οργάνωση», εκδ. Τζιόλα, 2016. Tirole (1988), Theory of Industrial Organization. MIT press.
Teaching methods	Lectures, exercises and case studies.
Assessment methods	Written exam, assignment
Language of instruction	Greek and English

Course title	**Market Analysis & Portfolio Management**
Course code	**m12104f**
Type of course	Compulsory
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)	7,5
Name of lecturer	Tzavalis Elias, Professor
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	
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	**m12105f**
Type of course	Compulsory corse
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)	7,5
Name of lecturer	**Vrontos. I.,** Assistant Professor

Objective of the course (preferably expressed in terms of learning outcomes and competences)	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: • Know and apply a wide range of econometric models to empirical economic and financial problems. • Learn the fundamentals in statistical/econometric inference allowing them to understand which type of analysis is necessary and how it can be correctly implemented. • Estimate the parameters of statistical and econometric models. • Conduct hypothesis testing and construct confidence intervals for model parameters. • Estimate regression and time series models, construct predictions and interpret the results of econometric analysis appropriately. • Estimate structural change-point and panel data models and apply them to empirical problems. • Be able to apply, using the R package, econometric models to empirical economic/financial problems and applications
Prerequisites	At least a graduate course on Econometrics and/or a course on Introduction in Statistics (m12201s).
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	• Stock, J.H., and Watson, M.W. (2017). Introduction to Econometrics, 3rd edition, Pearson • Weisberg, S. (2005). Applied Linear Regression, 3rd edition, Wiley • Fox, J., and Weisberg, S. (2011). An R Companion to Applied Regression, 2nd edition, SAGE Publications Inc.

	• Hamilton, J.D. (1994). Time Series Analysis. Princeton, New Jersey: Princeton University Press
	• Enders, W. (2010). Applied Econometric Time Series. New York: Wiley
	• Cowpertwait, P.S.P., and Metcalfe V. A.(2009). Introductory Time Series with R. New York: Springer Texts in Statistics
	• Cryer, J.D., and Chan K.S. (2010). Time Series Analysis with Applications in R. Springer Texts in Statistics
	• Gujarati, D.N. (2008). Basic Econometrics. New York: McGraw-Hill
	• Pindyck, R.S. and Rubenfeld, D.S. (1991). Econometric Models and Economic Forecasts. New York: McGraw-Hill
	• Shumway, R.H. and Stoffer, D.S. (2011). Time Series Analysis and Its Applications with R Examples. New York: Springer Texts in Statistics
	Tzavalis, E. (2008). Econometrics, AUEB
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	**Game Theory & Strategic Decisions: with applications in Economics**
Course code	**m12106f**
Type of course	Compulsory
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)	7.5
Name of lecturer	GATSIOS KONSTANTINOS, Professor
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, *Strategies and Games, Theory and Practice*, MIT Press. Osborne, M: An Introduction to Game Theory, εκδ. Κλειδάριθμος. Gibbons, R: *A Primer in Game Theory*, 1992
Teaching methods	Lectures, assignments, laboratory sessions.
Assessment methods	75% Exams, 20% homework, 5% participation in the course
Language of instruction	Greek

2nd SEMESTER compulsory/ elective courses

Course title	**Corporate Finance**
Course code	m12107f
Type of course	Compulsory
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated (based on the student workload required to achieve the objectives or learning outcomes)	6
Name of lecturer	Pagratis Spyros, Associate Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Corporate Finance is one of the seven core courses of the program. Students taking this course should be able to: 1. Identify turning points in economic policy that could have a material impact on funding conditions and corporate decisions to access external financing.

	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.
	3. Value investment projects, conduct capital budgeting exercises, and identify factors that affect corporate decisions to access different forms of financing.
	4. Assess alternative ways of accessing capital markets.
	5. Identify issues of first-order importance that are relevant to corporate financing, combine them to make informed decisions and negotiate funding terms with financiers.
Prerequisites	The course *Capital Markets and Portfolio Management* is prerequisite.
Course contents	**Session 1. A primer on money creation in a modern economy** • Quantitative Easing (QE) and asset valuations. • Quantitative Tightening (QT) and capital market turbulence. A view to the future. • Long-term refinancing operations, targeted operations, credit easing, outright monetary operations (OMT) and the Covid-19 pandemic emergency programs. **Session 2. Capital Structure: Optimal debt-equity choice.** • Empirical patterns of corporate financing and possible explanations. • Types of financial instruments and markets. • Modigliani-Miller irrelevance proposition. An options-based approach to debt and equity valuations. The weighted average cost of capital (WACC) and WACC fallacies. • Capital structure under financial frictions. Taxes, financial distress costs and the static trade off (STO) in practice. • Debt-overhang: The underinvestment problem and the role of financial restructuring. • Equity capital raising and the mechanics of rights issues. • Incentives, asymmetric information, and the pecking-order of financing choices. **Session 3. Business plans: Risk, return, and free cash flow analysis** • WACC and the internal rate of return (IRR) in practice. • Data sources: Equity risk premium (ERP), marginal tax rates, sectoral betas and growth rates on operating income (EBIT).

	• Free cash flow analysis: Working capital, sunk costs, tax shields (amortization-depreciation and interest costs).
Recommended reading	*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 includes articles from business press (that students need to follow closely). These are optional but recommended to those students without prior exposure to finance. <u>Auxiliary textbooks:</u> 1. Jean Tirole. "The Theory of Corporate Finance", Princeton University Press. 2. Norelli A. and B. Merrill, "Quantitative Tightening: Many Moving Parts," J.P. Morgan Asset Management (Nov 2, 2017). Available at: https://blog.jpmorganinstitutional.com/2017/11/quantitative-tightening-many-moving-parts/ 3. McLeay M, Radia A., and R. Thomas, "Money creation in the modern economy," Bank of England Quarterly Bulletin (2014 Q1). Available at: https://www.bankofengland.co.uk/quarterly-bulletin/2014/q1/money-creation-in-the-modern-economy
Teaching methods	Lecturing will be supported by 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

Course title	**Econometric Applications in Economics and Finance**
Course code	**m12109f**
Type of course	Compulsory
Level of course	postgraduate
Year of study	1st
Semester/trimester	2nd

Number of credits allocated (based on the student workload required to achieve the objectives or learning outcomes)	6
Name of lecturer	**Dendramis I.,** Associate Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	1. To develop your capacity to understand characteristics of time series such as stationarity, cointegration, causality, time dependence. 2. To provide you with a stronger understanding in important topics in economics and finance such as risk and expected return. 3. To enlighten your insights on the benefits that modern econometrics offer on optimal decision making in economics and finance. 4. To give you hands-on experience in applying econometric techniques on economics and financial series, with the use of computational software. 5. To develop your powers in forecasting economics series with large datasets
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	1. Comprehensive Final Exam, Assignments
Language of instruction	Greek-English

Course title	**Business Finance and Strategic Business Decisions**
Course code	**m12103f**
Type of course	Compulsory
Level of course	postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated (based on the student workload required	6

to achieve the objectives or learning outcomes)	
Name of lecturer	Achilleas Vassilopoulos, Assistant Professor AUA
Objective of the course (preferably expressed in terms of learning outcomes and competences)	After successful completion of this course the students must have a good understanding of: • experimental design theory and applications • basic preference/choice model building • theory and econometric estimation of basic and advanced choice/preference models Furthermore, students are expected to obtain the necessary skills to : • use scientific software and develop codes independently, • collect, handle, and organize panels of choice data, • visualize data and extract features, • decompose and quantify the effect of attributes/characteristics on consumers' choices/preferences. • simulate and predict choices, demand and market shares. design data collection tools for the estimation of behavioral models
Prerequisites	Basic knowledge of concepts related to: • Economics: Utility Function, Utility Maximization • Statistics: Sample, Population, Distributions (Probability Distribution/Density Function), Probabilities • Econometrics: Linear Regression, Likelihood Function and Use of R and R-Studio: package installation and basic operations
Course contents	1. Experimental design of alternative products/services 2. Empirical models of decision making 3. Revealed preference discrete choice data analysis. 4. Stated preference data analysis. 5. Simulation of options/demand/market shares based on scenarios. Market segmentation, design of preference data collection tools
Recommended reading	Main reading: Lecture notes and academic papers discussed throughout the module. Supplementary readings include: • Ben-Akiva M, Lerman SR (1985). Discrete Choice Analysis: Theory and Application to Travel Demand. The MIT Press, MA, USA. • Hensher DA, Rose JM, Greene WH (2015). Applied Choice Analysis: A Primer. Second Edition, Cambridge University Press, Cambridge, UK. • Train KE (2009). Discrete Choice Methods with Simulation. Second edition. Cambridge University Press, NY, USA.
Teaching methods	• Weekly lectures (theory & hands-on),

	• Learning-by-doing approach.
Assessment methods	The final mark is obtained as (weights in squared brackets): • [10%] Weekly attendance • [50%] Weekly projects (essay and code), • [40%] Final written exams
Language of instruction	Greek/English

2nd SEMESTER Indicative list of Elective Courses

Course title	**Behavioral Economics**
Course code	**m12220f**
Type of course	Elective course
Level of course	postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated (based on the student workload required to achieve the objectives or learning outcomes)	6
Name of lecturer	Dioikitopoulos E, Associate Professor in Economics
Objective of the course (preferably expressed in terms of learning outcomes and competences)	After successful completion of this course the students must have understood behavioural game theory, design of economic experiments, analysis of consumer behavior at the micro and macro level and analytical methods for understanding and predicting individual and social behavior. Also, studentσ will get the analytical tools of applying the aforementioned learning outcomes on economics, business, finance and marketing.
Prerequisites	…………………………………..
Course contents	This course examines the role of systematic bias in the financial decisions of businesses and individuals, such as pricing and consumption decisions. The analysis is done first on a theoretical level through the construction of models and then through the construction of experiments and econometric analyzes. More specifically, the course focuses on biases such as overconfidence, naivety, aversion to loss, aversion to uncertainty, the Placebo phenomenon, reciprocity, the architecture of choices, the attachment to reference points, reputation mechanisms, the pursuit of social status and the cultural dimensions of human behaviour. Finally, we will develop analytical and quantitative behavioural tools to explain the behaviour of microeconomic and macroeconomic variables and we will

	extend the analysis to different subfields such as behavioral industrial organization, marketing, economic policy, finance and business.
Recommended reading	1. C. F. Camerer. 2003. Behavioral game theory: Experiments in strategic interaction. Russell Sage Foundation.
	2. D. Kahneman 2011. Thinking, Fast and Slow. Farrar, Straus and Giroux.
	3. O. Galor, 2011. Unified Growth Theory. Princeton University Press
	4. C. Gaganis, I. Hasan, and F. Pasiouras 2017 The effect of board directors from countries with different genetic diversity levels on corporate performance (with). \textit{Management Science} 63 231-249.
	5. E. Dioikitopoulos, S. Turnovsky and R. Wendner 2020 Dynamic Status Effects, Savings and Income Inequality ", International Economic Review.
	6. S. Jaikumar and A. Sarin 2020 Conspicuous consumption and income inequality in an emerging economy: evidence from India, Marketing Letters.
	8. B. Enke, A. Falk, A. Becker, T. Dohmen, D. Huffman, and U. Sunde, 2018 Global Evidence on Economic Preferences. Quarterly Journal of Economics, vol. 133(4), pp. 1645-1692.
	9. B. Enke, 2019, Kinship, Cooperation, and the Evolution of Moral Systems,Quarterly Journal of Economics} , vol. 134(2), pp. 953-1019.
	10. S. Georganas, M. Sutter and T. Alysandratos, 2020. Driving to the Beat: Reputation vs Selection in the Taxi Market. Disentangling reputational from self-selection effects in credence goods markets. A field experiment in Athens, working paper.
Teaching methods	Lectures and Labs.
Assessment methods	Individual Essays and a Final Exam.
Language of instruction	Greek/English

Course title	**Large Data and Statistical Learning**
Course code	**m12210f**
Type of course	Elective course
Level of course	postgraduate
Year of study	1st
Semester/trimester	2nd

Number of credits allocated (based on the student workload required to achieve the objectives or learning outcomes)	6
Name of lecturer	**Fotis Papailias,** Professor at King's Business School, King's College London, UK
Objective of the course (preferably expressed in terms of learning outcomes and competences)	After successful completion of this course the students must have a good understanding of: • computational inference, • time series forecasting, • data features (seasonalities, nonstationarities, etc.), • how machine learning methods work (supervised and unsupervised machine leaning). Furthermore, students are expected to obtain the necessary skills to be able to: • use scientific software and develop codes independently, • collect, handle, and organise large panels of data, • visualise data and extract features, • apply machine learning techniques in practice and interpret the output in economic and finance applications.
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	Main reading: supplied material. Supplementary readings include: • James, G., Witten, D., Hastie, T., Tibshirani, T. (2013). An Introduction to Statistical Learning with Applications in R. Springer, New York.

	• Hyndman, R.J., Athanasopoulos, G. (2019). Forecasting: Principles and Practice, 3rd Edition, OTexts: Melbourne, Australia. • Sheppard, K. (2020). Financial Econometrics Notes. University of Oxford. And various academic papers discussed throughout the module.
Teaching methods	• Weekly lectures (theory & hands-on), • Weekly tutorials (theory & hands-on) • Learning-by-doing approach.
Assessment methods	Weights in squared brackets. • [10%] Weekly Assignments, • [30%] Project 1 (essay and code), • [30%] Project 2 (essay and code), • [30%] Final Exam.
Language of instruction	English (occasional use of Greek).

Course title	**Banking and Risk Management**
Course code	**m12212f**
Type of course	Elective course
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated (based on the student workload required to achieve the objectives or learning outcomes)	6
Name of lecturer	Sakellaris Ploutarchos, Professor, Dept. of Economics
Objective of the course (preferably expressed in terms of learning outcomes and competences)	By the end of the course, the students should be able to: • master the fundamentals of risk management (except for credit risk management) as well of compliance to bank regulatory procedures. • Identify and measure risk exposure for a FI, applying methods such as Value-at-Risk (VaR) and Expected Shortfall. Understand and implement hedging strategies to offset portfolio and asset risk positions using derivative instruments such as futures, forwards, options, and swaps.
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), 6th edition, 2023. Anthony Saunders, Marcia Cornett and Otgo Erhemjamts, Financial Institutions Management: A Risk Management Approach, McGraw Hill, 10th edition, 2021. Steve Allen, Financial Risk Management: A Practitioner's Guide to Managing Market and Credit Risk (Wiley Finance), 2nd 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	**m12219f**
Type of course	Elective course
Level of course	Postgraduate
Year of study	1st
Semester/trimester	2nd
Number of credits allocated (based on the student workload required to achieve the objectives or learning outcomes)	6
Name of lecturer	**Topaloglou Nikolaos**, Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The aim of this course is to introduce students to the theoretical and practical aspects of financial derivatives.

	• Specifically, the course examines the pricing and use of financial derivatives including options, forward contracts, futures contracts, swaps and credit derivatives. • The course will extensively focus on the theory and applications of derivatives in speculation and risk management. • Moreover, the course includes a computational demonstration of the pricing models with excel.
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	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

Coursetitle	**Corporate governance**
Coursecode	**m12221f**
Type of course	Elective course
Level of course	postgraduate
Year of study	1st

Semester/trimester	2nd
Number of credits allocated (based on the student workload required to achieve the objectives or learning outcomes)	6
Name of lecturer	Zacharias El., Assistant Professor, Dept of Economics
Objective of the course (preferably expressed in terms of learning outcomes and competences)	After successful completion of this course the students must have understood The problems that may arise from the distinction between business ownership and management. The role of the board of directors The ways of monitoring the decisions of business executives. The corporate governance systems in different countries.
Prerequisites	-
Course contents	In the course we analyze the principles of corporate governance that guarantee the operation of firms in the best interests of their shareholders. This can be done by the alignment of incentives of executives with those of the shareholders. We examine the structure and the role of the board of directors, the compensation schemes of the business executives, and the internal and external control mechanisms of firms. We also examine the alternative corporate governance schemes in different countries. Finally, we examine issues of corporate social responsibility and sustainability.
Recommended reading	J. Tirole, "The Theory of Corporate Finance", Princeton University Press. C. A. Mallin, "Corporate Governance", Oxford University Press. B. Tricker, "Corporate Governance Principles, policies and practices", Oxford University Press.
Teaching methods	Lectures
Assessment methods	Mid Term, Final, Paper Assignment
Language of instruction	Greek/English

PART III: INFORMATION FOR THE STUDENTS

Athens University of Economics and Business provides not only high-quality education but also high-quality 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 https://lesxi.aueb.gr/

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 Electronic Secretariat 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. https://www.aueb.gr/en/content/wi-fi-connection

• 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 of 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 here https://www.aueb.gr/en/content/health-care .

Services/Facilities to Students with Special Needs
Athens University of Economics and Business ensures the facilitation of students with special needs for access to the university buildings through ramps, lifts and other equipment. There are also specific exam regulations 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 https://www.aueb.gr/en/lib/content/users-additional-needs .

Student Financial Aid – Scholarships and Awards
Athens University of Economics and Business offers scholarships to undergraduate and graduate students in order to support them and to award and encourage excellence. The resources for these scholarships come from the Institution itself or from partnering organizations. More information about scholarships, according to the level of studies, can be found here https://www.aueb.gr/en/content/scholarships .

Studies Advisor
The Studies Advisor is an institution established with the purpose of informing, discussing,

and advising students regarding:

- the structure of the content of the courses so that they are aware of issues such as prerequisite courses, knowledge required to attend specific courses, attend tutorials, participate in tutorials, workshops, and progress, with the aim of better understanding and successful participation in exams,
- the content of elective courses with the aim of choosing the courses that are closest to the student's personal and academic interests,
- the results of the exams,
- the continuation of their studies both in Greece and abroad,

- their professional prospects and their connection with the labor market during their studies (practice), but also after they have finished.
- Any other issue raised by the student that may be related to or affect his studies.

Library and Study Rooms

The Library & Information Center of the University was established in 1920 and operates on the first and second floor of 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 (DIOB).

Three Documentation Centers operate within the library:

- The European Documentation Center (KET) since 1992,
- The Organization for Economic Cooperation and Development (OECD) Documentation Center since 1997,
- The Delegation Center of the World Tourism Organization (WHO) hosting publications since 2004.

The library contributes substantially both to meeting the needs for scientific information of the academic community and to supporting studying and research of students. This objective is achieved through the unified organization of collections and the coordination of the services provided. The library provides access to:
- Its printed collection of books and scientific journals,
- Course books used in classes,
- Its collection of electronic scientific journals
- Its collection of e-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)
- Collection of official government publications of the European Union, the OECD and the WCO
- Databases on the issues adopted 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 can be found here https://www.aueb.gr/en/library .

International Programmes and Information on International Student Mobility

Athens University of Economics and Business is actively involved in the Erasmus+ Program by 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 https://www.aueb.gr/en/erasmus

Foreign Language Courses

Knowledge of foreign languages is a necessity in today's educational and professional context. The Student Club offers opportunities of attending foreign language classes. Classes are held in English, French, German, Spanish, Italian and Russian, and new language seminars are available upon request. More information can be found here https://www.aueb.gr/en/content/foreign-languages-university-student-club .

Connections with the Job Market and Entrepreneurship

DASTA AUEB (https://www.aueb.gr/en/dasta) is the University's Employment and Career Unit that plans, coordinates, and implements actions related to:
  a) Entrepreneurship and innovation
  b) Connecting students and graduates with the labor market
  c) Connecting the academic community with businesses
  d) Offering internships, and
  e) Supporting dissemination of research output.

Athletic Activities

Students can participate in individual and team sports activities through the Department of Physical Education, which is staffed by university personnel, as well as a number of part-time instructors specialized in various sports. The University cooperates with the City of Athens Culture, Sports and Youth Organization and uses public and private sports facilities. More information can be found here https://www.aueb.gr/el/content/athlitikes-drastiriotites

Cultural Activities

To fulfill its purpose of providing a multidimensional study experience at AUEB, the Student Club organizes various cultural activities, such as theater, traditional dance, choir, photography, cinema, rhetorical club and Model Of United Nations (MUN). More information can be found here https://www.aueb.gr/en/content/cultural-activities

Student Organizations and Clubs

Various student organizations and clubs are active within the AUEB community, including AIESEC, Erasmus Club, Investment Club, Entrepreneurship Club ThinkBiz, and other. More information can be found here https://www.aueb.gr/en/content/student-clubs

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 of the fact 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 where all graduates of the University can register. The main goals 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 here https://alumni.aueb.gr/en

Volunteer Program

AUEB's Volunteer Program was launched in September 2017 and since then has brought more than 450 volunteers to for-impact organizations around Athens, implementing more than 50 volunteer activities. The aim of "AUEB Volunteers" is to give the chance to the members of university's community, i.e. students, faculty and administrative staff, to experience volunteering so as to highlight the value of participation and contribution to society and the university, as well as to sensitize more citizens about crucial social issues. More information can be found here   https://auebvolunteers.gr/english-intro/

Quality Assurance

Athens University of Economics & Business implements a quality assurance policy in order to continuously improve the quality of its educational programs, research activities and administrative services, and upgrade the academic and administrative processes and the University's overall operations. The Quality Assurance Unit (MODIP) coordinates and supports all related activities including the administration of the University-wide teaching and course evaluation process by students across all programs. More information can be found here https://aueb.gr/modip .

Training and Lifelong Learning Center

The Center for Education and Lifelong Learning (KEDIVIM / AUEB) ensures the coordination and interdisciplinary cooperation among all University entities in the development of continuous education programs, which complement and upgrade the skills and competences of the program participants. These programs build on participants earlier formal education, vocational training and professional experience. The aim is to facilitate job market integration, career and personal development. More information can be found here https://www.aueb.gr/en/content/kedivim-opa