ATHENS UNIVERSITY OF ECONOMICS

AND BUSINESS

POSTGRADUATE PROSPECTUS FOR THE MASTER'S PROGRAMME IN

Business Economics with Analytics

Department of Economics
School of Economic Sciences

Director: Associate Professor, S. Pagratis

ATHENS, OCTOBER 2023

PART I: INFORMATION ABOUT THE INSTITUTION

CONTACT INFORMATION

ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS (AUEB)
Address:76, Patission Str. GR-10434, Athens
Telephone number: +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://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, 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 Business Economics with Analytics
Director Associate Professor Spryros Pagratis
Contact details
Address: 47A Evelpidon Str. & 33 Lefkados Str., Athens, GR 11362
9th floor, Office No: 909
Telephone number: (+30) 210 8203649
Email: business.econ@aueb.gr
Website: **www.dept.aueb.gr/business-economics**

LinkedIn: MSc in Business Economics with Analytics | LinkedIn
Facebook: ΠΜΣ Επιχειρηματική Οικονομική με αναλυτικές μεθόδους ΟΠΑ | Athens | Facebook
Instagram: MScBusinessEconomics (@businesseconomicsopa) • 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.

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.

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**

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 curricula and corresponding specializations which lead to an undergraduate degree:

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 Undergraduate Prospectus and on its 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 TWO: Information about the Master's Programme in Business Economics with Analytics

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, 9[th] floor, office no. 909
Monday to Friday, 10:00-18:00

Telephone: +30 210-8203649

Email: business.econ@aueb.gr

Webpage: https://www.dept.aueb.gr/en/business-economics

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

Description of the Programme – Who is it designed for?

The Master's Programme entitled "Business Economics with Analytics" was established by the 16 June 2020 decision of the University Senate. The Programme is governed by the relevant provisions of Greek law, the Programme's Studies Regulations which were prepared pursuant to the decision of the Department's General Assembly on 3 June 2020, and relevant decisions of the University Senate.

The Master's Programme **is designed for** graduates of Greek universities or technological educational institutions or corresponding foreign institutions (which have been recognized by the Hellenic National Academic Recognition Information Center) with degrees in Economics or other related disciplines (Finance, Business Administration, Marketing, and others) as well as in disciplines such as Engineering, Mathematics, Physics, Statistics, Informatics, and others.

The objective of the Master's Programme in **Business Economics with Analytics** is to offer its students the necessary education in contemporary methods of economic science that are based on econometric and data analysis methods in business economics with analytics. This education covers the professional and research needs and the orientation of the Programme's graduates in either businesses or organizations (public or private) in Greece or abroad. In recent years, the needs have increased – especially in the Greek Economy and the labor market – for the use by economists of econometric methods based on data analysis tools and computational methods, both in the area of analysis as well as in issues of economic policy. This Programme aims to fill this need, offering the Greek economy, primarily, the above-described education, supported by the high-level academic staff of the Department of Economics.

Why choose this programme?

1. The Master's Programme in Business Economics with Analytics helps its students to "build" valuable skills by teaching them how to apply basic elements of statistics to real business problems and how to turn data into a strong strategic advantage.
2. It is among the most contemporary master's programs offered by the AUEB Department of Economics, having been established very recently, in 2020. The Programme aims to train economists in matters of business economics and business and market strategy, **based on the most up-to-date quantitative and analytical methods**, in a way that will enable them to respond to the present-day demands of businesses and the needs of the Greek economy.
3. The teaching staff of the Programme is composed of professors at Athens University of Economics and Business and other Greek and foreign educational institutions with rich teaching and research experience and publications in international scientific journals.
4. Distinguished executives from the labor market participate in lectures, sharing their experience and knowledge with the students.

Career options

Professional Horizons and Employment of Graduates

Economic Consultant
Economic consultants use analytical and research skills to conduct studies of alternative economic scenarios. They analyze trends in industry, in commerce and in the markets in order to help businesses to improve their performance. They can be employed in industry and education, in businesses, in governmental and non-governmental organizations, and elsewhere.

Economic consultants may also serve as expert witnesses in legal cases to assess economic damages, to analyze intellectual property rights and antitrust violations, to address regulatory violations in the context of supervising authorities (central banks, competition commission, regulatory authorities for energy and telecommunications).

Strategist
Strategy is vital to the growth and success of a business. In large companies, strategic planners are involved in shaping and implementing the organization's strategy. Strategic analysts use information and data – and, depending on the circumstances, artificial intelligence – to make decisions to achieve the desired results. They are also in a position to create a sustainable commercial advantage, applying innovative and quantified ideas. Strategic analysts maximize the value per customer by recognizing highly relevant products and sales offers for prospective and current buyers. They approach customers through alternative channels and increase the productivity of advertising and marketing media through artificial intelligence.

Credit Analyst
Credit analysts conduct microeconomic analyses of prospective clients to assess the risks involved in lending capital to them or to businesses. They consider economic trends and factors which affect the region, the industries, and the competitors of the potential borrowers.

Credit analysts prepare reports which summarize their findings and recommend interest rates which are appropriate for the risk profile of the clients.

Financial Analyst
Financial analysts can be employed in the research departments of companies, in financial companies which invest in and analyze stocks, derivatives, bonds and other investment instruments. Their analyses often require advanced quantitative and econometric skills.

These analysts often use computing software and models to aid in their analyses. They write reports and prepare presentations for colleagues and clients who make the final decisions about investments, stock/bond offers and mergers and acquisitions.

Market Research Analyst
Market research analysts study the trends in industry, in commerce and in the financial sector to assess the way in which products or services could perform under different economic conditions. They are trained in designing studies and analyzing data. They must be able to quantify the results and to present this information to the clients.

These analysts apply many of the skills that they develop in the core economics courses, such as the use of presentation and graphics software, as well as writing and statistics skills. They must exercise critical thinking and be proficient in problem solving.

Management Consultant
Management consultants analyze business problems and look for possible solutions to present to clients. Recent graduates often start out in positions such as research analyst, research assistant, or junior consultant, where they support the work of personnel who are more senior in the hierarchy. Over time they can be promoted to positions such as management consultant.

The study of economics provides an excellent foundation in the financial and quantitative modeling which is used by consultants to carry out their analyses. Writing and presentation skills are also essential for the preparation of reports and the submission of recommendations to clients.

Policy Analyst
Policy analysts research and analyze issues that affect the public. They can be employed as advisers in governmental and international organizations in areas such as healthcare, taxation, energy, the environment, and international trade policy.

Policy analysts rely on quantitative analysis and writing skills to present their findings and to convince legislators and the public of the viability of their recommendations.

Actuary
Actuaries use advanced mathematical and statistical/econometric methods to determine the probability of events such as fires, deaths, illnesses, and business failures. They need to take into account a large number of variables when analyzing risk profiles and possible economic losses in order to create a profitable structure for contracts.

Actuaries often use software to assist in their analyses. They devise graphs to convey their decisions to members of the management team.

✓ Academic degree awarded

The Master's Programme awards a **Master's Degree (MSc)** in Business Economics with Analytics.

✓ Entrance requirements – Selection criteria

To the MSc in Business Economics with Analytics 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 "Business Economics with Analytics" 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

The priority of the **Master's Programme in Business Economics with Analytics** is to offer its students the necessary education in contemporary methods of economic science that are based on econometric and data analysis methods in business economics with analytics. This education covers the professional and research needs and the orientation of the Programme's graduates in either businesses or organizations (public or private) in Greece or abroad. In recent years, the needs have increased – especially in the Greek Economy and the labor market – for the use by economists of econometric methods based on data analysis tools and computational methods, both in the area of analysis as well as in issues of economic policy. This Programme aims to fill this need, offering the Greek economy, primarily, the above-described education, supported by the high-level academic staff of the Department of Economics.

The objectives of the Programme are:

- To prepare students to be able to deal with problems in the economy, the markets, and businesses, as well as in organizations, by providing them with solid foundations in the theory and application of economic analysis using analytical and computational methods, as well as with communication and collaboration skills.

- To apply the scientific knowledge provided, with special emphasis on the use of appropriate contemporary methods and analytical tools in teaching.
- To cultivate an entrepreneurial and innovative perspective through the organization of lectures by prominent business executives.
- To follow research developments in the field of economics at the international level, through the organization of lectures and presentations by distinguished scientists.
- To follow and analyze economic developments in Greece and the world through seminars and lectures provided by executives in the business world.
- To contribute to the modernization, know-how and development of the Greek economy, and to improve the competitiveness of the country, through the development of the skills and knowledge of the Programme's students with regard to new methods and practices in economic analysis.

✓ Access to further studies

Graduates of the Programme have access to the third cycle of studies, according to the Studies Regulations of the Doctoral Programme of the Department. 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 into 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 "Business Economics with Analytics" 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:

- seven compulsory courses, four of which are taken in the first semester of studies and have 7.5 ECTS credits each, and two of which are taken in the second semester and have 6 ECTS credits each;
- three elective courses taken in the second semester, which have 6 ECTS credits each; and
- 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 microeconomic theory	0
Introduction to statistics	0

First Semester	ECTS credits
Industrial Organization and Strategy	7.5
Market Analysis and Portfolio Management	7.5
Quantitative Methods	7.5
Analytical & Computational Data Methods for Economists	7.5
Total credits for 1st semester	**30**
Second Semester	
Econometrics Applications in Economics and Finance	6
Applications of Analytical Methods in Business Finance & Strategy	6
Elective course 1 *	6
Elective course 2 *	6
Elective course 3 *	6
Total credits for 2nd semester	**30**
Third Semester	
Master's Dissertation	30
Total 3rd Semester credits	**30**
TOTAL ECTS CREDITS FOR THE PROGRAMME	**90**

* Below is an indicative list of elective courses offered:

a. Game Theory & Strategic Decisions with applications in Economics
b. Banking Administration and Risk Management
c. Corporate Finance
d. Behavioral Economics
e. Financial Derivatives
f. Business Finance and Strategic Business Decisions

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.

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

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) Individual course descriptions

Preparatory Courses

Course title	**Introduction to Microeconomic Theory**
Course code	**m13202s**
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 analyses 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 take into account 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	**m13201s**
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	0

achieve the objectives or learning outcomes)	
Name of lecturer	**Vrontos I.** Asssistant 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 in order 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	**m13103f**
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	**m13104f**
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	**m13105f**
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 (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	• 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	**Analytical & Computational data methods for Economists**
Course code	m13106f

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	Alexopoulos A., Assistant Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	After the successful completion of this course the students will have the knowledge to identify linear and non-linear patters in economic data and to choose or combine appropriate methods for its analysis and management. Students will be able to understand and explain the results of these methods and extract useful findings to support decisions. By applying the analytical and computational methods discussed in the course, students will have also the ability to design and implement integrated methodological approaches for the structuring, analysis, and exploration of economic data by developing their own code. Finally, students will be able to evaluate and compare the performance of the developed methods and make critical conclusions.
Prerequisites	Basic knowledge of statistics and computer programming.
Course contents	The course focuses on applied econometrics and computational methods that can be used for the effective analysis and management of economic data. The R Project for Statistical Computing is used for applying these methods and techniques in practice. The course covers the following topics: applications on descriptive statistics, explanatory data analysis and basic diagrams, econometric methods for linear and non-linear data, linear regression, logistic regression, principal component analysis and clustering, analysis of panel data by using time series regression models, factor models and forecasting, decision trees, neural networks and deep learning.
Recommended reading	• James, G., Witten, D., Hastie, T. & Tibshirani, R. (2013). An Introduction to Statistical Learning with Applications in R, Springer. • Abhijit, G. (2017). Machine Learning with R, Springer. • Hastie, T., Tibshirani, R. & Friedman, J. (2001). The Elements of Statistical Learning, Springer. • Hyndman, R.J., & Athanasopoulos, G. (2018) Forecasting: principles and practice, 2nd edition, OTexts: Melbourne, Australia. OTexts.com/fpp2.
Teaching methods	Class lectures, laboratory exercises - assignments, literature review and analysis, project preparation, writing of reports and independent study.
Assessment methods	Written exam at the end of the semester (70%), project preparation (30%).
Language of instruction	Greek

2nd Semester Compulsory Courses

Course title	**Econometrics Applications in Economics and Finance**
Course code	**m13107s**
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	**Applications of Analytical Methods in Business Economics & Strategy**
Course code	m13108s
Type of course	Compulsory 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
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: • Large data features (seasonalities, nonstationarities, etc.), • how machine learning methods work (supervised and unsupervised machine leaning) and could be applied to macroeconomics and finance applications, • various methodologies to predict financial distress, • portfolio optimization, • investment strategies. 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 economics and finance applications, • build methodologies to predict financial distress, • optimise portfolios • design investment and trading strategies from scratch.
Prerequisites	No formal pre-requisite, a basic level of maths/stats and econometrics is required.

Course contents	The course is divided in two parts: (i) Part I is concerned with analytical methods in economics focusing more on macroeconomics, portfolio selection and financial distress, and (ii) Part II is concerned with portfolio optimisation and investments. The first part of the course is designed to introduce students to the concepts of large data handling and analysis with machine learning techniques. We discuss large data handling techniques and discuss its features (seasonalities, nonstationarities). We discuss machine learning methodologies (k-means clustering, principal component analysis, lasso, etc.) could be applied in economics and finance and provide macroeconomic and portfolio selection applications. Finally, we extend the list of our topics and discuss how to use methodologies to predict financial distress (Z-score, O-score and top-down approaches). The second part of the course is designed to give students a basic understanding of applied portfolio optimisation, investment strategies and signal extraction. Both parts of the course have a "hands-on" approach where all methods are 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. • Würtz, D., Setz, T., Chalabi, Y., Chen, W., Ellis, A. (2015). Portfolio Optimization with R/Rmetrics. Rmetrics Association and Finance Online Publishing, Zurich. • Xidonas, P., Mavrotas, G., Krintas, T., Psarras, J., Zopounidis, C. (2012). Multicriteria Portfolio Management, Springer, New York. 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, [45%] Project 1 (essay and code), [45%] Project 2 (essay and code)
Language of instruction	English/Greek

2nd Semester (Indicative list of elective courses)

Course title	**Game Theory & Strategic Decisions: with applications in Economics**
Course code	**m13209f**
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 Eleftherios, Assistant Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The course offers the appropriate tools for the analysis of economic phenomena in which economic agents interact.
Prerequisites	Only basic knowledge of economics and mathematics is required.
Course contents	The strategic decision-making of economic units (individuals or firms) when they interact with others is examined. More specifically, the course analyzes the way in which factors such as the amount of available information, the time horizon and the sequence of actions influence strategic decision-making.
Recommended reading	Dutta, P. K., *Strategies and Games, Theory and Practice*, MIT Press. Osborne, M., An Introduction to Game Theory, Κλειδάριθμος. Gibbons, R., *A Primer in Game Theory*, Gutenberg. Σταματόπουλος Γ., Θεωρία Παιγνίων, Κάλλιπος.
Teaching methods	Lectures, assignments.
Assessment methods	80% Exams, 20% assignments
Language of instruction	Greek

Course title	**Business Finance and Strategic Business Decisions**
Course code	m13219f
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	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 behavioural 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.

	6. 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

Course title	**Behavioral Economics**
Course code	**m13214f**
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)	**Learning outcomes include the application of knowledge to study:** • Macroeconomic Indicators of Countries. • Inflation expectations and analysis of bankers' statements. • Individuals financial decisions. • Irrational behaviour and behavioural biases. • Historical determinants of preferences using knowledge from various sciences such as psychology, engineering, anthropology and biology.

	• Consumer behaviour analyzing review scores on Airbnb/Booking.com. • Extracting humans preferences by collecting and analyzing data from IMDB, Netflix, Spotify, and Google Trends. **What practical, technical knowledge and soft skills can be added to the resume after successfully completing the course:** • Web-Scraping • Text Analysis • Econometrics Analysis on countries and individuals • Clustering Standard Errors • Mediation Analysis • Instrumental Variables • Visualization Tools: Choropleth Maps, Dropdown Menus • Construction of Online Questionnaires • Presentation Skills Practical Evidence of Innovation and Creativity
Prerequisites	…….
Course contents	The first part of the course focuses on behavioural theory, which includes decision theory, behavioural game theory with empirical applications in economics and business. There will be an overview/revision of the fundamentals of behavioural microeconomics. In the course of this, students will be participating in actual experiments through surveys and online games. Applications will include, among others, the behaviour of drivers under deferent reputation mechanisms (based on a field study with Beat and Uber in Athens), the effectiveness of Covid-19 lockdown measures based on the behaviour of individuals using data from google mobility data and experimental evidence, and applications in auctions and company takeovers. The second part of the course focuses on quantitative behavioral macroeconomics with applications in economics, business and finance. This part of the course aims to enhance students background with the deep cultural routes of contemporary human behavior. This course combines knowledge from interdisciplinary quantitative research studies such as business, engineering, psychology and anthropology. Among others, applications will include scrapping people preferences data from google, twitter and facebook using R, explaining the rise of the experiences economy (important category in AirBnb), and the importance of culture on the consumption of luxury goods, on savings rate, CEOs firm decisions and investors decisions on stock market participation.
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	Each week's material will be covered in three hours of lectures.
Assessment methods	Assessment will be: 10% Weekly/Bi-Weekly Problem Sets (Individual Work), 30% Teamwork and Presentation, 60% Final Examination.
Language of instruction	Greek/English

Course title	**Banking and Risk Management**
Course code	m44108s
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	m44107s
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

Course title	**Corporate Finance**
Course code	**m12107f**
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	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 incudes articles from business press (that students need to follow closely). These are optional but recommended to those students without prior exposure to finance. Auxiliary textbooks: 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

PART III: INFORMATION FOR THE STUDENTS

GENERAL 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