

SCHOOL OF INFORMATION SCIENCES AND TECHNOLOGY

DEPARTMENT OF STATISTICS

MSc. in
INSURANCE AND FINANCIAL RISK ANALYTICS

STUDY GUIDE
ATHENS, ACADEMIC YEAR 2026-27

PART I: INFORMATION ABOUT THE INSTITUTION

CONTACT DETAILS (Name & Address)

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 Vasilios Vasdekis

Vice Rectors:

Vice Rector of Academic Affairs and Personnel
Professor Leonidas Doukakis

Vice Rector of Research and Lifelong Learning
Professor Georgia Siougle

Vice Rector of Financial Planning and Infrastructure
Associate Professor Eleanna Galanaki

Vice Rector of International Cooperation and Development
Professor Nancy Pouloudi

School of Information Sciences and Technology
Dean: Professor Vasiliki Kalogeraki
School of Business
Dean: Associate Professor Angeliki Poulymenakou

Department of Statistics *(supervising department)*
Chair: Professor Stylianos Psarakis
Department of Accounting and Finance
Chair: Professor Georgios Chalamandaris

Master's Program
Director: Professor Athanasios Yannacopoulos

Contact details
Address: 47A Evelpidon & 33 Lefkados Street, Athens, 113 62, Greece
Telephone number: +30 210 82 03 681
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Website: https://aueb-analytics.wixsite.com/msc-stats/

ACADEMIC CALENDAR

FALL SEMESTER

Classes begin:	October 5, 2026
Christmas Holidays:	December 24, 2026 - January 6, 2027
Classes end:	January 12, 2027

Exam period

Start of Exams:	January 18, 2027
End of Exams:	February 2, 2027

Holidays
October 28, 2026
November 17, 2026
January 30, 2027

SPRING SEMESTER

Classes begin:	1st year: February 9, 2027 2nd year: February 8, 2027
Easter Holidays:	April 26, 2027 – May 9, 2027
Classes end:	1st year: June 3, 2027 2nd year: June 2, 2027

Exam period

1st year:	April 12-22, 2027 & June 10, 2027
2nd year:	April 14-21, 2027 & June 9, 2027

Holidays
March 15, 2027
March 25, 2027
May 1, 2027
June 21, 2027

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

UNIVERSITY STAFF

The University staff consists of the following categories:

- TEACHING STAFF:

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

- **ADMINISTRATIVE STAFF**

SERVICES

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

GENERAL DESCRIPTION OF THE UNIVERSITY

The Athens University of Economics and Business (AUEB), as a Higher Educational Institution, is a legal entity governed by public law and supervised by the Ministry of Education, Research and Religious Affairs.
AUEB is, in order of seniority, the third Higher Education Institution of the country and the first in the fields of Economics and Business Administration. Later, the scientific fields of Informatics and Statistics were added. Since its founding, in 1920, AUEB has a rich and noteworthy tradition of significant academic achievements that define the present and create excellent prospects for the future.

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

Chief Regulations of the University (including academic recognition procedures)

The regulations include, for example:

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

AUEB'S ECTS COORDINATOR

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

PART II: INFORMATION ON DEGREE PROGRAMS

(A) General Description

Qualification awarded

The Postgraduate Program awards a **Master Degree in Insurance and Financial Risk Analytics.**

Admission requirements

The program accepts university graduates, from Greek or non-Greek higher education institutions that have been recognized from the Hellenic NARIC organization (DOATAP), according to the law 4485/2017 (article 34). Applicants that have not yet graduated from their universities' must submit a solemn statement of Law No. 1599/86 that if selected for the MSc program, they will have completed their undergraduate studies until the forthcoming September.

Admission criteria/Registration Procedure

The program accepts university graduates, from Greek or non-Greek higher education institutions that have been recognized from the Hellenic NARIC organization (DOATAP), according to the law 4485/2017 (article 34).
Foreign students must have proficient knowledge of the Greek language (they must either have graduated from the Hellenic high school (lyceum) or have a GAT Greek language certificate).
The program accepts up to twenty three (23) students per year.
Applicants selection is made according to the provisions of the Law No. 4485/2017 and the program's Academic Regulations as published in the Governmental Gazette No. 3601 B' (24-8-18).
The Following documents must be submitted with the application, as indicated in the official call for applications:

1. Online application form http://e-graduate.applications.aueb.gr
2. Curriculum Vitae
3. Copies of all University Degrees / Diplomas and Official Transcripts of marks received. Applicants that have not yet graduated from their universities' must submit a solemn statement of Law No. 1599/86 that if selected for the MSc program, they will have completed their undergraduate studies until the forthcoming September.
4. Certified copy of the English language certification verifying good command of the language (at least level B1.
5. Two confidential recommendation letters.
6. For non-Greek university degrees recognition by the Hellenic National Academic Recognition Information Centre (DOATAP) is required according to the Law No. 4485/2017 art. 34.

The applicant's evaluation process has as follows:

a) The Admissions Committee compiles a table of all applicants

b) Rejects all applicants that do not meet the minimum prerequisites that have been set by the Departmental Assembly.
c) Calls all eligible applicants for a personal interview with at least two members of the Admissions Committee.
d) Ranks all applicants according to the above mentioned quantitative and qualitative criteria and selects the ones that will be accepted.
e) The final list of accepted applicants is validated by the Departmental Assembly.

Educational and professional goals

The Postgraduate Program in **Insurance and Financial Risk Analytics** aims to provide specialized postgraduate knowledge to graduates of Greek and recognized foreign universities in the key areas of Actuarial and Financial Risk Management with emphasis on Quantitative Methods.

The program focuses on the following scientific fields (1) Stochastic and statistical modeling of financial, insurance and actuarial risk (2) Risk management techniques (3) Selection techniques of financial and insurance portfolios.

The purpose of the Program is the training of part-time postgraduate students in the quantitative and statistical analysis of financial and actuarial data and the development of modern techniques regarding the assessment / forecasting of business risks in financial and insurance-actuarial products. In particular, the Program aims to:

• The creation of specialized scientists in the above fields

• The promotion of the University internationally and to the development of cooperation networks with the international scientific community within the framework of the opportunities offered at the European level and worldwide.

• To the interconnection of academia and the educational process with the needs of the market and the economy in general.

Access to further studies

Access to the PhD Program – 3rd Cycle.

Course structure diagram with credits:

The course structure diagram with credits for the Academic Year 2026-27 is defined as follows:

1st Semester *(each student selects all three **(3)** courses)*	**ECTS**
Probability and Applications using Computational Techniques	5
Statistics and Applications using Computational Techniques	5
Financial Markets and Corporate Finance	5

2nd Semester *(each student selects all three **(3)** courses)*	
Optimization Techniques and Portfolio Theory	5
Linear Models and Time Series Analysis	5
Stochastic Processes and Derivative Markets	5
3rd Semester *(each student selects all three **(3)** courses)*	
Financial Econometrics	5
Financial Mathematics with Computational Applications	5
Life Insurance – General Insurance	5
4th Semester *(each student selects all three **(3)** courses)*	
Insurance Risk Management - Solvency II	5
Credit and Financial Risk Management	5
Topics in Insurance and Finance: Introduction to Lévy processes & Applications and Machine Learning in Risk Management	5
5th Semester	
MSc Thesis	30
Total	**90**

Examination and assessment regulations

The final grade of each course is determined by the respective teachers. The degree may involve individual and group work of students. Participation in the exams on the specific date announced according to the exam schedule is mandatory.

The rating scale is set from zero (0) to ten (10), with grades of the whole or half unit. Leading points are the five (5) and the highest.

Each student can take exams in courses that failed during the September exam period. If a student fails in the September exam then he is entitled to be examined in the next exam of the course and in case of failure he is deleted from the program taking only one certificate of attendance.

To receive the degree must have a promotional degree in all postgraduate courses and a successful examination in the diploma thesis. If this condition is not met within the stipulated deadline, the postgraduate student is entitled to a simple certificate of successful attendance of the courses in which he received a promotional grade and leaves the Program.

(B) Description of individual course units

PROBABILITY AND APPLICATIONS USING COMPUTATIONAL TECHNIQUES (m63101p)

Instructors: A.YANNACOPOULOS

Core Course, 1st semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

Fundamental concepts in probability, with emphasis in multivariate distributions, simulation techniques, stochastic processes. Analytic and numerical techniques. Emphasis in applications in risk management. In particular, we study

- the concepts of probability, random variables, moments and conditional expectation (as a random variable with emphasis in its properties as estimator) are introduced
- characteristic functions
- fundamental univariate distributions and their simulation
- fundamental multivariate distribution (elliptic distributions) and their simulation
- dependence measures and copulas
- fundamental stochastic processes (Poisson, compound Poisson etc) and their simulation

All concepts and numerical methods are illustrated within the framework of models or examples from actuarial and financial risk management.

Prerequisites

Undergraduate probability.

Target Learning Outcomes

In depth understanding of the fundamental concepts of probability theory and stochastic processes which are necessary in risk management (motivated by appropriate risk management examples). Good working knowledge of analytic methods and techniques in probability. Good working knowledge of computational techniques. Scientific and statistical computing basics. The students will acquire skills in analysis, processing and modeling using probabilistic and stochastic techniques related to actuarial science, insurance and finance. They will require skills in programming and the use of modern computing languages and environments (e.g. the Python Ecosystem) focusing on the creation of computational tools for simulation, understanding and modeling risk, based upon techniques from probability theory and stochastic processes as developed in the course. Finally, we aim that the students develop skills for independent study and understanding the current scientific literature and computational techniques in the field, through carefully designed and guided assignments.

Recommended Bibliography

- M. J. Hasset and D. G. Stewart, Probability for risk management, ACTEX Publications 2013
- J. Mc Neil, R. Frey and P. Embrechts, Quantitative risk management, Concepts techniques and tools, Princeton, 2015
- A. N. Yannacopoulos, Probability & Computational Applications, handouts notes

Teaching and Learning Activities

In class (in vivo) teaching and e-learning, computing tutorials and hands on learning.

Assessment and Grading Methods

Compulsory continuous assessement and oral exams/presentation of these.

STATISTICS AND APPLICATIONS USING COMPUTATIONAL TECHNIQUES (m63102p)

Instructors: P.BESBEAS – I.PAPAGEORGIOU

Core Course, 1st semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

The course provides concise coverage of the fundamentals of inference for parametric statistical models, including both theory and practical numerical computation. The course focuses on frequentist maximum likelihood estimation while also considering alternative general methods applicable to a wide range of models and emphasizing the common questions addressed by each of the approaches. The material serves as a lively introduction to the theory and tools that a beginning graduate student needs in order to make the transition to serious statistical analysis: inference; modelling; computation, including optimisation; simulation methods; and the R language. The course will deepen understanding of why and when methods work and explain how they are suitably applied in practice.

Prerequisites

Probability.

Target Learning Outcomes

After completing the course, the students ideally should be able to:

- Implement the standard methods from the classical mathematical statistics theory to derive estimates for unknown parameters of a population with known otherwise distribution.
- Assess and compare the derived estimates with respect to standard statistical criteria.
- Construct a confidence interval for the unknown parameters based on a sample.
- Construct a test for a statistical hypothesis involving unknown parameters of the population under study.
- Implement relevant computational methodologies and simulation techniques when an analytic approach is not feasible.
- Take advantage of the statistical programming language R for computer age statistical inference.

Recommended Bibliography

- Simon Wood. Core Statistics, Cambridge University Press, 2015.
- Bradley Efron and Trevor Hastie. Computer Age Statistical Inference: Algorithms, Evidence, and Data Science, Cambridge University Press, 2016.
- John Verzani. Using R for Introductory Statistics, Second Edition, Chapman & Hall/CRC: The R Series 2005.
- Michael J. Crawley. Statistics, An Introduction Using R, John Wiley & Sons 2015.
- Leonhard Held and Daniel Sabanés Bové. Applied Statistical Inference Likelihood and Bayes, Springer 2014.

- Dennis D Boos and L. A Stefanski Essential Statistical Inference: Theory and Methods, Springer 2013.

Teaching and Learning Activities

Face to face teaching covering theory and practice. The practicals are implemented with R.

Assessment and Grading Methods

Project.

FINANCIAL MARKETS AND CORPORATE FINANCE (m63103p)

Instructors: L.ROBOLIS – G.CHALAMANDARIS

Core Course, 1st semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

The goal of this course is twofold: First, to describe the main financial markets and instruments and, second, to analyze corporate decisions from a financial perspective. With respect to the first subject, the course focuses on money-market, capital and debt markets. With respect to the second, the course concentrates on investment and financing decisions, valuation, and the treatment of risk. Topics to be studied are the time-value of money, exchanges and Over-The-Counter Markets, law of one price, net present value rule, capital budgeting techniques and the estimation of the cost of capital. It also studies the valuation of stocks and bonds, the risk-return trade-off, the capital structure and its relationship with the value of the firm as well as the dividend policy of corporations.

Prerequisites

The course is an introduction in Finance; therefore, it does not have prerequisites other than basic knowledge of mathematical calculus, probability theory and statistics.

Target Learning Outcomes

On completing the course participants will:

- Be familiar with the different types of financial markets.
- Know the main principles for pricing financial securities and use them for analyzing and hedging financial risks.
- Understand how projects are valued, and will be able to use the key capital budgeting techniques (NPV and IRR)
- Know how firms raise capital from the market, and how stocks and bonds are priced.
- Understand how risk affects the value of the asset in equilibrium, and how this affects, in turn, the company cost of capital.
- Understand the trade-off firms face between tax advantages of debt and various costs of debt.
- Be able to explain and use the capital structure theory in order to determine the optimal capital structure.

Recommended Bibliography

- Brealey, Myers and Allen, “Principles of Corporate Finance”, McGraw-Hill 11th ed. 2014.
- Damodaran, “Corporate Finance: Theory and Practice”, Wiley 2nd ed. 2001.
- Copeland, Weston and Shastri, “Financial Theory and Corporate Policy”, Addison-Wesley 4th ed. 2005.

- Bodie, Merton and Cleeton, “Financial Economics”, Pearson 2nd ed. 2011.
- Fabozzi, “Capital Markets: Institutions, Instruments, and Risk Management”, (The MIT Press), Fifth Edition, 2015.

Teaching and Learning Activities

One three-hour lecture per week, study theory and practice in empirical exercises as homework.

Assessment and Grading Methods

The final grade comes from the final examination.

OPTIMIZATION TECHNIQUES AND PORTFOLIO THEORY (m63104p)

Instructors: I.VRONTOS - E.KYRIAKIDIS - G.PAPAGIANNIS

Core Course, 2nd semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

A plethora of empirical financial problems such as portfolio construction, risk management, pricing of financial derivatives etc. require solving different optimization problems. This course will introduce and develop the relevant mathematical tools and numerical methods/techniques for analyzing and solving optimization problems in finance. The course covers linear, quadratic and dynamic programming problems. It presents nonlinear programming, introduces the basic ideas, dual methods, Lagrange multipliers, and optimality conditions for unconstrained and constrained optimization problems. Gradient descent method, steepest descent method, Newton and quasi-newton numerical schemes are presented and developed. The basic framework of evolutionary algorithms and stochastic optimization approaches is introduced and non-smooth and non-convex optimization problems are described. Different method and techniques are presented such as the genetic algorithm, particle swarm optimization, simulated annealing, and stochastic gradient methods. Application of different optimization techniques in estimating the parameters of nonlinear statistical and econometric models is presented. Illustration of the proposed methods and techniques is given using empirical financial applications including construction of mean-variance optimal portfolios, estimation of the efficient frontier, optimization of Value-at-Risk and conditional Value-at-Risk, asset-liability management and risk management.

Prerequisites

No prerequisites.

Target Learning Outcomes

The aim of this module is to provide students with advanced analytical and numerical skills required to solve optimization problems in finance. After successfully completing the course, students will be able to:

- describe and solve linear programming problems
- describe and solve quadratic programming problems
- describe and explain dynamic programming problems
- describe and solve nonlinear programming problems
- explain convex sets and functions, constrained and unconstrained maximization problems
- demonstrate an understanding of numerical algorithms for solving several programming problems
- demonstrate an understanding of basic evolutionary algorithms and stochastic optimization problems
- apply optimization methods for estimating the parameters of univariate and multivariate nonlinear models
- solve simple asset-liability management problems

- solve mean-variance optimization problems
- optimize Value-at-Risk and conditional Value-at-Risk
- apply optimization methods in risk management

Recommended Bibliography

- Cornuejols, G., Pena, J., and Tutuncu, R. (2018). Optimization Methods in Finance, Cambridge University Press
- Bertsekas, D.P. (2014). Constrained optimization and Lagrange multiplier methods, Academic Press
- Boyd, S. and Vandenberghe, L. (2004). Convex optimization, Cambridge University Press
- Kroese, D.P., Taimre, T., and Botev, Z.I. (2013). Handbook of monte carlo methods, John Wiley & Sons
- Nocedal, J., and Wright, S. (2006). Numerical optimization, Springer Science & Business Media
- Simon, D. (2013). Evolutionary optimization algorithms, John Wiley & Sons
- Selected papers

Teaching and Learning Activities

One three-hour lecture per week, study exercises, and programming exercises as homework (some to be submitted).

Assessment and Grading Methods

The final grade is the average of the final examination grade (weight 50%) and the grade of the study and programming exercises to be submitted (weight 50%).

LINEAR MODELS AND TIME SERIES ANALYSIS (m63105p)

Instructors: I.BALTAS

Core Course, 2nd semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

This course serves as an introduction to the analysis of cross-sectional and time series data. It presents the basic principles, the properties, statistical inference procedures, model selection and the construction and evaluation of forecasts for these two classes of statistical models. The empirical part of the course consists of applying the above topics using the computational environment R.

Prerequisites

Basic knowledge of Probability Theory and Statistics.

Target Learning Outcomes

Upon successful completion of the course, students:

- Will have a basic understanding of conditional mean and conditional variance
- Will extensively explore the distinct types of correlation and the cases where these may or may not be the appropriate measures for use
- Will be able to estimate the parameters of simple and multiple regression models and understand the validity (or lack thereof) of the relevant assumptions
- Will be able to make predictions via regression models and accurately quantify the corresponding uncertainty
- have understood basic concepts of time series analysis (autocovariance, autocorrelation, partial autocorrelation, stationarity, ergodicity).
- Will be able to perform unit root tests.
- Will be able to apply various transformations to achieve stationarity.
- Will be familiar with the basic stochastic time series models, both stationary and non-stationary.
- Will be able to estimate the above models, perform diagnostics and apply various selection criteria techniques.
- Will be able to use the above models for forecasting

Recommended Bibliography

- Lecture notes
- Applied Regression Analysis, 3rd Edition (1998), Norman R. Draper, Harry Smith, Wiley
- Modern methods of time series analysis (2013). S. Dimeli, AUEB editions
- Time series analysis with applications in R (2008). J.D Cryer & K.S. Chan, Springer.
- Introductory Econometrics for Finance, Second Edition (2008). C. Brooks, Cambridge

- Applied Econometric Time Series, Fourth Edition (2014). W. Enders, Wiley.
- Introductory Econometrics: A modern approach, Fifth Edition (2013). J. Wooldridge, South-Western Cangage Learning

Teaching and Learning Activities

One three-hour lecture per week and study exercises as homework.

Assessment and Grading Methods

The course is examined by assignment.

STOCHASTIC PROCESSES AND DERIVATIVE MARKETS (m63106p)

Instructors: A.YANNACOPOULOS – A.TSEKREKOS

Core Course, 2nd semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

The course covers the basic derivative securities, derivative markets and their functions, the pricing of derivative securities via stochastic processes and the risk management of financial positions via derivatives. Computational techniques of pricing derivatives are also covered. More specifically, the following topics are covered:

- Futures contracts and hedging
- Forward contracts and pricing
- Swaps
- Options contracts: Characteristics and trading strategies
- Pricing options contracts

Prerequisites

There are no compulsory prerequisite courses required.

Target Learning Outcomes

The students will come out of the course with a broad knowledge of derivative markets, with a special focus on pricing methods via stochastic processes and computational methods. Specifically, the course aims to help the student:

- develop a basic understanding of derivative markets and their basic functions, and
- understand and apply computational techniques, based on stochastic processes, to price derivative securities.

Recommended Bibliography

- Hull, J. C. (2015) Options, Futures, and Other Derivatives, 9th edition, Pearson
- McDonald, R. L. (2013), Derivatives Markets, 9th edition, Prentice Hall
- Shreve, S. (2005), Stochastic calculus for finance Vols. I and II, Springer
- Γιαννακόπουλος Α. (2014) Στοχαστικά Χρηματοοικονομικά (σημειώσεις)

Teaching and Learning Activities

Distance learning methods through e-class and Microsoft teams during the COVID19 pandemic. In the class otherwise.

Assessment and Grading Methods

Assessment via a compulsory assignment during the COVID19 pandemic. Assessment via a compulsory assignment (30%) and written examination (75%) normally.

FINANCIAL ECONOMETRICS (m63107p)

Instructors: I.VRONTOS

Core Course, 3rd semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

This course provides a broad introduction to the theory and empirical analysis of advanced econometric models in financial applications such as construction of optimal portfolios, evaluating managers' performance, and forecasting financial returns. Multi-factor models are introduced, which can be used to estimate the expected returns of financial assets, and univariate and multivariate heteroscedasticity models (ARCH/GARCH), which can be used to model the variations and covariances/correlations of financial returns. Indicative examples of the application of these advanced statistical and econometric models and techniques are (a) the construction of optimal portfolios, (b) the evaluation of the performance of the various mutual fund or hedge fund investment managers, (c) forecasts of financial series, e.g. stock returns.

Prerequisites

No prerequisites.

Target Learning Outcomes

The aim of this module is to provide students with advanced statistical and econometric skills required to analyze empirical problems in finance. After successfully completing the course, students will be able to:

- interpret the concepts of return and risk in financial markets
- model the expected returns of financial assets
- model the variances and covariances/correlations of financial returns
- use advanced econometric tools to analyze models used in financial applications
- forecast financial returns
- assess the performance of portfolio managers
- understand modern portfolio theory
- solve mean-variance optimization problems
- estimate the risk of financial assets

Recommended Bibliography

- Elton, E.J., Gruber, M.J., Brown, S.J., and Goetzmann W.N. (2014). Modern Portfolio Theory and Investment Analysis, 9th edition, Wiley.
- Sharpe, W.F., Alexander, G.J, and Bailey, J.V. (1999). Investments, 6th edition, Prentice-Hall.
- Tsay, Ruey S. (2010). Analysis of Financial Time Series, New York: Wiley.
- Vrontos, I.D. (2016) Financial Econometrics, Lecture Notes (In Greek).
- Selected papers.

Teaching and Learning Activities

One three-hour lecture per week, study exercises, and programming exercises as homework (some to be submitted).

Assessment and Grading 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.

FINANCIAL MATHEMATICS WITH COMPUTATIONAL APPLICATIONS (m63108p)

Instructors: G.PAPAGIANNIS

Core Course, 3rd semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

This course focuses on the computational part of financial mathematics and is organized in three thematic sections. The first one is about Monte Carlo methods for scenario generation and their applications in pricing financial derivatives under static/dynamic approaches and variance reduction methods for improving accuracy in pricing estimates. In the second part, parametric and nonparametric approaches for the risk quantification and dependence modeling are presented, with special emphasis in the calculation of insurance and financial risk. In the third section modern statistical learning techniques for the study of data from financial and insurance markets are presented

Prerequisites

Students should have basic knowledge of optimization, probability theory, stochastic processes and finance. For the programming part of the course and the related computational assignments basic knowledge of computational packages (e.g., Octave/MATLAB, R, Python) is required.

Target Learning Outcomes

After successfully completing the course, students will be able to:

- develop and implement computational techniques for treating problems of financial mathematics
- use analytical-statistical methods to the stochastic modeling and interpretation of interesting quantities in financial and insurance markets
- understand and use the basic financial and insurance risk quantification tools
- apply modern methods and techniques of statistical learning for the analysis of market data

Recommended Bibliography

- Asmussen, S., & Glynn, P. W. (2007). *Stochastic simulation: algorithms and analysis* (Vol. 57). Springer Science & Business Media.
- Bishop, C. M. (2006). *Pattern recognition and machine learning*. Springer.
- Cherubini, U., Luciano, E., & Vecchiato, W. (2004). *Copula methods in finance*. John Wiley & Sons.
- Glasserman, P. (2013). *Monte Carlo methods in financial engineering* (Vol. 53). Springer Science & Business Media.
- Hastie, T., Tibshirani, R., & Friedman, J. (2009). *The elements of statistical learning: data mining, inference, and prediction*. Springer Science & Business Media.
- Joe, H. (2014). *Dependence modeling with copulas*. CRC press.

- Korn, R., Korn, E., & Kroisandt, G. (2010). *Monte Carlo methods and models in finance and insurance*. CRC press.
- McNeil, A. J., Frey, R., & Embrechts, P. (2015). *Quantitative risk management: concepts, techniques and tools-revised edition*. Princeton University Press.

Teaching and Learning Activities

One three-hour lecture per week (for 8 weeks), computational assignments to be submitted per course's section.

Assessment and Grading Methods

The final grade is calculated as a weighted average of the grade in computational assignments that are submitted during the course (70%) and the grade of the final examination or assignment (30%).

LIFE INSURANCE - GENERAL INSURANCE (m63109p)

Instructors: A.ZYMPIDIS – N.TSAGAKIS

Core Course, 3rd semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

A. Life Insurance
Survival function, Simple mortality table and related functions, force of mortality, laws Classics mortality, actuarial tables and commutation functions, Stochastic approach to Life Insurance. Life annuities with one or more payments annually, Relationship between annuities, life insurance of various kinds, Relationship annuities and insurance, interest rate movements and mortality. Net premiums and gross premiums, concept and process of calculating reserves, Relationship between successive stock price. Tables and Actuarial functions for two or more persons, Contingent actuarial functions. Pricing and profit-testing.
B. General Insurance
Uncertainty, Risk, Insurance, Insurance Companies, Actuaries, Insurance Concepts, Products, Actuarial base. Frequency, severity and pricing methodology premium adjustments, Projections and trends for the final payments by using linear and other models. Reserving methods, Analysis of Insurance Data, Triangular methods and olistic methods of reserving, Discounting reserves, and Confidence Intervals. Reinsurance schemes, «Bonus-Malus» and Markov Chains.

Prerequisites

Students should have basic knowledge of mathematical calculus, linear algebra, probability and statistics.

Target Learning Outcomes

- The student will receive all the necessary technical knowledge for Life and General Insurance: Pricing, Reserving and Reinsurance.
- The student will be able to understand the structure of the basic & complex products of Life Insurance and to design similar products. He (she) will also be able to design and investigate various reinsurance coverage structures.
- The student will be able to perform all the basic technical calculations in relation to the Pricing (Net and Commercial Premiums), Reserving and Reinsurance procedures.

Recommended Bibliography

A. Life Insurance

- Zimbidis A.(2009), «Actuarial Mathematics of Life Insurance»
- Neil A. (1986), «Life Contingencies» Heinemann Professional Publishing
- Etienne De Vylder (1997), "Life insurance : Actuarial Perspectives" Kluwer Academic Print

B. General Insurance

- Zimbidis A. (2008) «Actuarial Mathematics of General Insurance»

- Brown R.L , Gottlieb L.R. (2005) -3rd edition “Introduction to Ratemaking and Loss Reserving for Property and Casualty Insurance”, Actex Publications,
- Mikosch T. (2006) “Non-Life Insurance Mathematics: An Introduction with Stochastic Processes”, Springer

Teaching and Learning Activities

One three-hour lecture per week, study exercises αs as homework (some to be submitted).

Assessment and Grading Methods

The final grade is the average of the final examination grade (α%) and the grade of the study and programming exercises to be submitted (100% - α %), provided that the final examination grade is at least 5/10. Otherwise, the final grade equals the final examination grade. The percentage a% varies within the range 20%-40% depending on the difficulty of the exercises each academic year.

INSURANCE RISK MANAGEMENT - SOLVENCY II (m63110p)

Instructors: A.ZYMPIDIS – I.CHATZIVASILOGLOU

Core Course, 4th semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

- Enterprise Risk Management frameworks in the context of insurance undertakings, basic principles, the role of risk culture
- Taxonomy and classification of risks that insurance undertakings are facing
- Valuation of future cash flows, calculation of the best estimate of technical provisions in the framework of Solvency II
- Risk quantification methodologies of insurance undertakings (1-year MTM approach, Liability Run-off approach), economic capital, standard approach of Solvency II
- Asset Liability Management principles and methodologies (cash flow matching, cash flow testing, key rate durations, asset-liability adequacy tests)
- The framework and processes of holistic risk management (stakeholders, risk control, strategic risk management, emergent risk management, risk management culture)
- Scenario analysis and stress tests in an ERM framework, Own Risk and Solvency Assessment in the framework of Solvency II.

Prerequisites

Students should have basic knowledge of mathematical calculus, linear algebra, probability and statistics. Financial mathematics, Life contingencies, basic principles of investment theory, basic principles of corporate finance (e.g NPV methodologies).

Target Learning Outcomes

- to understand the basic principles and elements of the risk management framework of Solvency II,
- to understand the risks that insurance undertakings are facing
- to understand the basic principles for the calculation of best estimate of technical provisions according to Solvency II and to be able to apply them on basic life insurance products
- to understand the need of insurance undertakings to maintain solvency capital and to be able to apply different risk quantification methodologies
- to understand the basic principles and methodologies of asset-liability management and to able to apply them under different contexts.

Recommended Bibliography

- N. 4364/2016
- Regulation (EU) 2015/35

- Act of the Executive Committee TtE 81/2016, regarding the valuation of technical provisions
- Introduction to Solvency II of (re)insurance companies, I.Chatzivasiloglou, Financial Bulletin no.44, Bank of Greece
- The valuation of assets and liabilities of (re)insurance companies according to Solvency II, I.Chatzivasiloglou, Financial Bulletin no 45, Bank of Greece
- Financial Enterprise Risk Management by P.Sweeting,, Cambridge University Press
- Enterprise Risk Management – Integrated Framework by Committee of Sponsoring Organizations of the Treadway Commission (COSO)
- Investment Science by D.Luenberger, Oxford University Press

Teaching and Learning Activities

One three-hour lecture per week, study exercises αs as homework (some to be submitted).

Assessment and Grading Methods

The final grade is the average of the final examination grade (α%) and the grade of the study and programming exercises to be submitted (100% - α %), provided that the final examination grade is at least 5/10. Otherwise, the final grade equals the final examination grade. The percentage a% varies within the range 20%-40% depending on the difficulty of the exercises each academic year.

CREDIT AND FINANCIAL RISK MANAGEMENT (m63111p)

Instructors: A.EPISCOPOS

Core Course, 4th semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

The course studies risk management, with a focus on financial institutions. Among the topics covered are: Interest rate risk. Volatility and value at risk (VaR). Regulatory framework for capital adequacy. Basel Accords I, II, and III. Credit risk models and calibration. Credit ratings. Estimation of default probabilities. Credit exposure on derivatives. Operating risk. Liquidity risk. Using derivatives contracts in risk management.

Prerequisites

Essential knowledge on the valuation of derivatives contracts.

Target Learning Outcomes

After successfully completing the course, students will be able to:

- Understand the importance of risk management, with an emphasis on financial institutions.
- Know the regulatory framework on bank capital adequacy, such as Basel Accords I, II, and III.
- Analyze and apply models of measurement and management of financial risks, such as interest rate risk, market risk, liquidity risk, and operating risk.
- Analyze and apply models of credit risk measurement and management.
- Effectively use derivatives contracts in risk hedging.

Recommended Bibliography

- Hull, John (2018), *Risk Management and Financial Institutions*, 5th edition, Wiley.
- Saunders, Anthony, and Marcia Cornett (2018). *Financial Institutions Management: A Risk Management Approach*, McGraw Hill.

Teaching and Learning Activities

One three-hour lecture per week. Homework exercises through a derivatives analysis software.

Assessment and Grading Methods

The final grade is a weighted average of the written examination grade and the grade on homework exercises with 70% and 30% weights, respectively.

TOPICS IN INSURANCE AND FINANCE: INTRODUCTION TO LEVY PROCESSES AND APPLICATIONS AND MACHINE LEARNING IN RISK MANAGEMENT (m63112p)

Instructors: ST.VAKEROUDIS – K.GEORGIOU – P.PAPAIOANNOU

Core Course, 4th semester, 5 ECTS units
Course level: Graduate (MSc)
Language: Greek

Course Description

Review of Basic issues in Probability Theory and Stochastic Processes, Poisson Process, Brownian motion, Lévy Processes, Applications in Financial Mathematics, Interest Rate Models, Applications in Actuarial Sciences (Risk/Ruin Theory)

Prerequisites

Probability and applications using computational techniques
Stochastic Processes and Derivative Markets

Target Learning Outcomes

The students will be familiarized with practical problems and the respective management solutions from the financial/actuarial industry. They will acquire the mathematical background to be able to analyze, model, and solve the problems arising from the industry. They will be able to apply modern methods and propose novel approaches to attack each specific case.

Recommended Bibliography

- Stochastic Finance (notes), A. Yannacopoulos
- Introduction to Stochastic Calculus, D. Cheliotis
- Hull, J. C. (2015) Options, Futures, and Other Derivatives, 9th edition, Pearson
- McDonald, R. L. (2013), Derivatives Markets, 9th edition, Prentice Hall
- Shreve, S. (2005), Stochastic calculus for finance Vols. I and II, Springer
- An introduction to Lévy Processes with Applications in Finance, Lecture Notes, A. Papapantoleon
- Introductory Lectures on Fluctuations of Lévy Processes with Applications, A.E. Kyprianou
- Brigo D., Mercurio F. (2001) Interest Rate Models - Theory and Practice, Springer

Teaching and Learning Activities

One three-hour lecture per week (8 weeks).

Assessment and Grading Methods

The students will be graded by a final exam at the end of the lectures. Moreover, each student will submit a short essay with respect to a topic associated to the lectures during the semester.

DISSERTATION THESIS

Core Course, 5th semester

ECTS units: 30

Course level: Graduate (MSc)

Language: English

Course Description

In the dissertation thesis, the student writes a research assignment, in which the existing literature is reviewed, research hypotheses are proposed and basic results from the literature are reproduced. The aim is to introduce the student to (a) the existing research literature, (b) analytic/numeric methodologies, (c) data collection methods, (d) result reporting and conclusions drawing. The dissertation can involve analytic or computational data analysis techniques, in topics revolving around quantitative risk management. The outline of the dissertation will usually contain the following: Abstract/Summary, Introduction, Literature Review, Research Hypotheses Development, Research Methodology, Empirical Results, Sensitivity Analysis and Discussion, Synopsis and Conclusions, References, Appendices (e.g. Programming Code). The dissertation is organized in Chapters and the outline is agreed upon by the student and the supervisor in common.

Prerequisites

In order to undertake a dissertation thesis, the student must have successfully completed all taught courses of the program.

Target Learning Outcomes

The dissertation thesis aims at giving the student the opportunity to develop and apply research methods on topics related to risk management. The goal is to allow the student to deeply appreciate the selected research topic and the related literature, to develop her/his critical thinking (by developing research hypotheses), to collect and analyse appropriate empirical data and to acquire skills in drawing evidence-based conclusions.
General skills: Search, analyse and synthesize data and information, using appropriate technologies. Produce new research ideas. Advance free and creative thinking.

Recommended Bibliography

Dissertation thesis outline
Appropriate recent research literature

Teaching and Learning Activities

The assessment of the dissertation depends on a series of assessment criteria, such as:
Are (a) the research question and (b) its importance to science adequately described?
Is the research aim presented?
Are the research framework and the methodology briefly described?
Are the research findings summarised?
Are the research questions and motives clearly presented?
Are the research questions linked to the existing literature?
Are the research hypotheses clearly presented and described?
Is the dissertation topic relevant to the Master program?
Does the student understand the relevant terminology? Does she/he correctly use it?
Is the outline of the literature review clearly presented?
Is the literature reviewed relevant to the research question?
Does the literature review analyse, synthesize, compare and evaluate related research?
Are the research hypotheses well developed?

Is the selected methodology adequately justified?

Are the empirical results clearly linked to the study's research hypotheses, are they correctly interpreted and presented?

Is the dissertation summarised in a clear and understandable way? Are future research topics suggested?

Has the dissertation thesis outline being followed?

Assessment and Grading Methods

The dissertation is assessed by a three-member examining committee, that comprises of the dissertation supervisor and two other faculty members of the program. The student must make a presentation of the dissertation thesis to the three-member committee.

PART III: INFORMATION FOR THE STUDENTS

GENERAL STUDENT INFORMATION

The 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.

- **E-Learning Platform – ECLASS**

The Open eClass platform is an integrated Electronic Course Management System and is the proposal of the Academic Internet (GUnet) to support Asynchronous Distance Education Services.
Instructions are provided at https://eclass.aueb.gr/info/manual.php

Medical Services, Insurance / Healthcare

Undergraduate, postgraduate and PhD students at the University who have no other medical and hospital care are entitled to full medical and hospital care in the National Health System with coverage of the relevant costs by the National Health Service Provider. A psychiatric counseling service also operates at the University, staffed with a physician specializing in the treatment of mental health issues.
More information at https://www.aueb.gr/en/content/health-care .

Services/Facilities to Students with Special Needs

The Athens University of Economics and Business ensures the facilitation of students with special needs, through the design, implementation, and environmental adaptations, for access to the university building facilities. In the main building there are specially configured lifting machines, ramps, and elevators. There are also special regulations for conducting exams for students with special needs.
The Athens University of Economics and Business has established a Committee for Equal Access for people with disabilities and people with special educational needs. The Commission is an advisory body and submits recommendations to the competent bodies for the formulation and implementation of the policy of equal access for persons with disabilities and persons with special educational needs.

Through the Library services, students with physical disabilities are granted electronic access to the recommended Greek bibliography of the courses taught at the University. In this context, the Association of Greek Academic Libraries (SEAB) has developed a multimodal electronic library called AMELib.
More information is available at https://www.aueb.gr/el/lib/content/amea-atoma-me-idiateires-anages.

Library and Study Rooms

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

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

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

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

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

International Programs and Information on International Student Mobility

Athens University of Economics and Business is actively involved in the Erasmus+ Program since 1987 promoting cooperation with universities, businesses, and international organizations of the European Union (EU) as well as in the mobility of students, teaching, and administrative staff.
In addition, strengthening its internationalization objectives, it creates new opportunities through the Erasmus+ International Mobility Program. Within this framework, mobility scholarships are granted through the State Scholarships Foundation (SSF) to incoming and outgoing students of the three study cycles, according to the funding approved each year by the State Scholarship Foundation for the University. Outgoing students have the possibility to spend a period of study at a Partner Institution outside the EU with full academic recognition through the application of the ECTS credits system https://www.aueb.gr/en/content/erasmus-programme

Connecting with the Job Market and Entrepreneurship

D.A.STA.O.P.A. (https://www.aueb.gr/el/dasta) is the administrative unit of the University that plans, coordinates and implements the actions of the Athens University of Economics and Business in the following areas:

a) development of entrepreneurship and innovation

b) connecting students and graduates with the labor market

c) connecting the academic community with businesses

d) student internship programs and,

e) supporting research utilization actions

Student Associations

Various student clubs and associations are active within the community of the Athens University of Economics and Business

(https://www.aueb.gr/el/content/student-associations).

Alumni Network

Adhering to a long tradition of educating future top executives in the economic, social, and political life of the country, AUEB is proud that thousands of its graduates hold leading positions in companies, organizations, research institutes and universities in Greece and abroad. Understanding the

importance of developing and strengthening the bond with its graduates, AUEB created its Alumni network including a platform https://alumni.aueb.gr where all graduates of the University can register. The main objectives of the Network are the connection of the graduates with their colleagues and former fellow students, and diffusion of information about activities, services, and events in and around the University that concern them.
Additional information on Clubs and Alumni Associations is available on the website https://www.aueb.gr/el/content/organizations-and-associations-of-students-and-alumni.

Volunteer Program

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

Quality Assurance

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

Training and Lifelong Learning Center

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