Professional MSc in Digital Transformation

SCHOOL OF BUSINESS

DEPARTMENT OF MANAGEMENT SCIENCE AND TECHNOLOGY

STUDY GUIDE
ATHENS, FEBRUARY 2024

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

ACADEMIC AUTHORITIES

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

Rector:

Professor Dimitris Bourantonis

Vice Rectors:

Vice Rector of Academic Affairs and Personnel
Professor Vasilios Vasdekis

Vice Rector of Research and Lifelong Learning
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
Dean: Professor Angeliki Poulymenakou
Department of
Chair: Professor E. Voudouri

Contact details
Address: 47a Evelpidon Str, GR-113 62, Athens
Email: digitaltransformation@aueb.gr
Website: https://www.dept.aueb.gr/digitaltransformation

ACADEMIC CALENDAR

FALL SEMESTER

Classes begin:	Monday, September 23, 2024
End of 1st period:	Saturday, November 2, 2024
Start of 2nd period:	Monday, November 25, 2024
Break before Christmas Holidays:	Saturday, December 21, 2024
Classes restart:	Tuesday, January 7, 2025
Classes end:	Saturday, January 18, 20245

Exams' period of Fall Semester

Exams of 1st period (November):	11/11/2024 – 23/11/2024
Exams of 2nd period (February):	27/01/2025 – 8/02/2025

Holidays

October 28 Holiday - The Anniversary of the "No", Monday, October 28, 2024
The Anniversary of Polytechneio, Satursay, November 17, 2024
Epiphany, Monday, Saturday 6, 2025

SPRING SEMESTER

Classes begin:	Monday, February 10, 2025
End of 1st period:	Saturday, March 22, 2025
Break before Easter Holidays:	Monday, April 14, 2025
Classes restart:	Wednesday, April 16, 2025
Start of 2nd period:	Thursday, April 24, 2025
Classes end:	Saturday, May 31, 2025

Exams' period of Spring Semester

Exams of 1st period (April):	31/02/2025 – 12/04/2025
Exams of 2nd period (June - July):	10/06/2025 – 21/06/2025

Holidays

Clean Monday, Monday, March 3, 2025
Greek Independence Day, Tuesday, March 25, 2025
Pentecost Monday, Monday, June 9, 2025

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 staff, the quality in teaching and research, the modern curriculum/courses, but also the high demand of its graduates significantly enhance the University's brand name and reputation, in Greece and abroad.

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

ADMISSION/REGISTRATION PROCEDURE

Chief Regulations of the University (including academic recognition procedures)
The regulations include, for example:

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

AUEB'S ECTS COORDINATOR

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

PARTII: INFORMATION ON DEGREE PROGRAMMES

A.GENERAL DESCRIPTION

QUALIFICATION AWARDED

The Postgraduate Program awards the MSc in Digital Transformation.

ADMISSION REQUIREMENTS

The minimum selection criteria for admission to the Professional Master's Program at the Athens University of Economics and Business are as follows:

a) Regarding members of the Funding Body Personnel:

- Graduates of Greek or foreign Universities
- Possess basic knowledge of computer science and mathematics
- Certification of proficiency in the English language at the Proficiency level or IELTS (for study) with a minimum score of 7/10, or a degree from an English-speaking University.

b) Regarding third parties:

- Graduates of Greek or foreign Universities in the fields of positive sciences, engineering, administration, economic sciences, and computer science
- Possess basic knowledge of computer science and mathematics based on undergraduate courses successfully completed
- Graduation grade at least equal to or greater than seven out of ten (7.0/10.0)
- Certification of proficiency in the English language at the Proficiency level or IELTS (for study) with a minimum score of 7/10, or a degree from an English-speaking University.

In addition to the above criteria, the following may also be taken into account:
a) Grades in undergraduate courses related to the courses of the Master's program.
b) University and Department of origin.
c) Research experience and work experience.
d) Interview.
e) Recommendation letters from professors or employers.
f) Any distinctions/awards.

ADMISSION/REGISTRATION PROCEDURE

The registration of prospective postgraduate students is carried out annually from May to October within deadlines set by the Director of the Master's Program.
Before enrolling, the candidate becomes aware of the Operating Regulation of the Master's Program, the Regulations for Postgraduate and Doctoral Studies of the Athens University of Economics and Business (B 3140/2023), the Code of Ethics and Good Practice of the Athens University of Economics and Business (B' 7257/2022), and any amendments, declaring in writing that they accept them. In cases of exceptional need, the Department's Assembly may, after a reasoned request from the interested party, decide that registration can take place within a month after the deadline.

EDUCATIONAL AND PROFESSIONAL GOALS

Upon successful completion of the program, the titleholder will have acquired comprehensive and specialized knowledge in the fundamental concepts and most contemporary trends prevailing in the fields of Quantitative Methods and Business Analytics, Design and Implementation of Information Systems and Applications, as well as Business Strategy and Project Management in the Digital Transformation.

The titleholder will be able to apply, analyze, and synthesize the above knowledge to optimize the utilization of an organization's digital resources, support critical decision-making with computational models and data, create innovative digital services/systems, and organize digital transformation within the framework of an integrated business strategy.
Additionally, they will have developed high-level analytical and synthetic abilities, along with proficiency in the relevant tools of information technology, operational research, statistics, and business analytics. This enables them to stay abreast of academic and empirical developments in the rapidly changing field of Digital Transformation, both on a national and international level.
In a modern, dynamically changing environment characterized by a high degree of complexity, graduates of the Master's Program will gain critical theoretical scientific depth and technical expertise in Digital Transformation. They will be capable of applying highly specialized knowledge in the aforementioned areas to adapt to the constantly evolving requirements of a successful professional career. Furthermore, they will possess the self-confidence to become future leaders, both in the banking sector and other industries, with a clear professional orientation and the goal of developing and merging their technical and managerial skills.
In this way, the graduates of the Professional Master's Program will contribute to the continuous technological and digital modernization of the banking and other significant business sectors. This contribution will involve introducing innovative digital practices and initiatives, implementing modern technologies and systems, and providing ongoing training for the personnel of businesses.

ACCESS TO FURTHER STUDIES

It is possible to continue studies at the Doctoral level.

COURSE STRUCTURE DIAGRAM WITH CREDITS

PREPARATORY COURCES			
S/N	**COURSE TITLE**	**TYPE OF COURSE**	**ECTS**
1	Introduction to Statistics	Preparatory Course	0
2	Introduction to Databases	Preparatory Course	0
1st SEMESTER			
1	Digital Transformation and Business Strategy	Core Course	5
2	Systems Analysis and Design	Core Course	5
3	Statistics and Quantitative Methods for Decision Making	Core Course	5
4	Java and Web (React) programming	Core Course	5
5	Data Management and Engineering	Core Course	2.5
6	People & Teams Management	Core Course	2.5
7	Business Process Modelling and Re-engineering	Core Course	2.5

8	User-Centered Design Thinking	Elective Course	2.5
		SEMESTER TOTAL ECTS	**30**
2nd SEMESTER			
ΚΩΔΙΚΟΣ	**ΤΙΤΛΟΣ ΜΑΘΗΜΑΤΟΣ**	**ΤΥΠΟΣ ΜΑΘΗΜΑΤΟΣ**	**ECTS**
9	Mobile programming (Kotlin for Android & Swift for IOS)	Core Course	2.5
10	Banking and Finance	Core Course	2.5
11	Big Data Systems and Cloud Management	Core Course	2.5
12	Data Analytics and Visualization	Core Course	2.5
13	Artificial Intelligence and Machine Learning algorithms	Core Course	2.5
14	Cybersecurity and Data Privacy	Core Course	2.5
15	Project Management and agile methods	Core Course	2.5
16	Customer Analytics	Core Course	2.5
17	Digital Transformation Management	Elective Course	2.5
18	Digital services and innovation	Elective Course	2.5
19	User experience design	Elective Course	2.5
20	Full Stack Web development	Elective Course	2.5
		SEMESTER TOTAL ECTS	**30**
3rd SEMESTER			
1	Master Thesis / Intership	Core Course	30
		SEMESTER TOTAL ECTS	**30**
		TOTAL ECTS	**90**

The duration of the Full-Time Program is set at three (3) semesters of study, which includes the time dedicated to the preparation of the master's thesis.

FINAL EXAMINATION

The two semesters in the full-time program are divided into four teaching periods and the four teaching semesters in the part-time program are divided into eight teaching periods. In both programs - full-time and part-time - examinations are held four times in each academic year, in the following months: November, January / February, April and June / July. The schedule of courses / exercises and exams of each semester is prepared and announced at least ten days before the beginning of the semester.

EXAMINATION AND ASSESSMENT REGULATIONS

1. The final evaluation of each course is done either through written or oral examinations and / or assignments.
2. The final grade of each course is determined by the respective teachers. The individual and group assignments of students can be included. Participation in the examination on the specific date announced in accordance with the Program is compulsory.
3. The grading scale is set from zero (0) to ten (10) with grades of the whole or half unit. Passing grades are considered the total grade of 5 and the highest.
4. In the event that a student does not come unjustifiably on the specific examination date of a course, s/he loses the examination period and the course is considered as failed.
5. In case of failure in a course or exceeding the limit of absences, the postgraduate student is obliged to repeat the course attendance. In case of failure in a course, a re-examination may be carried out twice, according to the professor's instructions as regards the type of examination, but not a third time. The re-examination does not require a re-registering. Specific arrangements and cases are examined by the Coordinating Committee.
6. For the award of the MSc, a promotional degree is required in all postgraduate courses and in the dissertation. If this condition is not met within the expected period, the postgraduate student is only entitled to a simple certificate of successful attendance of the courses, where he/she received a promotional degree and the postgraduate student's attendance of the Program is completed.
7. The Department Assembly, following a recommendation from the Coordinating Committee, may decide to dismiss postgraduate students if, during their studies in the program, they fail in courses totaling up to 10 credit units per semester. The Department Assembly may also determine specific cases of force majeure (illness, workload, etc.) where failure in a larger number of courses may be permitted.
8. In any case of delete of the postgraduate student, any tuition fees paid shall not reimbursed, unless there are special reasons and the Assembly shall justifiably decide otherwise upon the proposal by the Coordinating Committee of the MSc

INTERSHIP

The master's thesis or internship is mandatory and takes place during the third semester of the program. The aforementioned options will have equal significance and carry the same number of credit units, as specified in the operating regulations.

CAREER SUPPORT OFFICE & PROFESSIONAL DEVELOPMENT

The Career Support Office & Professional Development of the MSc in Digital Transformation, is developed in order to offer students and recent graduates comprehensive and modern services for preparation, integration or repositioning in the labor market.

The services offered by the Career Office of the Postgraduate Program are the following:

- Personalized consulting services with a variety of content and topics (cv writing, informing about the needs of the market, preparing for the interview process & virtual interviews, access and search techniques in the labor market, enhancing self-knowledge, exploring personal inclinations and developing skills, planning a career plan, managing dilemmas and decision-making methodology, developing job search strategies, etc.).
- Conducting a series of workshops in the context of group consulting meetings in groups with a small number of participants on career strategy as well as the development of personal skills and with specific topics (indicatively: CURRICULUM VITAE & Cover Letter, Personnel Selection

Interview, Self-Awareness Enhancement and Decision Making, teamwork skills, stress & time management, job search tactics in Greece and abroad, etc.).

- Workshops and training seminars, in which external speakers with significant professional experience and a rich track record will take part. Through these seminars, participants will be offered the opportunity to acquire knowledge, share ideas and concerns about their professional careers and learn about the modern skills sought by the new internationalized environment.

B. DESCRIPTION OF INDIVIDUAL COURSE UNITS

Preparatory Courses

Introduction to Statistics

Course title	**Introduction to Statistics**
Course code	-
Type of course	Preparatory Course
Year of study	1st
Semester/trimester	Preparatory Course
Number of credits allocated	0 ECTS
Name of lecturer	Ioannis Vrontos
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Know the basic distributions and their usefulness in practice. • Estimate the parameters of the distributions and of statistical models. • Conduct hypothesis testing and construct confidence intervals for population parameters. • Estimate regression models, construct predictions and interpret the results of statistical analysis appropriately. • Learn the principles of statistical inference so that they can understand the analysis needed for a particular data set, and how it can be properly applied.
Prerequisites	No prerequisites.
Course contents	Data analysis using statistical methods and techniques is necessary in many empirical problems. The data and the variability they present, but also the uncertainty regarding the appropriate modeling approach make it necessary to make decisions based on statistical analysis and processing. The aim of this course is to present, develop and apply the basic theoretical and practical statistical methods and models. The methods introduced and developed are a reliable approach to the analysis of empirical problems because they study and 'capture' the characteristics of the data. The appropriate statistical tools for data analysis in empirical problems are presented and developed. The course presents the theory of basic continuous and discrete distributions and their usefulness as statistical modeling tools in empirical problems and applications. The sampling distributions that are used in statistical inference are developed and basic probabilistic results are presented. Then, basic estimation methods are introduced and developed, such as the least squares method and the maximum likelihood method. These methodologies are necessary in order to estimate the distribution parameters but also the parameters of statistical and econometric models. Statistical inference, and in particular, the theory and interpretation of confidence intervals and hypothesis testing are developed and presented. The concepts of covariance and correlation are introduced in order to study the relationship of two or more random variables. Finally, simple and multiple regression models are presented and developed. Emphasis is given on the application of theory to empirical problems, on the interpretation of results, on the diagnostic tests of residuals and on the selection of appropriate models (model selection).
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.

	• Weisberg, S. (2005). Applied Linear Regression, 3rd edition, Wiley. • 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 two-hour lecture per week, study exercises, and programming exercises as homework (to be submitted).
Assessment methods	No Assessment.
Language of instruction	English, Greek

Introduction to Databases

Course title	**Introduction to Databases**
Course code	-
Type of course	Preparatory Course
Year of study	1st
Semester/trimester	Preparatory Course
Number of credits allocated	0 ECTS
Name of lecturer	Chrysostomos Kapetis
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Understand, appreciate and effectively explain the underlying concepts of data management. • Apply conceptual database modeling methods to design a relational database. • Use SQL language in conjunction with a modern RDBMS to define, query and manage a relational database.
Prerequisites	No prerequisites.
Course contents	This course aims to introduce the basic concepts and essential knowledge of databases and Database Management Systems. It focuses on relational databases design and implementation using SQL language. Topics • Introduction to basic database concepts and technologies • Entity-Relationship model • Relational model • The SQL Language (DDL and DML commands) • Using SQL SERVER (or MYSQL) to create, query and manage a relational database.
Recommended reading	1. Coronel, Morris, rob. Database Systems: Design, Implementation and Management. Ninth Edition, Cengage Learning, 2009. 2. Ramakrishnan and Gehrke. Database Management Systems. 3rd Edition, McGraw Hill, 2002. 3. Silberschatz, Korth, Sudarsham. Database system concepts. Fourth Edition, McGraw Hill, 2001. 4. Hoffer, Vankataraman, Topi. Modern Database Management. 12th Edition, Pearson, 2015.
Teaching methods	Lectures and programming exercises.
Assessment methods	No Assessment.
Language of instruction	English, Greek

1st Semester

Core Courses

Digital Transformation and Business Strategy

Course title	**Digital Transformation and Business Strategy**
Course code	m86101f
Type of course	Core
Year of study	1st
Semester/trimester	1st
Number of credits allocated	5 ECTS
Name of lecturer	Georgios Doukidis, Professor Chris Lazaris, Dr.
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Students who successfully complete this course will be able to: • Understand the fundamental dimensions of business strategy based on the strategic objectives of organizations and the contemporary challenges they face. • Recognize the basic functions of managing major categories of information systems and the theoretical models that assist in their utilization. • Familiarize themselves with the key pillars of digital transformation (customer experience, business processes, and business models), including related information technology trends. • Evaluate the current digital maturity of businesses and propose a comprehensive plan for digital transformation initiatives. • Design applications, leveraging relevant information systems (customer relationship management, process automation) and case studies, and develop necessary strategies that harness digital innovations for business transformation. • Gain practical experience of using information systems in scenarios related to digital transformation, reinforcing previous learning objectives and gaining technical skills by acquiring recognized certifications for the job market.
Prerequisites	No prerequisites.
Course contents	The course focuses on the integration of digital transformation with business strategies, emphasizing the development of skills and knowledge required for creating and implementing effective strategies/actions that leverage the capabilities of digital technologies and result in business transformation. In the first part of the course, we delve into the strategic utilization of information systems and technologies to support business transformation. Topics covered include the main categories of information systems and their effective utilization within organizations, contemporary business strategies linked to innovation and transformation, designing strategic digital systems for competitive advantage and sustainability, and implementing key business transformations (consumer experience, business processes, business models) through digital technologies. The second part of the course emphasizes practical learning on a digital transformation platform. Specifically, we explore customer relationship management (CRM) systems with a focus on transforming customer experiences

	and business processes. Learning about the digital CRM platform includes the following subtopics, which are examined through practical exercises and projects using the Salesforce digital platform: 1. Familiarization, navigation, and customization of the digital transformation platform. 2. Sales automation, marketing, customer service, and customer experience transformation. 3. Administration, automation, and transformation of business processes.
Recommended reading	*Main readings:* 1. Information Technology for Management: Driving Digital Transformation to Increase Local and Global Performance, Growth, and Sustainability (12th Edition, 2021) by E. Turban, C. Pollard, and G. Wood. Published by John Wiley. 2. Innovation, Strategic Development, and Information Systems by G. Doukidis (2011). Published by Sideris Publications. *Supporting readings:* 1. The Digital Future: Transformation, Strategy, Governance, Technologies) by G. Doukidis (2019). Published by Sideris Publications. 2. Selected Case Studies. *Relevant scientific journals:* • MIS Quarterly • MIS Quarterly Executive • European Journal of Information Systems • Journal of the Association for Information Systems • Information Systems Research
Teaching methods	Lectures, case studies, hands-on in Salesforce CRM
Assessment methods	Course evaluation is based on the following criteria: • Written exam (50%) • Group presentation of digital transformation case studies (10%) • Individual digital transformation assignment based on laboratory exercises (40%)
Language of instruction	English, Greek

Systems Analysis and Design

Course title	**Information Systems Analysis and Design**
Course code	m86102f
Type of course	Core
Year of study	1st
Semester/trimester	1st
Number of credits allocated	5 ECTS
Name of lecturer	A. Poulymenakou, Professor Dr. C. Lazaris, Laboratory Teaching Faculty K. Diakonikolaou
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Students who successfully complete this course will be able to: • Recognize, model, and document requirements from various users and stakeholders that impact and are impacted by the design of information systems. • Transform requirements into functional specifications for an information system.

	• Understand the significant differences between Waterfall and Agile methodologies in the process of developing digital systems, with an emphasis on analysis and design. • Analyze and design digital systems based on Agile principles, utilizing best practices for formulating and organizing User Stories and managing the Product Backlog. • Organize work plans for the development of digital systems based on agile principles, using best practices for workload and time estimates. • Obtain digital certifications recognized by the job market for their knowledge in Agile and Scrum (Professional Scrum Product Owner from Scrum Organization). • Develop critical thinking capabilities on important issues of organizational implementation of Information Systems including resistance to change, information politics, organizational impact of digital transformation and IS project failures
Prerequisites	No prerequisites.
Course contents/Syllabus	• Information Systems in Organizations • Requirements Analysis: Soft Systems Methodology • Requirements Analysis: UML Tools (1): Use case diagrams. • Requirements Analysis: UML Tools (2): Class diagrams. • Alternative Lifecycle Models for Digital Systems: Waterfall and Agile. Comparing the development process of digital systems between Waterfall methodologies (such as RUP) and Agile methodologies (such as Scrum, Kanban, XP). The Agile Manifesto for digital system development. • Analysis and Design of Digital Systems Based on Agile and Scrum: Product Backlog, User Stories, Product Backlog refinement, User Story Mapping. • Workload Estimations and Work Plan Creation Based on Agile and Scrum: User Story points, Sprint Backlog, Sprint Planning, Daily Scrum. • Information Management Policies within the Organization. • Challenges during the Integration of Information Systems in the Organization and Change Management: Student presentations based on case studies.
Recommended reading	Main readings: - Dennis, Wixom, Tegarden. Systems Analysis and Design using UML 2.0, Publisher Kliarithmos - J. Laudon, K. Laudon, Essentials of Management Information Systems, Prentice Hall, 8th edition - M.H. Sheriff, Managing Projects in Telecommunication Services, Wiley-IEEE Press - Selected case studies Relevant scientific journals: - MIS Quarterly - MIS Quarterly Executive - European Journal of Information Systems - Journal of the Association for Information Systems - Information Systems Research

Teaching methods	Lectures, case studies
Assessment methods	Course evaluation is based on the following criteria: • Written exam (40%) • Group writing applying requirement analysis in an organization (50%) • Group presentation of case studies (10%)
Language of instruction	English, Greek

Statistics and Quantitative Methods for Decision Making

Course title	**Statistics and Quantitative Methods for Decision Making**
Course code	m86103f
Type of course	Core
Year of study	1st
Semester/trimester	1st
Number of credits allocated	5 ECTS
Name of lecturer	Manolis Kritikos, Professor Ioannis Mourtos, Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • understand and formulate complex decision-making problems. • develop the appropriate decision-making problems. • use decision making models to effective decision making. • solve difficult combinatorial optimization problems. • implement models in many business functions. • use computer technology efficiently to make the best decision. • Analyse methodologies and techniques using case studies to make effective business decisions.
Prerequisites	No prerequisites.
Course contents	The course consists of twelve in person three-hour lectures. The topics covered in these lectures are the following: Methodology of Management Science in problem solving, Linear programming: model formulation, graphical solution and computer solution, Sensitivity analysis, Linear programming: Models of the Management Science problems, Integer programming: 0-1 integer models, mixed - integer linear programming models, Transportation, Transshipment, and Assignment problems, Network flow models, Multicriteria decision making, Decision analysis, Heuristics in Combinatorial Optimization, Simulation.
Recommended reading	• C. Ragsdale, (2024), Spreadsheet Modeling & Decision Analysis : A Practical Introduction to Business Analytics, Cengage Learning, Broken Hill • B. W. Taylor III, (2019), Introduction to Management Science, Pearson Educational Inc, Broken Hill • H. A. Taha, (2016), Operations Research: An Introduction, 10th edition, Prentice Hall, 2016 • N. Balakrishnan, B. Render, P. M. Stair, Jr., (2013), Managerial Decision Modeling with Spreadsheets, Pearson Educational Inc. • Z. Michalewicz and D.B.Fogel, (2004), How to solve it: Modern Heuristics, Springer • W. L. Winston and S. C. Albright, (2002), Practical Management Science, South-Western College Pub. • G. L. Nemhauser and L. A. Wolsey, (1999), Integer and Combinatorial Optimization, Wiley- Interscience,

Teaching methods	The course consists of twelve in person three-hour lectures.
Assessment methods	The final grade will be based on homework and case studies, class participation and a final exam. The breakdown of the final grade will be approximately as follows: 10 % class participation and homework 20% case study or a group project (researching and writing a report), in groups two or three students. 70% final examination.
Language of instruction	English, Greek

Java and Web (React) programming

Course title	**Programming in Java and Web (React)**
Course code	m86104f
Type of course	Core
Year of study	1st
Semester/trimester	1st
Number of credits allocated	5 ECTS
Name of lecturer	Athanassios Androutsos
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Understand the basic characteristics of modern software based on the development of web-centric applications in the contemporary business environment. • Develop Java applications based on best practices at a professional level. • Develop applications using JavaScript/React technologies. • Showcase their knowledge and skills through projects on GitHub.
Prerequisites	No prerequisites.
Course contents	The course covers the basic principles of Structured Programming and extends to the introduction of Object-Oriented Programming and object-oriented modeling. Graduate students will learn to develop Java programs using the integrated development environment IntelliJ IDEA through practical examples. Additionally, design and development techniques for web pages and applications using JavaScript/React languages will be presented.
Recommended reading	• Προγραμματισμός με JAVA, Κάβουρας Κ. Ιωάννης, Ρουκουνάκη Α. Κατερίνα, Εκδόσεις Κλειδάριθμος. • Java Προγραμματισμός, H.M. Dietel, P.J. Dietel, 10η Έκδοση, 2015. Ελληνική μετάφραση: Εκδόσεις Γκιούρδας. • Ο Προγραμματισμός για το WEB - Όλα όσα πρέπει να γνωρίζεται, Randy Conolly, Ricardo Hoar, Εκδόσεις Μ. Γκιούρδας • React Quickly, Morten Barklund, Azat Mardan, Manning; 2nd ed. edition (September 5, 2023).
Teaching methods	Face-to-face
Assessment methods	Written work (50%) Laboratory work (50%)
Language of instruction	English, Greek

Data Management and Engineering

Course title	**Data Management and Engineering**
Course code	m86105f
Type of course	Core
Year of study	1st
Semester/trimester	1st

Number of credits allocated	2.5ECTS
Name of lecturer	Dimitris Papakyriakopoulos
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • It recognizes the value of data to a business. • Recognize the effects of data governance practices. • Review and design data models. • Applies data management tools. • Create and manage effective data pipelines.
Prerequisites	No prerequisites.
Course contents	First part-Theoretical foundations • The concepts data management, lifecycle of data and data governance • Relational data bases and modeling • Data warehouse and modelling Second part- Processing data with R • Introduction to the tidyverse ecosystem. • Data wrangling and the grammar of graphics. • Reporting using markdown and shiny app.
Recommended reading	DAMA International (2017). *DAMA-DMBOK: Data Management Body of Knowledge.* Technics Publications, ISBN:9781634622349. Ladley, J. (2019). *Data governance: How to design, deploy, and sustain an effective data governance program*. Academic Press. Wickham, H., Çetinkaya-Rundel, M. and Grolemun, G. (2023) *R for Data Science (2e)*. O'REILLY, available at https://r4ds.hadley.nz/ Kimball, R., Ross, M., Thorthwaite, W., Becker, B., & Mundy, J. (2008). *The data warehouse lifecycle toolkit*. John Wiley & Sons.
Teaching methods	Lectures, motivate students both to group and individual work
Assessment methods	Group assignments
Language of instruction	English, Greek

People & Teams Management

Course title	People & Teams Management
Course code	m86106f
Type of course	Core
Year of study	1st
Semester/trimester	1st
Number of credits allocated	2.5ECTS
Name of lecturer	Ioannis Nikolaou, Professor of Organizational Behaviour and Human Resources Management
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Understand the critical role of effective management and more generally of effective human resource management. • Understand organizational behavior and, consequently, be able to manage themselves and others more effectively in the workplace. • Understand the basic functions of the Human Resources Management for the success of modern organizations. • Recognize key concepts and critical theories of organizational behavior and development.
Prerequisites	No prerequisites.
Course contents	• The role and significance of effective management of individuals and teams/ The exercise of leadership and administration

	• Psychology of individual differences • Recruitment and Selection of Human Resources • Motivation of Human Resources • Effective Team Management • Evaluation and Development of Human Resources
Recommended reading	Vakola, M. & Nikolaou, I. (2019). *Organizational Psychology & Behavior*. Athens: Rosili Lectures/ Scientific Paper Recommended Resources • Penney, L. M., David, E., & Witt, L. A. (2011). A review of personality and performance: Identifying boundaries, contingencies, and future research directions. *Human Resource Management Review, 21*(4), 297-310. • Hansen, M. T., Ibarra, H., Peyer, U., & von Bernuth, N. (2013). The Best-Performing CEOs in the World. Harvard Business Review, 91(1/2), 81-95. • Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly, 41*(4), 574-599. • Huckman, R., & Staats, B. (2013). The Hidden Benefits of Keeping Teams Intact. Harvard Business Review, 91(12), 27-29. • Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. Journal of Organizational Behavior, 36(1), 72-103. • Nikolaou, I. (2014). Social Networking Web Sites in Job Search and Employee Recruitment. International Journal of Selection and Assessment, 22(2), 179-189.
Teaching methods	Lecture presentations, case studies, guest talks, videos, etc.
Assessment methods	**Written Assignment (WA) (weighting-50%):** Each student selects a topic related to Human Resources Management/Organizational Behavior and submits a bibliographic review of the most important theories and theoretical approaches to the topic using literature-based information and supporting his/ her analysis with appropriate references from scientific journals worldwide. All individual submissions include at least four quality research sources. (5,000-8,000 words). **Final Exam (FE) (weighting-50%):** A take-home' examination at the end of the semester has been designed to assess all topics covered in "Management of People and Groups" including lectures, tutorial materials, and relevant text book chapters. A case study is given to all students a few days before the day/ time of the exam, which students should study carefully. The examination instructions and questions are made available through Eduportal on the day of exams, and students have a set of three hours to complete these before submitting answers in the assessment folder. This is an individual piece of work and, as an open-book task, completely remotely (not in a formal and invigilated examination venue), it is subject to normal DMST coursework regulations (and is submitted through Turnitin software).
Language of instruction	English, Greek

Business Process Modelling and Re-engineering

Course title	**Business Process Modelling and Re-engineering**
Course code	m86107f
Type of course	Core
Year of study	1st
Semester/trimester	1st
Number of credits allocated	2.5 ECTS
Name of lecturer	A. Poulymenakou, Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The main objective of the course is to introduce basic concepts and techniques related to the business analysis of work systems involved in and supported by IT systems (and technologies). Students will understand how different types of business processes and technologies, within a specific human, work and organizational context, can be studied and analyzed to locate/track and identify opportunities for improvement and innovation in order to implement and apply them. The course emphasizes on techniques for analyzing structures and performance, infrastructure and risks in organizational and social contexts and environments that are enhanced by the technology embedded in them.
Prerequisites	No prerequisites.
Course contents	○ Work Systems, Business Processes, architecture and information systems infrastructure ○ Strategy and vision of Business Process Performance ○ Business Process Strategy - Performance perspective ○ Business Processes and IT Architectures - Performance Management perspective ○ Corporate Governance of Information Infrastructure ○ Enterprise Modelling using the Archimate modelling language
Recommended reading	○ P. Weill and J. Ross (2004) Information Technology Governance, Harvard Business School Press ○ J. Ross, P. Weill and D.C. Robertson, (2006) Enterprise Architecture Strategy, Harvard Business School Press ○ McAfee (2009) Enterprise 2.0, Harvard Business School Press ○ Selected academic articles, business publications, and case studies distributed during lectures
Teaching methods	Lectures, case studies, hands on workshops on modelling toolset (Archi)
Assessment methods	The evaluation of the course is based on the following criteria: - Class participation (10%) - Project consisting of two parts: ○ Part A: Real Work System Study (70%) ○ Part B: Analysis and Modeling of Core Business Process using the Archi toolset (20%)
Language of instruction	Greek / English

<u>Elective Course</u>
User-Centered Design Thinking

Course title	**Business Process Modelling and Re-engineering**

Course code	m86208f
Type of course	Elective
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2.5 ECTS
Name of lecturer	Katerina Pramatari, Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Define the requirements and design user-centered systems and digital services • Use modern techniques in order to understand and capture user needs with the objective to design the user-interface and functionality of systems and digital services • Understand the difference between conceptual, technical and architectural design • Recognize the alternative choices for the development of a user-centered system, the role of the different technologies and the pros and cons of different implementation approaches (from-scratch development vs no-code/low-code platforms) • Design and develop a user-centered system, using at least a low-code/no-code platform, and put it in operation • Have a contemporary view of the tools and technologies used in the user-centered system design and development • Understand the business implications of system design decisions
Prerequisites	No prerequisites.
Course contents	The course is structured under the following modules: **Introduction to basic concepts** • User-centered design • Architectural and Detailed System Design • Architecture of Web Applications • Design of digital products and services **System Design** • Design of use cases and user interface • Design of classes and data layer • Architectural design • Indicative cases-examples **System Development and Testing** • Modern technologies and development frameworks • Pros/cons of low-code/no-code/full code • Implementation and testing • Indicative cases-examples **User-Centered Design Revisited** • Agile software development • User Journey maps • A/B Testing
Recommended reading	Alan Dennis, Indiana University Barbara Haley Wixom, "Analysis and Design with UML", University of Virginia, McIntyre School of Business David Tegarden, Virginia Tech, ISBN: 978-0-470-07478-7. Larman, Craig (2004). Agile and Iterative Development: A Manager's Guide. Addison-Wesley. p. 27. ISBN 978-0-13-111155-4.

	Tomasz Miaskiewicz, Kenneth A. Kozar, Personas and user-centered design: How can personas benefit product design processes?, Design Studies, Volume 32, Issue 5, 2011, Pages 417-430. Van Eijk, Daan et al. 'Design for Usability; Practice-oriented Research for User-centered Product Design'. 1 Jan. 2012: 1008 – 1015.
Teaching methods	• Lectures • Practical Exercises • Application design and development • Team-work • Class presentations
Assessment methods	Team project-class presentations: 30% Final project assignment: 40%. Written exams: 30%
Language of instruction	English, Greek

2nd Semester

Core Courses

Mobile programming (Kotlin for Android & Swift for IOS)

Course title	Mobile programming (Kotlin for Android & Swift for IOS)
Course code	m86109f
Type of course	Core
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2.5ECTS
Name of lecturer	Ioannis Kontopoulos
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Understand principles of object-oriented programming • Understand principles of mobile app development • Design and develop apps for Android devices
Prerequisites	No prerequisites.
Course contents	Java development; Android app development; mobile app principles; object-oriented principles
Recommended reading	*1. Learn Java and Object-Oriented programming by Vahe Aslanyan* *2. Effective Java by Joshua Bloch* *3. Android notes for professionals* *4. Android App Development For Dummies 3rd Edition*
Teaching methods	Theory and lab exercises
Assessment methods	Semester project
Language of instruction	English, Greek

Banking and Finance

Course title	Banking and Finance
Course code	m86110f
Type of course	Core
Year of study	1st
Semester/trimester	2nd

Number of credits allocated	2.5 ECTS
Name of lecturer	Konstantinos Drakos, Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Comprehend the functioning of banking, as well as of the wider financial system and its interaction with the general economic environment • Analyze the risks emerging from banking operations • Understand the regulatory environment and its implications for banking institutions' decisions • Comprehend the consequences of new technologies for the banking environment
Prerequisites	No prerequisites.
Course contents	• Introduction to basic finance concepts: types of financial markets, types of financial assets, pricing • The role of banking firms in modern market economies: the meaning and need for financial intermediation • The financial landscape: a historical perspective, current trends and expected developments • Banking and the Management of Financial Institutions: Identification and measurement of intermediation financial risks • Contemporary Banking Regulation: the Basel Accords and their implications for banking operations and management decisions • The new era of financial intermediation: technological advances, Fintech
Recommended reading	• *Frederic S. Mishkin, The Economics of Money, Banking and Financial Markets,* • *Business School Edition, 4th Edition – Addison-Wesley Publishers, 2016* • *Shelagh Heffernan, Modern Banking, 2005 John Wiley & Sons Ltd* • The Routledge Handbook of FinTech, Edited By K. Thomas Liaw, 2021 • Fabian Schar and Aleksander Berentsen, Bitcoin, Blockchain, and Cryptoassets: A Comprehensive Introduction, MIT Press, 2020
Teaching methods	Face-to-face
Assessment methods	multiple choice questionnaires
Language of instruction	English, Greek

Big Data Systems and Cloud Management

Course title	**Big Data Systems and Cloud Management**
Course code	m86111f
Type of course	Core
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2.5 ECTS
Name of lecturer	Chrysostomos Kapetis
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Understand the fundamental concepts and principles of big data

	• Explain the role and significance of big data systems and cloud management in modern business operations. • Describe and use techniques and systems for managing big data. • Understand cloud infrastructure and services • Know the required techniques and methodologies for managing cloud services and resources
Prerequisites	No prerequisites.
Course contents	The vast amount of today's datasets and the specialized requirements of modern applications have necessitated the development of a new generation of data management systems, where emphasis is placed on distributed and fault-tolerant processing. New programming examples have emerged, new systems and tools have been developed, and a multitude of newly formed enterprises offers solutions for data management and analysis. This course focuses on big data systems and cloud management techniques within the context of modern business operations. Students will learn the fundamental concepts and principles governing big data and become familiar with big data system technologies, including data storage, processing, and analysis. Additionally, the course will cover various aspects of cloud computing, including cloud service models (IaaS, PaaS, SaaS), with a focus on their applications in managing large-scale data environments. Through theoretical discussions, practical examples, and programming exercises, students will develop the knowledge and skills required for designing, implementing, and managing big data systems in cloud environments. Topics covered include: • Introduction to Big Data • Big Data Storage and Processing Concepts • Big Data Systems (Hadoop Map-Reduce, Hive, Apache Spark) • NoSQL Databases (MongoDB, Neo4J) • Cloud Infrastructure and Virtualization Technologies • Scalability and Elasticity in Cloud-Based Big Data Systems
Recommended reading	1. Lin, J., Dyer, Ch., Data-Intensive Text Processing with MapReduce. Morgan & Claypool Publishers, 2010. 2. Erl, Th., Khattak, W., Buhler, P., Big Data Fundamentals: Concepts, Drivers & Techniques. Prentice Hall, 2016. 3. Chambers, B., Zaharia, M., Spark: The Definitive Guide: Big Data Processing Made Simple. O'Reilley, 2018. 4. Bhowmik, S., Cloud Computing. Cambridge University Press, 2017. Weise,L. Advanced Data Management – For SQL, NoSQL, Cloud and Distributed Databases. De Gruyter Oldenbourg, 2015. 5. Garcia-Molina, H. Ullman, J. Widom, J. Database Systems the Complete Book. Pearson Prentice Hall, 2009
Teaching methods	Lectures and programming exercises.
Assessment methods	Evaluation criteria: • Final written Exam (40%) • Programming Exercises (60%) The evaluation procedure is announced to the students during the first lecture and is also accessible at the moodle platform throughout the entire semester.
Language of instruction	English, Greek

Data Analytics and Visualization

Course title	Data Analytics and Visualization
Course code	m86112f
Type of course	Core
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2,5 ECTS
Name of lecturer	Dr. Maria Kechagia
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Understand the importance of extracting and interpreting information from complex data. • Use data analytics as a central element in the decision-making process in the digital environment. • Use advanced data analysis techniques, including statistical methods and basic machine learning algorithms. • Be able to discover patterns, predict trends and make sense of data. • Use data visualization tools such as graphs, charts and graphs. • Use visual representations to enhance understanding and communication of results. • To have the necessary skills to face challenges in the field of digital transformation, effectively utilizing data for the benefit of organizations and businesses.
Prerequisites	No prerequisites.
Course contents	1. Introduction and use of Python libraries such as numpy and pandas. In particular, the students will be taught how to import, export and process data from different types of files, e.g., txt, csv, json. (2 lectures of 3 hours) 2. Introduction and use of visualization programs e.g., matplotlib, seaborn, plotnine, plotly (2 lectures of 3 hours) 3. Introduction and use of basic statistical models e.g., regression, correlation, anova with Python's statsmodels library and introduction to machine learning models e.g., k-means using Python libraries such as scikit-learn (2 lectures of 3 hours)
Recommended reading	1. Introduction to Computation and Programming Using Python by John V. Guttag, third edition, MIT Press 2. An Introduction to Statistics with Python: With Applications in the Life Sciences (Statistics and Computing) by Thomas Haslwanter, second edition, Springer 3. Python Data Science Handbook: Essential Tools for Working with Data by Jake Vanderplas, O'Reilly 4. Fundamentals of Data Visualization: A Primer on Making Informative and Compelling Figures by Claus O. Wilke, O'Reilly
Teaching methods	Teaching will be face-to-face. However, students will be able to send emails with questions to the instructor. Students will be able to view and download to their computer the slides that will be used in the lectures. The lectures will contain both theory and short exercises and examples that will be solved in the class for the students to understand the concepts of the course. Finally, programs and software tools will be used for the exercises of the course. There will be tutorials on how to use these programs and tools, so that the students themselves can use them.
Assessment methods	At the end of the course, students will submit a group written project (max 3 people), which will count for 40% of the final grade of the course.

	In addition, students will be assessed with final written exams that will account for 60% of the final grade. In the written exams, students will be tested with the following assessment methods: Multiple Choice Test, Short Answer Questions, Development Questions, Problem Solving. The course evaluation criteria will be explicitly stated on the course slides. In the final exam, there will be a score for each question. Also, for the group project, instructions will be given regarding the chapters the project should have, as well as how much each chapter contributes to the final mark of the project.
Language of instruction	English, Greek

Artificial Intelligence and Machine Learning algorithms

Course title	**Artificial Intelligence and Machine Learning algorithms**
Course code	m86113f
Type of course	Core
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2.5 ECTS
Name of lecturer	Korfiatis Nikolaos, Assoc. Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Understand the fundamentals of artificial intelligence and machine learning, distinguish between different types of machine learning, such as supervised and unsupervised learning, and how they can be applied in various business contexts. • Identify opportunities for digital transformation and applications of artificial intelligence in their organizations, such as strategic advantages, improvement of operational efficiency, customer experience (CX), etc. • Develop and implement AI strategies, formulating strategic plans for integrating AI technologies into business processes, including setting clear goals, selecting appropriate ML algorithms, defining success metrics, and leveraging existing data across the organization. • Manage the implementation of AI projects by gaining knowledge of forming and leading AI project teams, understanding the roles and skills required, and applying project management methodologies tailored to the needs of AI. • Determine compliance with ethical and regulatory issues by becoming aware of the ethical implications of AI technologies, including issues related to bias, privacy and transparency, and understanding the regulatory landscape affecting the application of AI in business.
Prerequisites	No prerequisites.
Course contents	**1.** ntroduction to Artificial Intelligence and machine learning (ML) in business • Definitions and distinctions: AI, ML, deep learning and their importance to business. • Overview of the evolution of AI and ML, key concepts and algorithms. • High-level case studies that demonstrate the impact of IT across industries. **2.** Data-driven decision making and machine learning algorithms • The role of data in ML: implementation, quality and management strategies. • Introduction to data analysis and its business applications. • Supervised and unsupervised machine learning.

	3. Implementation of artificial intelligence strategies • Identify business opportunities for IT integration. • Creating an AI strategy: from conception to implementation roadmap. • Case study analysis: Successful applications of IT projects. **4.** Digital Transformation and IT • Key considerations for operational IT implementation: team composition, technology stack and project management methodologies. • The CRISP – DM standard • Addressing the common challenges in the implementation of IT projects. Batch and Real time frameworks. **5.** Ethics, privacy and IT compliance • Privacy algorithms and the role of personal data in the application of IT in organizations • Anonymization techniques and impact on the performance of machine learning algorithms. **6.** Generative AI and applications • Training, architecture and retraining of Production AI models • Prompt Engineering and dialog techniques with generative artificial intelligence models in business environments. **7.** Practical AI and ML applications and case cases
Recommended reading	Course material will be provided in slides and videos as well as exercise packs from Datacamp. Additional material will be given during the lectures. • Zwingmann, T. (2022). Ai-powered business intelligence. " O'Reilly Media, Inc.". • Banachewicz, K., Massaron, L., & Goldbloom, A. (2022). The Kaggle Book: Data analysis and machine learning for competitive data science. Packt Publishing Ltd. • McKinney, W., (2017). Python for data analysis: Data wrangling with Pandas, NumPy, and IPython. (2nd Edition). O'Reilly. Scientific Articles: • Canhoto, A. I., & Clear, F. (2020). Artificial intelligence and machine learning as business tools: A framework for diagnosing value destruction potential. Business Horizons, 63(2), 183-193. • Veale, M., & Zuiderveen Borgesius, F. (2021). Demystifying the Draft EU Artificial Intelligence Act—Analysing the good, the bad, and the unclear elements of the proposed approach. Computer Law Review International, 22(4), 97-112. • Brynjolfsson, Erik, Danielle Li, and Lindsey R. Raymond. Generative AI at work. No. w31161. National Bureau of Economic Research, 2023.
Teaching methods	Use of online support system and specialized platform for machine learning and AI examples (datacamp)
Assessment methods	The course will be assessed at two levels. 1. Individual work that will require the completion of the relevant sections from the datacamp and an evaluation test that will be carried out by the datacamp and will be opened in the last week of the course, as defined by the teacher. This will count for 20% of the grade. 2. The remaining 80% will be calculated from a required grade of group work that will require students to reproduce and extend an existing

	python kernel code from a list of competitions on the Kaggle platform chosen by the instructor.
Language of instruction	English, Greek

Cybersecurity and Data Privacy

Course title	**Cybersecurity and Data Privacy**
Course code	m86114f
Type of course	Elective
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2.5 ECTS
Name of lecturer	D. Mitropoulos, Assistant Professor Dr. V. Koniakou
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Recognize the most common, modern attacks based on software vulnerabilities such as code injection attacks, cross-site scripting, cross-site request forgery, etc. • Utilize the most common countermeasures employed to protect applications as well as the processes and practices for developing secure software • Know and understand basic elements of applied cryptography with reference to the most widespread ones such as the TLS (Transport Layer Security) protocol, hash functions, digital certificates, and code signing techniques • They consider issues of data integrity, confidentiality and availability, data protection issues, the types of data (personal, sensitive) but also what different anonymization techniques • Recognise and assess the obligations arising from Regulation (EU) 2016/679 for banks (in particular with regard to the processing principles, the obligations of data controllers, the rights of the data subjects, and the application of Articles 25 and 32-34 of the Regulation) • identify and analyse the most relevant privacy and personal data protection issues related to the banking sector, particularly complicated issues that lie in the crossroad of different instruments imposing seemingly conflicting obligations. (For example, the Regulation (EU) 2016/679 and the KYC requirements in the context of the obligations stemming from the AML)
Prerequisites	No prerequisites.
Course contents	• Application Security • Elements of Cryptography • Data Protection • Privacy • Personal Data Protection in the Bank Sector
Recommended reading	[1] Ross J. Anderson. Security Engineering: A Guide to Building Dependable Distributed Systems. *John Wiley & Sons, Inc.*, New York, NY, USA, 1st edition, 2001. ISBN 0471389226. [2] John Viega and Gary McGraw. Building Secure Software: How to Avoid Security Problems the Right Way. *Addison-Wesley*, Boston, MA, 2001. ISBN 0-201-72152-X. [3] Michael Howard and David LeBlanc. Writing Secure Code. *Microsoft Press*, Redmond, WA, second edition, 2003. ISBN 0-7356-1722-8.

	[4] Zhendong Su and Gary Wassermann. The essence of command injection attacks in web applications. In *Conference Record of the 33rd ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages POPL '06*, pages 372–382. ACM Press, January 2006. [5] Brian Chess and Gary McGraw. Static analysis for security. *IEEE Security and Privacy*, 2(6): 76–79, 2004. ISSN 1540-7993. [6] Jonathan Katz and Yehuda Lindell. 2007. Introduction to Modern Cryptography (Chapman & Hall / Crc Cryptography and Network Security Series). *Chapman & Hall / CRC*. [7] Hoofnagle, C. J., Sloot, B. van der, & Borgesius, F. Z. (2019). The European Union general data protection regulation: What it is and what it means. Information and Communications Technology Law, 28(1). https://doi.org/10.1080/13600834.2019.1573501 [8] Ira S Rubinstein, Nathaniel Good, The trouble with Article 25 (and how to fix it): the future of data protection by design and default, International Data Privacy Law, Volume 10, Issue 1, February 2020, Pages 37–56, https://doi.org/10.1093/idpl/ipz019
Teaching methods	Lectures, Use Cases, Research Publication Readings
Assessment methods	Technical Projects, Essay Writing, Final Exam
Language of instruction	English, Greek

Project Management and agile methods

Course title	**Project Management and agile methods**
Course code	m86115f
Type of course	Core
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2.5ECTS
Name of lecturer	Konstantinos Androutsopoulos
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Identify and describe the goals, limitations and boundaries of a project (project scope) • Break down a project into individual work packages and activities (Work Breakdown Structure) • They calculate the cost, duration and required resources for the implementation of a project () • Draw up a project schedule (GANTT Chart) • Determine the relationship between project duration and cost (Cost-Time Trade off) • Review the allocation of resources to the activities of a project • Develop a project plan • Monitor and control a project • They evaluate projects
Prerequisites	No prerequisites.
Course contents	**SECTION 1 ORGANIZATION AND STRUCTURE OF A PROJECT** - Project definition and characteristics, categories of decisions related to project management - Project management goals and principles - Initiate, select and identify project ideas - Stages of a project's life cycle - Organizing a project

	- Project categorization and implications for the management process - Critical success factors of a project - Case study **SECTION 2 ELEMENTS OF PROJECT SCHEDULING** - Critical Path Method - Developing Project Schedule, Gantt Chart, Milestones - Case Study-Examples **SECTION 3 PROJECT COST** - Direct, indirect and total cost of a project - Project cost distribution over time - Cost-time trade-off - Examples **SECTION 4 RESOURCE MANAGEMENT** - Types and categories of resources and work, - Scheduling projects with limited resources - Time Allocation of work - Resource planning and smoothing - Examples **SECTION 5 PROJECT MONITORING & CONTROL** - Project monitoring methods - Project control procedures - Resource utilization and task progress relationship **SECTION 6 EVALUATION OF PROJECTS** - Cost-effectiveness analysis - Multi-criteria project evaluation methods - Examples in project evaluation
Recommended reading	• Kerzner Harold, Project Management: A Systems Approach to Planning, Scheduling, and Controlling 11th Edition, 2016 • Avraham Shtub, Jonathan F. Bard, Shlomo Globerson, " Project Management: Processes, Methodologies, and Economics ", 2η Έκδοση, Pearson Education, 2005. • Lock, D., "Project Management", 9th Edition, Gower, 2007. • Schwalbe, K., "Information Technology Project Management", 3rd Edition, International Thomson Publishers, 2004.
Teaching methods	Face to Face
Assessment methods	The students' final grade involves their grade on: 1) the written exam of the course (70% weighting) 2) the group work of the course (weighted 30%) **Written examination**. The written examination of the course is in the Greek language and includes topics related to: a) solving project management problems and b) short answer questions, and c) multiple choice questions supported by arguments. Assignment. The work concerns the development of a basic project management plan.
Language of instruction	English, Greek

Customer Analytics

Course title	**Customer Analytics**
Course code	m86116f
Type of course	Core
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2.5 ECTS
Name of lecturer	Panagiotis Sarantopoulos
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Possess an applied understanding of different analytics methods for customer and other marketing data • Demonstrate the ability to use the R language and environment to manipulate data and implement analytics techniques • Break complex tasks into parts and steps • Communicate findings and ideas professionally and creatively • Work in groups effectively and grow your interpersonal skills
Prerequisites	No prerequisites.
Course contents	• Customer Analytics and Data Visualization • Segmentation Analytics • Adverting Analytics • Promotions Analytics • Predicting and Modeling Choices • Customer Lifetime Value (CLV)
Recommended readings	• Chapman, C., & Feit, E. M. (2019). R for Marketing Research and Analytics. 2nd Edition. Springer. • Yildirim, G., & Kübler, R. (2023). Applied Marketing Analytics Using R. Sage. • Wickham, H., & Grolemund, G. (2016). R for Data Science: Import, Tidy, Transform, Visualize, and Model Data. O'Reilly Media. • Grigsby, M. (2022) Marketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques. KoganPage.
Teaching methods	Lectures, Case Discussions, Software Demonstrations
Assessment methods	Group Assignment, Final Written Exam
Language of instruction	English, Greek

<u>Elective Course</u>

Digital Transformation Management

Course title	**Digital Transformation Management**
Course code	m86217f
Type of course	Elective
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2.5 ECTS
Name of lecturer	George Doukidis, Professor George Lekakos, Professor

Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be in a position to: • Understand the key dimensions in planning, organising and managing a digital transformation program. • Evaluate the current state of digital maturity of an organisation and propose a digital transformation plan. • Learn how to use the various justification tools for a digital transformation program. • Recognise and schedule the various projects that a digital transformation program consists. • Identify the critical success factors and the risks of the digital transformation program.
Prerequisites	No prerequisites.
Course contents	The course aims at a broad understanding of the activities in a typical digital transformation program. The course material will be case-study oriented and will include the following parts: • The need for the objectives and their characteristics in a Digital Transformation program. • Developing the organizational vision and the required strategies for Digital Transformation program. • Different justification techniques (ROI, taking advantage of opportunities, eliminating weak points) for launching a Digital Transformation program. • The typical executive roles, the key executive activities and the required governance in a Digital Transformation program. • Implementing planning and schedules in the context of an organisation's Digital Transformation program. • Organizational change management which accompanies and supports the organisation as it proactively changes from its existing organization structure to a clearly-defined future organization. • Important components of a Digital Transformation program including: a feasibility study, the program charter, progress reports, status reviews, program closure.
Recommended reading	Suggested bibliography: • John Stark (2020) Digital Transformation of Industry: Continuing Change, Springer • David Rogers (2016) The Digital Transformation Playbook, Columbia Business School Selected case studies Related academic journals: • G. Doukidis, D. Spinellis & C. Ebert (2020) Digital Transformation Playbook, IEEE Software, September/October, pp. 13-21.
Teaching methods	Case study presentations of real-life digital transformation projects from various sectors
Assessment methods	• Group written project on a real-life digital transformation program (70%) • Group oral presentation of a digital transformation case study (30%)
Language of instruction	English, Greek

Digital services and innovation

Course title	Digital Services and Innovation
Course code	m86218f

Type of course	Elective
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2.5 ECTS
Name of lecturer	Eric Soderquist, Professor, Sessions 1-3, Katerina Pramatari, Professor, Sessions 4-6.
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Analyze the innovation dynamics of an organization and propose actions for developing and enhancing innovation outcomes, • Apply methods and tools for the structuring, development and evaluation of innovation processes and outcomes, including technology and product life cycles, Stage-Gate Model, and 10 Types of Innovation. • Design innovative digital services enabled by new technologies and demonstrate them by using digital tools (mock-up design). • Assess and experiment with innovative digital services, based on digital channels and online promotion tools for business validation. • Understand the pros and cons of alternative strategies for the technical implementation of digital services. • Shortly present innovative digital services, covering the problem and the proposed solution, the competition landscape, the development and funding approach etc. (pitching presentation).
Prerequisites	No prerequisites.
Course contents	Students are introduced to the notions and concepts of innovation, different types of innovation, and the structures, processes and methods used by organizations to develop, implement and enhance innovations. Through practical work, they get acquainted with development techniques and applications in the digital space. Based on the capabilities provided by new technologies, such as digital channels, Artificial Intelligence, Sensors, Internet of Things etc. they design innovative digital services and products that address the contemporary needs of organizations, consumers and citizens. Moreover, they assess the proposed ideas by using online communication and promotion tools and techniques. In the context of the course, modern design methods and approaches are applied (design thinking, lean startup methodology, etc.) as well as design, development and presentation tools (figma, mockup design, pitching presentation etc.). The students further develop critical thinking in respect to the alternative strategies for technical implementation and the pros and cons of each strategy.
Recommended reading	1. Dyer, J., Gregersen, H., Christensen, C. "The Innovators DNA", Harvard Business Review (HBR), December 2009: 60-67. 2. Pisano, G. "You Need an Innovation Strategy", HBR, June 2015: 60-67. 3. Gartner, ”Top Strategic Technology Trends for 202X”, 4. Cook, S. et al, Turn Generative AI from an Existential Threat into a Competitive Advantage", HBR, Jan-Feb 2024. 5. Steve Blanc, Why the Lean Start-Up Changes Everything, Harvard Business Review, May 2013
Teaching methods	Lectures, Exercises, Case Studies, Group Projects.
Assessment methods	Teamwork during sessions 2, 3, 5 και 6. 40% of final grade.

	Final Group Report 60%.
Language of instruction	English, Greek

User experience design

Course title	**User experience design**
Course code	m86219f
Type of course	Elective
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2.5ECTS
Name of lecturer	George Lekakos, Professor
Objective of the course (preferably expressed in terms of learning outcomes and competences)	The aim of the course is to introduce students to the concept of User Experience (UX) and the parameters that should be taken into account when designing modern services. It also aims at understanding design thinking while emphasizing the identification of emotions that lead to an improved user experience as well as its evaluation in order to achieve the user's engagement with the service. At the end of the course students will be able to: • Understand how human-computer interaction works as well as the way the human brain perceives the stimuli it receives • To apply the principles of design thinking in practice • Understand the meaning of the user experience and its dimensions • Evaluate quantitatively and qualitatively prototypes and services • Apply techniques to improve the user experience at the interface level
Prerequisites	No prerequisites.
Course contents	• User experience – User Interface • Human as information processor • Services and apps design • Usability principles • Design thinking principles • Qualitative and quantitative evaluation of services and applications • Prompt engineering in Gen AI
Recommended reading	• Dix, A., Finlay, J., Abowd, G., Beale., R.. Επικοινωνία Ανθρώπου - Υπολογιστή. Μ. Γκιούρδας • K. Chorianopoulos, Ο Προγραμματισμός της Διάδρασης, www.pibook.gr • Jennifer Preece, Yvonne Rogers, Helen Sharp, Interaction Design: Beyond Human-Computer Interaction, John Wiley & Sons, 2002 • Eisenberg, B., vonTivadar, J.Q, Crosby, B., Davis. L. T., a/b Always Be Testing: The Complete Guide to Google Website Optimizer, Wiley Publishing, Inc., 2008. • B.J. Fogg, Persuasive technologies, Morgan Kaufmann, 2003 • R. Gialdini, Influence: science and practice, Pearson International, 2009
Teaching methods	Lectures using powerpoint presentations, case study analysis, practical application using prototyping and UX evaluation tools, final project assignments presented by the students.
Assessment methods	Students performance assessment is based on the grade of the final project assigned to the students. The final grade of the course will result from the grade of the assignment (70%) and oral examination (30%)
Language of instruction	English, Greek

Full Stack Web development

Course title	**Full Stack Web development**
Course code	m86220f
Type of course	Elective
Year of study	1st
Semester/trimester	2nd
Number of credits allocated	2.5 ECTS
Name of lecturer	Athanassios Androutsos
Objective of the course (preferably expressed in terms of learning outcomes and competences)	Upon successful completion of the course, students will be able to: • Understand advanced features of modern software in the context of full-stack application development in the contemporary business environment. • Develop applications with Java EE and Spring / Spring Boot based on best practices at a professional level. • Develop applications using modern design architectures such as MVC (Model-View-Controller) and SOA (Service Oriented Architecture). • Showcase their knowledge and skills through projects on GitHub.
Prerequisites	No prerequisites.
Course contents	The course includes the presentation of enterprise applications using Jakarta EE and Spring/Spring Boot. Postgraduate students will learn to develop Full-Stack programs with Databases, Web Front-end or REST APIs, and Middleware within layered architectures. The course will also cover data input validation, encryption of sensitive user information, logging, application-level security, as well as other practical issues within the context of real operational applications.
Recommended reading	• Beginning Jakarta EE: Enterprise Edition for Java: From Novice to Professional,Peter Spath, Apress, 2019. • Pro Jakarta EE 10: Open Source Enterprise Java-based Cloud-native ApplicationsDevelopment 1st ed. Edition, Apress, 2023. • Spring in Action, Sixth Edition, Craig Walls, Manning, 2022. • Spring Boot in Practice, Somnath Musib, Manning, 2022.
Teaching methods	Face-to-face
Assessment methods	Written work (50%) Laboratory work (50%)
Language of instruction	English, Greek

PART III: INFORMATION FOR THE STUDENTS

GENERAL INFORMATION FOR THE STUDENTS

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. WiFi instructions

- **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.

Studies Advisor

In the PMSc in Digital Transformation, the institution of Professor-Advisor / Study Advisor has been adopted. The student may contact the Professor-Advisor/Study Advisor in order to consult him/her either on educational issues or on any issue affected by his/her studies.

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).