

**ΟΙΚΟΝΟΜΙΚΟ  
ΠΑΝΕΠΙΣΤΗΜΙΟ  
ΑΘΗΝΩΝ**



ATHENS UNIVERSITY  
OF ECONOMICS  
AND BUSINESS

**SCHOOL OF BUSINESS**

**DEPARTMENT OF MANAGEMENT SCIENCE AND TECHNOLOGY**



MSc in

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**Management Science  
& Technology**

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ATHENS UNIVERSITY OF ECONOMICS & BUSINESS

**STUDY GUIDE  
ATHENS, DECEMBER 2022**

## **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](mailto: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 Business School**

Dean: Associate Professor Angeliki Poulymenakou

#### **Department of Business School**

Chair: Professor E. Voudouri

#### **Master's Program**

Director: Professor Georgios Lekakos

#### **Contact details**

Address: 47a Evelpidon Str, GR-113 62, Athens

Telephone number: +30-210-8203685

Email: [ms-mst@aueb.gr](mailto:ms-mst@aueb.gr)

Website: <https://www.dept.aueb.gr/mast>

## **ACADEMIC CALENDAR**

### **Re-sit exam period September- October 2022**

Start of Exams: Monday, September 5, 2022  
End of Exams: Friday, September 16, 2022

### **FALL SEMESTER**

Classes begin: Monday, September 26, 2022  
End of 1<sup>st</sup> period: Saturday, November 2, 2022  
Start of 2<sup>nd</sup> period: Monday, November 28, 2022  
Break before Christmas Holidays: Friday, December 23, 2022  
Classes restart: Saturday, January 7, 2023  
Classes end: Saturday, January 21, 2023

### **Exams' period of Fall Semester**

Exams of 1<sup>st</sup> period (November): 14/11/2022 – 26/11/2022  
Exams of 2<sup>nd</sup> period (February): 31/01/2023 – 11/02/2023

### **Holidays**

October 28 Holiday - The Anniversary of the "No", Friday, October 28, 2022  
The Anniversary of Polytechnio, Thursday, November 17, 2022  
Epiphany, Friday, January 6, 2023

### **SPRING SEMESTER**

Classes begin: Monday, February 13, 2023  
End of 1<sup>st</sup> period: Saturday, March 25, 2023  
Break before Easter Holidays: Thursday, April 13, 2023  
Classes restart: Thursday, April 20, 2023  
Start of 2<sup>nd</sup> period: Monday, April 24, 2023  
Classes end: Saturday, June 3, 2023

### **Exams' period of Spring Semester**

Exams of 1<sup>st</sup> period (April): 03/04/2023 – 12/04/2023  
Exams of 2<sup>nd</sup> period (June - July): 12/06/2023 – 24/06/2023

### **Holidays**

Clean Monday, Monday, February 27, 2023  
Greek Independence Day, Saturday, March 25, 2023  
Pentecost Monday, Monday, June 5, 2023

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

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

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

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

### **AUEB's ACADEMIC STRUCTURE**

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

Each School is structured by at least two (2) Departments, covers a domain of related scientific areas, and ensures the interdisciplinary approach to teaching and research between its departments. The School is responsible for supervising and coordinating the operation of the Departments and the educational and research work produced, in accordance with the Internal Operating Regulations. The bodies of the School, according to Law 4957/2022 (A 141) as applicable are: a) the Dean and b) the Dean's Council

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

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

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

#### **1. SCHOOL OF ECONOMIC SCIENCES**

Department of International and European Economic Studies

Department of Economics.

#### **2. SCHOOL OF BUSINESS**

Department of Management Science and Technology

Department of Business Administration

Department of Accounting and Finance

Department of Marketing and Communication.

### **3. SCHOOL OF INFORMATION SCIENCE AND TECHNOLOGY**

Department of Informatics  
Department of Statistics

#### **ADMINISTRATIVE BODIES OF POSTGRADUATE STUDY PROGRAMS**

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

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

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

#### **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 Management Science and Technology.

#### **ADMISSION REQUIREMENTS**

The selection criteria for candidates are defined in the notice and include in particular:

- I. Degree/s grade.
- II. Duration and type of employment.
- III. Other skills (grade in GMAT / GRE exams, IT skills, relevant seminars, etc.).

as well as the following quality criteria:

- IV. University and Department of Origin.
- V. Type of research experience.
- VI. Knowledge of English at C1 / C1 level.
- VII. Interview,
- VIII. Letters of recommendation from faculty members or employers.
- IX. Any distinctions / awards.

#### **ADMISSION/REGISTRATION PROCEDURE**

The registration of the each year's admitted postgraduate students takes place from June to October of each year, within deadlines set by the CC of the MSc.

The candidate, before registering, acquaints himself/herself of the Operation Regulation and the establishment act of the MSc and declares in writing that he/she accepts the Operation Regulation of the program. For reasons of exceptional necessity, the Assembly may decide, upon a reasoned request by the person concerned, that registration may take place within one month of the expiry of the deadline.

#### **EDUCATIONAL AND PROFESSIONAL GOALS**

Upon successful completion of his studies, the degree holder has acquired comprehensive and specialized knowledge on the fundamental concepts and the most modern trends currently prevailing in the fields of Information Technology Management and e-Business, Quantitative Methods and Operational Research, Supply Chain and Transport Management, Organizational Studies and Business Strategy.

The degree holder understands and is able to analyze and combine the basic rules governing quantitative methods and operational research, information technology and systems management, e-business and digital marketing, supply chain and transport, organizational studies and business strategy, business analytics as well as innovation and entrepreneurship.

The degree holder is able to apply, analyze and synthesize the above rules and knowledge in order to optimize the utilization of an organization's resources, support critical business decision-making, create innovative digital services / systems, organize digital transformation and reorganization, as well as complex projects.

In addition, the degree holder has acquired high-level analytical and synthetic skills, as well as familiarity with the appropriate tools of management, informatics, operational research, statistics and business analytics, in order to be able to follow the academic and empirical developments in the rapidly changing areas of Management Science and Digital Technology, both at a Greek and international level.

In a modern environment in which business presents a high degree of complexity, the degree holder possesses and is able to utilize highly specialized academic knowledge in the above subjects, in order to adapt to the ever-changing requirements of a successful professional career in the fields of management, consulting, e-business, supply chain and transport.

**ACCESS TO FURTHER STUDIES**

It is possible to continue studies at the Doctoral level.

**COURSE STRUCTURE DIAGRAM WITH CREDITS**

1 <sup>st</sup> Semester of the MSc (ECTS)	ECTS
<b>Core Courses</b>	
Theories of Management and Organization	5
Managerial Decision Making	5
Theories and Management of Information Systems	5
<b>Elective Courses</b>	
Business Statistics	2.5
Customer-centric Information Systems	2.5
Electronic Commerce	2.5
Production and Operations Management	2.5
Business Strategy	2.5
Supply Chain Management	2.5
Data Management	2.5
Mathematical Programming	2.5
Software Systems	2.5
Digital Marketing	2.5
Quality Systems Management	2.5
Business and Technological Ethics	2.5
<b>Seminars</b>	
Research Issues and Research Methodology of Administration, Entrepreneurship and Technology	-
<b>Total of the 1<sup>st</sup> Semester</b>	<b>30</b>
<b>2<sup>nd</sup> Semester</b>	
<b>Core Course</b>	
Advanced Topics in Management Science and Technology	5
<b>Elective Courses</b>	
Platforms and Applications in Business Analytics	5
Business Intelligence	2.5
Entrepreneurship and Innovation	2.5
Business Process Management	2.5
Management of People and Groups	2.5
Analysis and Planning of Transportation and Distribution Systems	2.5
Developing Competencies for Management and Innovation	2.5
Combinatorial Optimization	2.5
Digital Payment Systems and Blockchain Applications	2.5



Introduction to Business Analytics using Python	2.5
Inventory Management	2.5
Digital Platforms, Networks and Innovation	2.5
Project and Program Management	2.5
Design Digital Services	2.5
Digital Marketing in Tourism	2.5
Transportation Systems Management	2.5
<b>Seminar</b>	
Personal Improvement and Employability of students	-
<b>Total of the 2<sup>nd</sup> Semester</b>	<b>30</b>
<b>3<sup>rd</sup> Semester</b>	
Master Thesis	30
<b>Total of the 3<sup>rd</sup> Semester</b>	<b>30</b>
<b>Total of All Semesters</b>	<b>90</b>

The full-time program consists of one year of coursework, followed by a semester-long diploma thesis or led-study project. The part-time program consists of two years of coursework, followed by a semester-long thesis or led-study project.

#### **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 Assembly of the Department of Management Science and Technology upon the recommendation of the Coordinating Committee may decide to delete postgraduate students if the failed courses exceed two courses of 5 credits (or four courses of 2.5 credits) per academic term.

8. In any case of delete of the postgraduate student, any tuition fees paid shall not be 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 dissertation or field study project or internship is compulsory and performed for full-time students upon completion of the course during the third semester while for part-time students in the fourth semester.

The students of the program may choose to pursue a field study project instead of a dissertation, with a few hours of weekly meetings of the student in the company, or b) Internship, lasting at least 3 months and working up to 40 hours per week, in a company-provider with the scope of solving real-life problems related to the subject of the dissertation, field study project or internship. The above options will have the same impact and the same Credit Units as the dissertation, as mentioned in the studies regulation.

### **STUDIES ADVISOR**

Each student of the MSc in Management Science and Technology has a Study Advisor (Tutor), who is assigned at the beginning of the academic year. The student can contact the Studies Counselor in order to consult him / her either on educational issues or on any issue that influences his / her studies.

### **CAREER SUPPORT OFFICE & PROFESSIONAL DEVELOPMENT**

The Career Support Office & Professional Development of the MSc in Management Science and Technology, is developed and evolved 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

### CORE COURSES

#### Managerial Decision Making

<b>Course title</b>	<b>Managerial Decision Making</b>
<b>Course code</b>	Full Time Program: m81101f Part Time Program: m81101p
<b>Type of course</b>	Core
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Number of credits allocated</b>	5 ECTS
<b>Name of lecturer</b>	Manolis Kritikos, Associate Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<ul style="list-style-type: none"> <li>• The main objective of the Course is to introduce and familiarize the student in the methodology of decision making, as well as in the major models used today. The course covers both theoretical and practical implications related to Operations Research.</li> <li>• At the end of the course students will be able to: <ul style="list-style-type: none"> <li>• understand and formulate complex decision-making problems.</li> <li>• develop the appropriate decision-making problems.</li> <li>• use decision making models to effective decision making.</li> <li>• solve difficult combinatorial optimization problems.</li> <li>• implement models in many business functions.</li> <li>• use computer technology efficiently to make the best decision.</li> <li>• analyse methodologies and techniques using case studies to make effective business decisions (part-time program).</li> </ul> </li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p>The course consists of twelve three-hour lectures. The topics covered in these lectures are the following:</p> <p>Management Science, the Management Science approach to problem solving, Linear programming: model formulation, graphical solution and computer solution, Sensitivity analysis in linear programming problems, Modeling examples, Data Envelopment Analysis, Integer programming, 0-1 Integer programming modeling examples, Heuristics in Combinatorial Optimization, Transportation, Transshipment, and Assignment problems, Network flow models, Multicriteria decision making, Decision analysis and Simulation.</p>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• C. T. Ragsdale, (2022), Spreadsheet Modeling and Decision Analysis, A practical Introduction to Business Analytics, 9e, CENGAGE,</li> <li>• B. W. Taylor III, (2019), Introduction to Management Science, Bernard Pearson Educational Limited.</li> <li>• N. Balakrishnan, B. Render, P. M. Stair, Jr., (2013), Managerial Decision Modeling with Spreadsheets, Pearson Educational Limited .</li> <li>• G. L. Nemhauser and L. A. Wolsey, (1999), Integer and Combinatorial Optimization, Wiley- Interscience.</li> </ul>

	<ul style="list-style-type: none"> <li>• W. W. Cooper, L. M. Seiford and K. Tone, (2007), Data Envelopment Analysis, Springer.</li> <li>• Z. Michalewicz and D.B.Fogel, (2004), How to solve it: Modern Heuristics, Springer.</li> <li>• H. A. Taha, (2016), Operations Research: An Introduction, 10th edition, Prentice Hall, 2016.</li> <li>• W. L. Winston and S. C. Albright, (2002), Practical Management Science, South-Western College Pub.</li> </ul>
<b>Teaching methods</b>	<ul style="list-style-type: none"> <li>• The course consists of twelve three-hour lectures.</li> </ul>
<b>Assessment methods</b>	<p>The final grade will be based on homework and case studies, class participation and a final exam.</p> <p>The breakdown of the final grade will be approximately as follows:</p> <ul style="list-style-type: none"> <li>• 10 % class participation and homework.</li> <li>• 20% case study or a group project (researching and writing a report), in groups two or three students.</li> <li>• 70% final examination.</li> </ul>
<b>Language of instruction</b>	Greek/English

### Theories and Management of Information Systems

<b>Course title</b>	<b>Theories and Management of Information Systems</b>
<b>Course code</b>	Full Time Program: m81102f Part Time Program: m81102p
<b>Type of course</b>	Core
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Number of credits allocated</b>	5ECTS
<b>Name of lecturer</b>	G. Doukidis, Professor A. Pouloudi, Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	The main objective of the course is to provide a broad understanding of the importance of Information Systems (IS) in the modern business and social context by developing the required knowledge for the analysis of complex phenomena related to the development, adoption and use of new technologies in order to make the appropriate business decision regarding the acquisition and use of information systems.
<b>Prerequisites</b>	No prerequisites.
<b>Course contents/Syllabus</b>	<ul style="list-style-type: none"> <li>• Information Technology and Systems. Basic Concepts and Business Utilization</li> <li>• Information Systems for Supporting and Integrating Intra-organizational processes</li> <li>• Decision Support Management Systems</li> <li>• Automation/Support of Inter-organizational processes and transactions. Creation of New Digital Ventures (e-Commerce</li> </ul>

	<p>Systems)</p> <ul style="list-style-type: none"> <li>• Strategic Information Systems for Innovation and Competitive Advantage</li> <li>• Information Resource Management and Strategic IT Planning</li> <li>• Dissemination and management of organization data and information</li> <li>• Information systems development approaches - The exploratory study using the methodology of variable systems</li> <li>• Requirements Analysis - UML Tools (1): Use case diagrams</li> <li>• Requirements Analysis - UML Tools (2): Class diagrams</li> <li>• Organization policies for data and information management</li> <li>• Challenges during the implementation of IT system. Change Management topics – student assignment (in groups) and presentation based on given case studies</li> <li>• Workshops: implementation of core business scenarios in SAP ERP</li> </ul>
<b>Recommended reading</b>	<p>Main readings:</p> <ul style="list-style-type: none"> <li>- E. Turban, L. Volonino, Information Technology for Management, 8th Edition, 2012, John Wiley &amp; Sons, Inc.</li> <li>- G. Doukidis (2011) Innovation, Strategy of Development and Information Systems. Publisher Klidarithmos</li> </ul> <p>Supporting readings:</p> <ul style="list-style-type: none"> <li>- Dennis, Wixom, Tegarden. Systems Analysis and Design using UML 2.0, Publisher Klierithmos</li> <li>- Oz E. Management Information Systems, Course Technology, 6th edition</li> <li>- J. Laudon, K. Laudon, Essentials of Management Information Systems, Prentice Hall, 8th edition</li> <li>- M.H. Sheriff, Managing Projects in Telecommunication Services, Wiley-IEEE Press</li> <li>- Selected case studies</li> </ul>
<b>Teaching methods</b>	Lectures, case studies, hands-on in SAP ERP and ARIS toolset (labs)
<b>Assessment methods</b>	<p>Course evaluation is based on the following criteria:</p> <ul style="list-style-type: none"> <li>• Written exam with development questions based on case study analysis (40%),</li> <li>• Group writing using modeling tools (30%)</li> <li>• Group presentation of case studies (10%)</li> <li>• Individual written assignment based on laboratory exercise (20%)</li> </ul>
<b>Language of instruction</b>	Greek / English

## Theories of Management and Organization

<b>Course title</b>	<b>Theories of Management and Organization</b>
<b>Course code</b>	Full Time Program: m81103f Part Time Program: m81103p
<b>Type of course</b>	Core
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 3 <sup>rd</sup>
<b>Number of credits allocated</b>	5ECTS
<b>Name of lecturer</b>	Eric Soderquist, Professor Dimitris Manolopoulos, Associate Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>Students should be able to:</p> <p><b>Part “Firm, Organizational and Management Theories”</b></p> <ol style="list-style-type: none"> <li>1. Understand and describe the evolving nature of the company, the structural dimensions of organizations, their daily operation, and the importance of the managerial function for their survival and development in a competitive environment.</li> <li>2. Acquire knowledge, skills and methodologies of the way companies are organized, operate, manage and strategize, and be able to critically evaluate the effectiveness of their managerial function.</li> </ol> <p><b>Part “Innovation Management”</b></p> <ol style="list-style-type: none"> <li>3. Analyze the innovation dynamics of an organization and propose actions for developing and enhancing innovation outcomes,</li> <li>4. 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.</li> </ol>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p><b>Part “Firm, Organizational and Management Theories”</b></p> <p>Organizations operate within a multifaceted context, with the overall objective to develop their competitiveness and achieve sustainability. A core prerequisite towards this direction is an effective way of management. Students are introduced in concepts, theories, and methodologies which contribute to their understanding of the corporate / organizational evolution.</p> <p><b>Part “Innovation Management”</b></p> <p>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.</p>
<b>Recommended reading</b>	<p><b>Part “Firm, Organizational and Management Theories”</b></p> <ol style="list-style-type: none"> <li>1. Miles, J.A. (2012). Management and Organization Theory, Wiley.</li> <li>2. Barney, J. 1991. Firm resources and sustained competitive advantage. Journal of Management, 17: 99–120.</li> <li>3. Floyd, S. W. 2009. Borrowing theory: What does this mean and when does it make sense in management scholarship? Journal of</li> </ol>

	<p>Management Studies, 46: 1059 –1075.</p> <p>4. Lectures' Notes</p> <p><b>Part “Innovation Management”</b></p> <p>1. Dyer, J., Gregersen, H., Christensen, C. "The Innovators DNA", Harvard Business Review, December 2009: 60-67.</p> <p>2. Pisano, G. "You Need an Innovation Strategy", Harvard Business Review, June 2015: 60-67.</p> <p>3. Wilson &amp; Daugherty, "Humans and AI Are Joining Forces", HBR, July-Aug. 2018: 114-123.</p> <p>4. Pisano, G. "The Hard Truth about Innovative Cultures", HBR, Jan-Feb 2019: 62-71.</p>
<b>Teaching methods</b>	Lectures, Exercises, Case Studies, Group Projects.
<b>Assessment methods</b>	<p><b>Part “Firm, Organizational and Management Theories”</b></p> <p>50% of the final grade based on final individual exam.</p> <p><b>Part “Innovation Management”</b></p> <p>50% of the final grade based on a team project as follows:</p> <ol style="list-style-type: none"> <li><u>Pitch Presentations</u> in sessions 2, 4 and 5 (10+10+10=30% of the Part 2 grade). One or two members make a short presentation on specific topics worked on in class,</li> <li><u>Final Summary Presentation</u> of 12 slides and 15 minutes duration. All team members must present one part. (20% of the Part 2 grade, individual),</li> <li><u>Innovation Assessment &amp; Development Report</u> according to template which will be distributed separately. (50% of the Part 2 grade).</li> </ol>
<b>Language of instruction</b>	Greek and English

### Advanced Topics in Management Science and Technology

<b>Course title</b>	Advanced Topics in Management Science and Technology
<b>Course code</b>	Full Time Program: m81104f Part Time Program: m81104p
<b>Type of course</b>	Core
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 4 <sup>th</sup>
<b>Number of credits allocated</b>	5 ECTS
<b>Name of lecturer</b>	Zachariadis Emmanouil, Assistant Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<ul style="list-style-type: none"> <li>Understand the relation between combinatorial optimization problems and Management Science</li> <li>Understand what the shape of a complete solution for a well-defined problem is and how the solution quality can be quantified</li> <li>Distinguish between the basic categories of combinatorial</li> </ul>

	<p>optimization problems</p> <ul style="list-style-type: none"> <li>• Understand the inability of mathematical programming methods to solve combinatorial optimization problems within acceptable computational time</li> <li>• Take advantage of the capabilities offered by a modern programming language towards the solution of optimization problems</li> <li>• Design greedy algorithm frameworks to solve basic optimization models</li> <li>• Understand the logic of applying local modifications to a solution and how these can be performed within a local search algorithm</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p>The course ‘Advanced Topics in Management Science and Technology’; is aimed at the development of the quantitative and computational skills necessary for the production of high-quality solutions for Management Science problems. It focuses on the optimization of problem applications which arise in modern companies and organizations. In the beginning, students are familiarized with the fundamental concepts of Combinatorial Optimization, the solution shape, and the objective function which maps a solution to its quality. Then, the inability of mathematical programming methods to deal with large-scale applications of Combinatorial Optimization problems within practical computational times is discussed.</p> <p>The most important Management Science problems are presented and described:</p> <p>Permutation Problems</p> <ul style="list-style-type: none"> <li>•Traveling Salesman Problem</li> <li>•Vehicle Routing Problem</li> </ul> <p>Assignment Problems</p> <ul style="list-style-type: none"> <li>•Bin Packing Problem</li> <li>•Linear Sum Assignment Problem</li> <li>•Quadratic Assignment Problem</li> <li>•Graph Coloring Problem</li> </ul> <p>Selection Problems</p> <ul style="list-style-type: none"> <li>•Set Covering Problem</li> <li>•Knapsack Problem</li> <li>•Shortest Path Problem</li> </ul> <p>Emphasis is given on how these problems can be solved in practice and not on their theoretical descriptions. To solve the aforementioned problems, greedy optimization methodologies are presented and coded in Python, to familiarize students with algorithmic design, as well as a modern and widely used programming language. Then, the class of Local Search methods is presented. These methods are capable of improving the solutions obtained by the greedy constructive algorithms. The concept of Neighborhood Type is presented, followed by the steepest descent local search scheme and the cycling around locally optimum solutions. Finally, metaheuristic solution frameworks are presented which are capable of</p>



	intelligently driving the conducted local search to very high-quality solutions.
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• Instructor notes</li> <li>• Introduction to Computation and Programming using Python, John v. Guttag</li> <li>• Theoretical Aspects of Local Search, Wil Michiels, Jan Korst, Emile Aarts.</li> </ul>
<b>Teaching methods</b>	Lectures Solving problem Examples Real-time code development for dealing with the problems presented
<b>Assessment methods</b>	70% Final Exam 30% Group Project (Optimization Methodology Development)
<b>Language of instruction</b>	Greek / English

## ELECTIVE COURSES

### Business Statistics

<b>Course title</b>	<b>Business Statistics</b>
<b>Course code</b>	Full Time Program: m81205f Part Time Program: m8105p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Number of credits allocated</b>	2.5 ECTS
<b>Name of lecturer</b>	I. Vrontos, Associate Professor

<p><b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b></p>	<p>The aim of this course is to provide students with the learning of the use of appropriate statistical methods, models and techniques required for the analysis of data in empirical problems. Upon successful completion of the course, students will be able to:</p> <ul style="list-style-type: none"> <li>• Know the basic distributions and their usefulness in practice.</li> <li>• Estimate the parameters of the distributions and of statistical models.</li> <li>• Conduct hypothesis testing and construct confidence intervals for population parameters.</li> <li>• Estimate regression models, construct predictions and interpret the results of statistical analysis appropriately.</li> <li>• 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.</li> </ul>
<p><b>Prerequisites</b></p>	<p>No prerequisites.</p>
<p><b>Course contents</b></p>	<p>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).</p>
<p><b>Recommended reading</b></p>	<ul style="list-style-type: none"> <li>• Newbold, P., Carlson, W. and Throne, B. (2012). Statistics for Business and Economics, 8<sup>th</sup> edition, Pearson.</li> <li>• Casella, G. and Berger R.L. (2001). Statistical Inference, 2<sup>nd</sup> edition, Duxbury Press.</li> <li>• Weisberg, S. (2005). Applied Linear Regression, 3<sup>rd</sup> edition, Wiley.</li> <li>• Barrow, M. (2006). Statistics for Economics, Accounting and Business Studies, 4<sup>th</sup> edition, Prentice Hall.</li> </ul>

	<ul style="list-style-type: none"> <li>Stine, R. and Foster, D. (2014). Statistics for Business Decision Making and Analysis, Pearson.</li> </ul>
<b>Teaching methods</b>	One three-hour lecture per week, study exercises, and programming exercises as homework (to be submitted).
<b>Assessment methods</b>	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.
<b>Language of instruction</b>	Greek/English

### Software Systems

<b>Course title</b>	<b>Software Systems</b>
<b>Course code</b>	Full Time Program: m81206f Part Time Program: m81206p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 3 <sup>rd</sup>
<b>Number of credits allocated</b>	2.5 ECTS
<b>Name of lecturer</b>	George Lekakos, Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	The course introduces students to the fundamental concepts of programming using the Java programming language. At the first part of the course, students are familiarized with the basics of programming (development of algorithms, Object-oriented design) applied through Java programming. At the second part of the course, the most significant aspects of the Java language are analyzed (classes, methods, variables, tables, control statements) in order to provide students the ability to develop their own Java programs. The expected learning outcome is to enable students to design object-oriented programs and develop programming skills using the Java language through exercises and personal assignments.
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	Fundamental elements of programming languages, Object-Oriented modeling, the Java programming language, variables, input and output, comparison operators, logic operators, conditional operators, programming with objects, classes and methods, arrays.
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>Course notes</li> <li>Java: How to program, Deitel and Deitel, Pearson education, Inc., 2018</li> </ul>
<b>Teaching methods</b>	Lectures using powerpoint presentations, practical application using IDE's, micro-project and final project programming assignments
<b>Assessment methods</b>	Students performance assessment is based on the grade of the final project assigned to the students (40%) and final written exam (60%).
<b>Language of instruction</b>	Greek / English

### Quality Systems Management

<b>Course title</b>	<b>Quality Systems Management</b>
<b>Course code</b>	Full Time Program: m81207f Part Time Program: m81207p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 3 <sup>rd</sup>
<b>Number of credits allocated</b>	2.5 ECTS
<b>Name of lecturer</b>	Cleopatra Deliou, PhD
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	The objectives of the course are for students to: <ul style="list-style-type: none"> <li>• understand the necessity of applying quality programs,</li> <li>• become familiar with the requirements of quality standards and the criteria of different quality models,</li> <li>• implement improvement initiatives themselves,</li> <li>• identify ways of approaching quality by analyzing case studies and good practices for implementing Quality Tools and Systems,</li> <li>• apply Quality Tools and Methods on Personal Basis (Personal Quality)</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p><b>1<sup>st</sup> Section</b></p> <ul style="list-style-type: none"> <li>• Introduction to Total Quality Management and Personal Quality</li> <li>• Basic concepts of quality and its evolution</li> <li>• Stakeholders Theory</li> <li>• Basic models and quality standards</li> <li>• Evaluation of personal quality characteristics</li> </ul> <p><b>2<sup>nd</sup> and 3<sup>rd</sup> Section</b></p> <ul style="list-style-type: none"> <li>• Presentation of the National Quality Awards and the EFQM Model of Business Excellence</li> <li>• Presentation of the Model criteria at the three levels of excellence and best practices</li> <li>• Presentation of certified companies and institutions at all three levels of excellence</li> <li>• The role of the quality assessor and the importance of having a quality department</li> <li>• Implementation of Quality Initiatives in the EFQM Excellence Model at different certification levels</li> </ul> <p><b>4<sup>th</sup> Section</b></p> <ul style="list-style-type: none"> <li>• Presentation of quality gurus</li> <li>• Basic theories and tools of Total Quality Management</li> <li>• The role of Human Resources Management in quality</li> <li>• The role of Leadership in creating a quality culture</li> <li>• Quality Tool Application: This Employee Self-Assessment</li> </ul> <p><b>5<sup>th</sup> Section</b></p> <ul style="list-style-type: none"> <li>• The ISO 9000: 2015 and ISO 22000: 2018 standards</li> <li>• Basic principles of standards and requirements</li> </ul>

	<ul style="list-style-type: none"> <li>• Comparative analysis of ISO with other standards / models</li> <li>• Differences between ISO 9001: 2008 and ISO 9001: 2015</li> <li>• Important requirements for the implementation of ISO 9001: 2015</li> <li>• Risk Management Analysis</li> </ul> <p><b>6<sup>th</sup> Section</b></p> <ul style="list-style-type: none"> <li>• The importance of Total Quality Management tools and the Cost of Quality</li> <li>• The basic tools in Quality Management</li> <li>• Application of tools and presentation through relevant examples</li> <li>• Application of tools on a personal level</li> <li>• Categories of Cost of Quality</li> </ul>
<b>Recommended reading</b>	<ol style="list-style-type: none"> <li>1. Evans, J. R., &amp; Dean, J. W. (2003). Total quality: Management, organization, and strategy.</li> <li>2. Davies, A. J., &amp; Kochhar, A. K. (2000). A framework for the selection of best practices. <i>International Journal of Operations &amp; Production Management</i>, 20(10), 1203-1217.</li> <li>3. EFQM Excellence Model: Higher Education Version 2003, Adapted from the EFQM Excellence Model 2003, Public and Voluntary Sector version, Sheffield Hallam University.</li> <li>4. Jarrar, Y. F., &amp; Zairi, M. (2000). Internal transfer of best practice for performance excellence: a global survey. <i>Benchmarking: An International Journal</i>, 7(4), 239-246.</li> <li>5. Tricker, R. (2014). <i>ISO 9001: 2008 for Small Businesses</i>. Routledge.</li> <li>6. Phillips, A. W. (2015). <i>ISO 9001: 2015 Internal Audits Made Easy: Tools, Techniques, and Step-by-Step Guidelines for Successful Internal Audits</i>. ASQ Quality Press.</li> <li>7. Lazarte, M. (2015). ISO 9001: 2015–Just published. <i>International Organization for Standardisation (ISO)</i>.</li> <li>8. Surak, J. G. (2007). A recipe for safe food: ISO 22000 and HACCP. <i>Quality Progress</i>, 40(10), 21.</li> <li>9. ISO, E. (2008). 9001: 2008. 2008. <i>Quality management systems–requirements, CEN management centre: rue de Stassart, 36</i>.</li> <li>10. Jackson, S. (2001). Successfully implementing total quality management tools within healthcare: what are the key actions?. <i>International Journal of Health Care Quality Assurance</i>, 14(4), 157-163.</li> <li>11. Powell, T. C. (1995). Total quality management as competitive advantage: a review and empirical study. <i>Strategic management journal</i>, 16(1), 15-37.</li> </ol>
<b>Teaching methods</b>	<p>The lectures of the course are supported by in-class case studies, group and individual quality improvement actions, use of self-assessment tools, and the application of quality standards and models exercises to improve understanding of the conditions and prerequisites of quality compliance in a business environment.</p>
<b>Assessment methods</b>	<p>The assessment will be carried out through individual implementation of quality initiatives based on the EFQM Excellence Model (100%). Participants will prepare the improvement actions and relevant projects needed for the organizations they represent to receive a first level quality</p>

	certification according to the EFQM model.
<b>Language of instruction</b>	Greek

### Supply Chain Management

<b>Course title</b>	<b>Supply Chain Management</b>
<b>Course code</b>	Full Time Program: m81208f Part Time Program: m81208p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Konstantinos Androutsopoulos, Assistant Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>The objective of this course unit is to introduce concepts and methods regarding Logistics Management. The course covers issues related to: Supply chain strategies and operations; Designing Global Supply Chains; planning and coordinating Logistics operations; International Logistics; Distribution and Transportation Systems Decision Making.</p> <p>The course will make it possible for participants to:</p> <ul style="list-style-type: none"> <li>• Acquire a clear understanding of Supply Chain characteristics, operations and performance.</li> <li>• Analyse and solve basic decision making problems in planning Supply Chain operations.</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p><b><i>Introduction to Supply Chain Management &amp; Basic Operations</i></b> Definition of Supply Chain Management, Basic Logistics Operations, Facilities and their interrelationships, Logistics Strategy, Categories of Supply Chain Management Decisions,</p> <p><b><i>Design of Supply Chains</i></b> Methodological Framework for Designing Global Supply Chains, Factors affecting the design of Supply Chains, Mathematical Models for Determining a Supply Chain Network, Factors Affecting the Off-Shoring decision.</p> <p><b><i>Inventory Management: Aggregation in Supply Chains</i></b> Defining Inventory and its importance in Supply Chain Management, Overview of Inventory Management Decisions, Inventory Aggregation Decisions.</p> <p><b><i>Transportation and Distribution Systems</i></b> Defining Transportation Systems, Basic characteristics of Transportation Systems, Distribution Process in Supply Chains, Distribution Models, Selecting Transportation Services.</p> <p><b><i>Level Of Service.</i></b> Defining the Level of Service, Assessing the Supply Chain</p>

	<p>performance, Order Processing, Methods for determining the Level of Service</p> <p><b>Warehousing &amp; Warehouse Management</b></p> <p>Types of Warehouses, Warehouse Operations, Locating Warehouses, Determining the capacity of a Storage area, Determining the Dimensions of a storage Area.</p>
<b>Recommended reading</b>	<p>Lecture Notes</p> <p>Course Books:</p> <ul style="list-style-type: none"> <li>• Sunil Chopra, Peter Meindl (2019), “<u>Supply Chain Management: Strategy, Planning and Operation</u>”, 7<sup>th</sup> edition, Pearson Education, New Jersey.</li> <li>• D Simchi-Levi (2008), “Designing and Managing the Supply Chain”, 3<sup>rd</sup> Edition, McGraw-Hill/Irwin Publishing.</li> <li>• Ronald H. Ballou (2004), “Business Logistics / Supply Chain Management”, 5th Edition, Prentice Hall, New Jersey.</li> </ul>
<b>Teaching methods</b>	<p>Lectures. The course's content will be presented using a mixture of lectures, case-studies discussions and in-class presentations. The lectures are further supported by the presentation of numerous practical examples highlighting how theory is applied and used in real-life situations.</p>
<b>Assessment methods</b>	<p>Written exam.</p>
<b>Language of instruction</b>	<p>Greek / English</p>

### Production and Operations Management

<b>Course title</b>	<b>Production and Operations Management</b>
<b>Course code</b>	Full Time Program: m81209f Part Time Program: m81209p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 3 <sup>rd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Apostolos Burnetas, Professor of UOA
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>After completing the course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Analyze multi-stage production processes, calculate capacity, and throughput time, and identify bottleneck stages.</li> <li>• Calculate congestion and delays in service systems and assess the effect of alternative system designs.</li> <li>• Understand and apply the basic principles of inventory management.</li> <li>• Design economic ordering and production policies, and calculate safety stock under demand and lead-time uncertainty.</li> </ul>
<b>Prerequisites</b>	No prerequisites.

<b>Course contents</b>	<p>Basic principles of analysis and design of business processes related to production of goods and services.</p> <ol style="list-style-type: none"> <li>1. Introduction. The role of production and operations management in a supply chain.</li> <li>2. Process Analysis: Process types and process diagrams, cycle time and process capacity, bottlenecks, throughput time, Gantt charts.</li> <li>3. Service Systems: Types of service systems, queueing analysis, measures of congestion and delay, single stage service systems, comparison of design alternatives.</li> <li>4. Inventory Management: Types of inventories, inventory management systems, deterministic demand models, service levels, safety stocks.</li> </ol>
<b>Recommended reading</b>	<ol style="list-style-type: none"> <li>1. Krajewski, L. , Ritzman, L., Malhotra, M. "Operations Management: Processes and Supply Chainis", 12 ed., Pearson, 2012.</li> <li>2. Lecture Notes.</li> </ol>
<b>Teaching methods</b>	Lectures, homework
<b>Assessment methods</b>	Project / Final Exam
<b>Language of instruction</b>	Greek / English

#### Data Management

<b>Course title</b>	<b>Data Management</b>
<b>Course code</b>	Full Time Program: m81210f Part Time Program: m81210p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	George Lekakos, Professor Andreas Zaras
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<ul style="list-style-type: none"> <li>• Understand and learn concepts related to data driven decision making, necessary for working in the field of data science.</li> <li>• Learn how to access, manage, and process data form real world data sources with the objective to be transformed in a suitable format for business decision making purposes.</li> <li>• Learn techniques for creating reports to help executives explore vast amount s of data, identify business problems, and propose relevant solutions.</li> <li>• Learn how to use the state-of-the-art software SAS Enterprise Guide, that will provide strong competitive advantage in the job market locally and globally since it is used by a plethora of organizations throughout the world.</li> <li>• Completion of the first step for obtaining the Certificate in Business Intelligence and Data Mining that is provided by the program in</li> </ul>



	cooperation with SAS.
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<ul style="list-style-type: none"> <li>• Introduction to data driven decision making during which we will provide definitions about fundamental concepts in the field such as big data, decision support systems, data warehouses, ETL (Extract, Transform and Load) processes, business intelligence, business analytics, artificial intelligence etc.</li> <li>• Theoretical background about accessing, managing, processing, and reporting of data including an introduction to Structured Query Language (SQL).</li> <li>• Use of SAS Enterprise Guide, the state-of-the-art software for accessing, processing, managing, and reporting of data: <ul style="list-style-type: none"> <li>✓ Introduction to SAS Enterprise Guide.</li> <li>✓ Data structures.</li> <li>✓ Accessing data e.g., from spreadsheets, relational databases, raw data (csv, txt).</li> <li>✓ Producing simple reports.</li> <li>✓ Producing frequency tables.</li> <li>✓ Output reports in various formats.</li> <li>✓ Producing graphs.</li> <li>✓ Gentle introduction to SQL for creating queries.</li> <li>✓ Creating simple queries though the graphical user interface of SAS Enterprise Guide.</li> <li>✓ Creating advanced queries though the graphical user interface of SAS Enterprise Guide.</li> <li>✓ Joining tables.</li> </ul> </li> </ul>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• Course notes provided by the instructors.</li> <li>• Anita Hillhouse et al (2020). SAS Enterprise Guide 1: Querying and Reporting (Course Notes), SAS Institute Inc.</li> <li>• Anita Hillhouse and Luna Bozeman (2020). SAS Enterprise Guide 2: Advanced Tasks and Querying (Course Notes), SAS Institute Inc.</li> <li>• Parr-Rud, O. (2014). Business Analytics Using SAS Enterprise Guide and SAS Enterprise Miner - A Beginner's Guide, SAS Institute Inc.</li> </ul>
<b>Teaching methods</b>	<ul style="list-style-type: none"> <li>• Power point presentations (covering the theoretical background related to data driven decision making and about accessing, managing, processing, and reporting of data).</li> <li>• Demonstrations about accessing, managing, processing, and reporting of data using SAS Enterprise Guide software.</li> <li>• Analysis and interpretation of the results drawn from the previous step for business decision making purposes.</li> <li>• Hands on exercises and case studies about accessing, managing, processing, and reporting of data and also about analysis and interpretation of the relevant results for business decision making purposes.</li> </ul>
<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Class participation (10%).</li> <li>• Final individual exam (90%) about a) data driven decision making (30%) και b) access, manage, process and report of data through the</li> </ul>

	use of SAS Enterprise Guide (70%).
<b>Language of instruction</b>	Greek/ English

### Inventory Theory

<b>Course title</b>	<b>Inventory Theory</b>
<b>Course code</b>	Full Time Program: m81211f Part Time Program: m81211p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 3 <sup>rd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Apostolos Burnetas, Professor of UOA
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>After completing the course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Apply time-series models for demand forecasting.</li> <li>• Calculate economic policies for systems with finite production rate and planned shortages.</li> <li>• Calculate optimal supplier selection and optimal policies under quantity discounts.</li> <li>• Design material requirements planning policies.</li> <li>• Calculate economic production and ordering policies for products with time varying demand.</li> <li>• Calculate optimal stocking policies for perishable products with stochastic demand.</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p>The course offers students the motivation and tools to identify, model and solve problems of demand forecasting and inventory management, and apply the models and solutions to manufacturing and retail firms.</p> <ol style="list-style-type: none"> <li>1. Time series forecasting models: Moving average and exponential smoothing, models with constant demand, trend and seasonalities.</li> <li>2. Constant demand models: finite production rate, planned shortages, quantity discounts.</li> <li>3. Time-varying demand models: the Wagner-Whitin algorithm.</li> <li>4. Inventory management for single period perishable products and stochastic demand: newsvendor model.</li> </ol>
<b>Recommended reading</b>	<ol style="list-style-type: none"> <li>1. Axsater, S. "Inventory Control", Springer, 2015.</li> <li>2. Lecture Notes.</li> </ol>
<b>Teaching methods</b>	Lectures, homework
<b>Assessment methods</b>	Project / Final Exam
<b>Language of instruction</b>	Greek / English

### Analysis and Planning of Transportation and Distribution Systems

<b>Course title</b>	<b>Analysis and Planning of Transportation and Distribution Systems</b>
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<b>Course code</b>	Full Time Program: m81212f Part Time Program: m81212p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 2 <sup>nd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Konstantinos Androutsopoulos, Assistant Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>The objective of this course is the analysis and planning of the distribution networks in Logistics Management. After successfully completing the course, the students will be able to:</p> <ul style="list-style-type: none"> <li>▪ Understand the operation of the Distribution networks in Supply Chains</li> <li>▪ Understand the configuration of distribution networks and the major issues arising in setting up a distribution network</li> <li>▪ Develop and solve mathematical models for distribution network planning</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p><b>Transportation Systems.</b> Introduction to transportation systems. Features and categories of transportation services.</p> <p><b>Introduction to Distribution networks.</b> Mathematical modelling issues in distribution and transportation systems. Distribution problem from a single origin to multiple destinations: definition, characteristics, constraints, mathematical model, solution method.</p> <p><b>Distribution Network Models (I) :</b> Distribution problem from multiple origins to multiple destinations: definition, characteristics, constraints, mathematical model, solution method. The transportation problem. Transshipment Problem: definition, characteristics, constraints, mathematical model, solution method.</p> <p><b>Distribution Network Models (II):</b> Vehicle Routing problem with Time windows, definition, characteristics, constraints, mathematical model, solution methods. Case: Fuel Distribution Μελέτη Περίπτωσης.</p> <p><b>Distribution Network Models (III):</b> Combined Inventory and Routing problems.</p> <p><b>Distribution Centers.</b> Location problems: definition, characteristics, constraints, mathematical models, solution methods. Emergency Response fleet management. Case Study.</p>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>▪ Lecture notes</li> <li>▪ Books: <ul style="list-style-type: none"> <li>○ Gianpaolo Ghiani, Gilbert Laporte, and Roberto Musmanno, “Introduction to Logistics Systems Planning and Control”, John Wiley &amp; Sons, Inc., 2004.</li> <li>○ Joseph Sussman, “Introduction to Transportation Systems”,</li> </ul> </li> </ul>

	Artech House Its Library, 2000(ISBN13: Artech House Its Library).
<b>Teaching methods</b>	Lectures. The course's content will be presented using a mixture of lectures, case-studies discussions and in-class presentations. The lectures are further supported by the presentation of numerous practical examples highlighting how theory is applied and used in real-life situations.
<b>Assessment methods</b>	Written exam.
<b>Language of instruction</b>	Greek / English

### Platforms, Networks and Innovation

<b>Course title</b>	<b>Platforms, Networks and Innovation</b>
<b>Course code</b>	Full Time Program: m81213f Part Time Program: m81213p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 2 <sup>nd</sup>
<b>Number of credits allocated</b>	2.5 ECTS
<b>Name of lecturer</b>	A. Poulymenakou, Associate Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<ul style="list-style-type: none"> <li>• Understanding key features of digital platforms: architecture, strategies, impact dynamics, the role of services supported by digital platforms, startups based on &amp; supported by digital platforms</li> <li>• Investigate the formulation of strategies and directions of business and administrative management for the opening / closing of mature (technological and operational) digital platforms, regulatory frameworks and governance, dissemination and sharing in relation with issues of data protection and security</li> <li>• Familiarity with issues of management, design and implementation of digital platforms</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents/Syllabus</b>	<ol style="list-style-type: none"> <li>1. From IT infrastructure to digital platforms</li> <li>2. Overview of Digital Platforms I: Architecture</li> <li>3. Digital Platforms Overview II: the role of services in the market of digital platforms, startups based on digital platforms as catalysts</li> <li>4. Digital Platforms Governance I: open platforms and its governing rules</li> <li>5. Digital Platform Governance II: protecting and disseminating / sharing a technology platform, open platform development and the commercial network/internet</li> <li>6. Management of Digital Platforms, design and knowledge issues in development and / or upgrade and / or improvement projects, e.g. <ul style="list-style-type: none"> <li>○ outsourcing,</li> </ul> </li> </ol>

	<ul style="list-style-type: none"> <li>○ collaborations,</li> <li>○ design rules, and</li> <li>○ problem solving</li> </ul>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>○ P. Weill and J. Ross (2004) Information Technology Governance, Harvard Business School Press</li> <li>○ J. Ross, P. Weill and D.C. Robertson, (2006) Enterprise Architecture Strategy, Harvard Business School Press</li> <li>○ McAfee (2009) Enterprise 2.0, Harvard Business School Press</li> <li>○ Selected academic papers, business publications, and case studies distributed during lectures</li> </ul>
<b>Teaching methods</b>	Lectures, case studies, hands-on in SAP platform (labs)
<b>Assessment methods</b>	The evaluation of the course is based exclusively (100%) on individual student assignment (bibliographic review or case study)
<b>Language of instruction</b>	Greek / English

### Platforms and Applications in Business Analytics

<b>Course title</b>	<b>Platforms and Applications in Business Analytics</b>
<b>Course code</b>	Full Time Program: m81214f Part Time Program: m81214p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Number of credits allocated</b>	2.5 ECTS
<b>Name of lecturer</b>	Andreas Zaras Panagiotis Sarantopoulos, Assistant Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<ul style="list-style-type: none"> <li>• Learn and understand concepts related to traditional statistical analysis so as students to be able to collect the proper data, organize and summarize them and draw conclusions about populations through analyzing samples of data.</li> <li>• Learn and understand concepts related to Business Intelligence so students to are able to use relevant software for exploring data, spot anomalies, recognize patterns, trends and associations and finally visualizing data to achieve information dissemination throughout the organization.</li> <li>• Learn and understand concepts related to Machine Learning so as students are able to formulate and solve data mining related problems with applications in market basket analysis, customer segmentation, campaign management and optimization etc.</li> <li>• Learn how to use the following software: SAS Enterprise Guide, SAS Enterprise Miner, SAS Visual Analytics</li> <li>• Become acquainted with the R programming language for statistical computing and graphics</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<ul style="list-style-type: none"> <li>• <b>Lectures 1-4:</b> Traditional statistical analysis (Descriptive statistics,</li> </ul>

	<p>inferential statistics, linear correlation, simple and multiple linear regression, categorical data analysis, Decision Support System: SAS Enterprise Guide)</p> <ul style="list-style-type: none"> <li>• <b>Lecture 5:</b> Data Visualization for Business Intelligence (Decision Support System: SAS Visual Analytics on SAS Viya)</li> <li>• <b>Lectures 6-10:</b> Data Mining/ Machine Learning Techniques (Market basket Analysis, Customer Segmentation through Clustering, Campaign Management through Predictive Analytics, Decision Trees, Model Assessment, Scoring New Data, Decision Support System: SAS Enterprise Miner)</li> <li>• <b>Lectures 11-13:</b> Getting started in R, Basic data structures in R (Vectors and data frames), Loading external data files in R, Basic data analysis (descriptive stats and basic graphs), Saving with script files, Basic and advanced scatterplots, Basic line plots, Heatmaps, Hotspot street maps, Linear regression in R, Understanding the model, Making predictions</li> </ul>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• Course notes provided by the instructor.</li> <li>• Stacey Syphus et al, 2015. <i>SAS Enterprise Guide 1: Querying and Reporting Course Notes</i>. Cary: SAS Institute Inc.</li> <li>• Marc Huber, 2012. <i>SAS Enterprise Guide: ANOVA, Regression and Logistic Regression</i>. Cary: SAS Institute Inc.</li> <li>• Peter Christie et al, 2011. <i>Applied Analytics Using SAS Enterprise Miner Course Notes</i>. Cary: SAS Institute Inc.</li> <li>• Kattamuri S. Sarma, 2017. <i>Predictive Modeling with SAS Enterprise Miner: Practical Solutions for Business Applications</i>, SAS Publishing.</li> <li>• Olivia Parr – Rud 2014. <i>Business Analytics Using SAS Enterprise Guide and SAS Enterprise Miner: A Beginner’s Guide</i>. SAS Publishing.</li> <li>• Bicole Ball, 2019. <i>SAS Visual Analytics 1 for SAS Viya: Basics</i>. Cary: SAS Institute Inc.</li> <li>• Chapman, C. &amp; Feit, E.M., 2015. <i>R for Marketing Research and Analytics</i>, Springer.</li> <li>• James, G. et al., 2013. <i>An Introduction to Statistical Learning with Applications in R</i>, Springer.</li> </ul>
<b>Teaching methods</b>	<ul style="list-style-type: none"> <li>• Power point presentations.</li> <li>• Demonstrations of producing business analytics results using relevant software.</li> <li>• Analysis and interpretation of the software output for business decision making.</li> <li>• Hands on case studies related to the production and analysis-interpretation of business analytics output for business decision making.</li> </ul>
<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Class participation: 5%</li> <li>• Final individual exam about traditional statistics: 40%</li> <li>• Final group project about data mining/ machine learning: 55%</li> </ul>
<b>Language of instruction</b>	Greek/ English

<b>Course title</b>	<b>Business Process Management</b>
<b>Course code</b>	Full Time Program: m81215f Part Time Program: m81215p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 2 <sup>nd</sup>
<b>Number of credits allocated</b>	2.5 ECTS
<b>Name of lecturer</b>	A.Poulymenakou, Associate Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>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.</p> <p>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.</p>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents/Syllabus</b>	<ul style="list-style-type: none"> <li>○ Work Systems, Business Processes, architecture and information systems infrastructure</li> <li>○ Strategy and vision of Business Process Performance</li> <li>○ Business Process Strategy - Performance perspective</li> <li>○ Business Processes and IT Architectures - Performance Management perspective</li> <li>○ Corporate Governance of Information Infrastructure</li> <li>○ Laboratories (ARIS toolset / platform, SAP ERP core business process)</li> </ul>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>○ P. Weill and J. Ross (2004) Information Technology Governance, Harvard Business School Press</li> <li>○ J. Ross, P. Weill and D.C. Robertson, (2006) Enterprise Architecture Strategy, Harvard Business School Press</li> <li>○ McAfee (2009) Enterprise 2.0, Harvard Business School Press</li> <li>○ Selected academic articles, business publications, and case studies distributed during lectures</li> </ul>
<b>Teaching methods</b>	Lectures, case studies, hands-on in SAP ERP and ARIS toolset (labs)
<b>Assessment methods</b>	<p>The evaluation of the course is based on the following criteria:</p> <ul style="list-style-type: none"> <li>- Class participation (10%)</li> <li>- Individual assignment consisting of two parts: <ul style="list-style-type: none"> <li>○ Part A: Real Work System Study (70%)</li> </ul> </li> </ul>

	○ Part B: Analysis and Modeling of Core Business Process using the ARIS toolset (20%)
<b>Language of instruction</b>	Greek / English

### Customer-centric Information Systems

<b>Course title</b>	<b>Customer-centric Information Systems</b>
<b>Course code</b>	Full Time Program: m81116f Part Time Program: m81116p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	George Lekakos, Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>The aim of the course is to introduce students in business analytics techniques that are typically utilized in organizations in order to provide an understanding of the needs and preferences of their customers and the prediction of their future behavior.</p> <p>At the end of the course students will be able to:</p> <ul style="list-style-type: none"> <li>• Apply data analytics techniques towards the understanding of consumer's behavior</li> <li>• Develop predictive models regarding customers future behavior</li> <li>• Use efficiently practical data analytics platforms</li> <li>• Understand and interpret the analysis results providing useful business insights</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<ul style="list-style-type: none"> <li>• Introduction to business analytics</li> <li>• Exploratory Vs Explanatory analysis methods</li> <li>• Distance metrics</li> <li>• Clustering, classification, association rules algorithms</li> <li>• Prediction of behavior and recommender systems</li> <li>• Evaluation of predictive performance and bias control</li> </ul>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• G. Lekakos, «Συστήματα Εξατομίκευσης», Course Notes</li> <li>• Jannach, D. Zanker, M., Felfernig, A., "Recommender Systems: An Introduction", Cambridge University Press, 2011</li> <li>• Ricci, F., Lior Rokach, L., Shapira, B., Kanto, P., "Recommender Systems Handbook", Springer, 2010</li> <li>• Aninash Kaushik, Web Analytics 2.0, Wiley Publishing, 2010</li> </ul>
<b>Teaching methods</b>	Lectures using powerpoint presentations, case study analysis, practical application using analytics tools (rapidminer), micro-project and final project assignments presented by the students.
<b>Assessment methods</b>	Students performance assessment is based on the grade of the final project assigned to the students. The project requires both analysis and interpretation of findings and is presented and orally examined.



Language of instruction	Greek / English
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### Innovation and Entrepreneurship

<b>Course title</b>	<b>Innovation and Entrepreneurship</b>
<b>Course code</b>	Full Time Program: m81217f Part Time Program: m81217p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 2 <sup>nd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Irini Voudouris, Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	This is a course about innovation, entrepreneurship and the challenges faced by entrepreneurs. We will attempt to discuss a variety of contemporary issues by using a mixture of lectures, case studies, guest speakers and brainstorming sessions. Emphasis will be placed on the development and evaluation of a business plan for a start-up. The challenge to participants is to discover their own innovative and entrepreneurial potential and find ways to capitalize on that potential.
<b>Prerequisites</b>	No prerequisites
<b>Course contents</b>	Session 1: Understanding the basics of entrepreneurship. Session 2: Creating and Developing opportunities – Building Business Models. Session 3: IdeaStorm - Understanding the basics of social entrepreneurship. Session 4: Business Planning. Session 5: Financing for start-ups - Entrepreneurship in action. Session 6: Business model presentation, market validation and assessment.
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• Neck H., Neck C. and Murray E. (2020) The Practice and Mindset (2nd Edition) Thousand Oaks: SAGE Publishing. ISBN: 9781544354620.</li> <li>• Kuratko, Donald F. (2014), Entrepreneurship: Theory, Process, Practice (9th Edition), Cengage/Southwestern Publishers. Hardcover: 624 pages, ISBN-13: 978-1285051758, ISBN-10: 1285051750.</li> <li>• Alexander Osterwalder, A. &amp; Pigneur, Y., (2010), Business Model Generation, John Wiley &amp; Sons. Paperback: 288 pages, ISBN-10: 0470876417, ISBN-13: 978-0470876411.</li> <li>• Recommended list of scientific articles.</li> </ul>
<b>Teaching methods</b>	The course involves a mixture of lectures, case studies, guest speakers and brainstorming sessions.
<b>Assessment methods</b>	The evaluation is based on two components: 1. A team working project, which assesses the ability of students to identify and implement business opportunities. The students work in

	groups of three to four. Deliverables include: i) two "business ideas" pitching per team, ii) a "business model" presentation, and iii) a complete "business plan". 2. Final written exams. The exam questions will require students to have a comprehensive understanding of the concepts, issues and frameworks developed during the course sessions.
<b>Language of instruction</b>	Greek / English

### Business Intelligence

<b>Course title</b>	<b>Business Intelligence</b>
<b>Course code</b>	Full Time Program: m81218f Part Time Program: m81218p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 2 <sup>nd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Damianos Chatziantoniou, Associate Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<ul style="list-style-type: none"> <li>• Develop an application in relational systems: design relational schemas, write SQL, use APIs to connect to a relational database within a programming language.</li> <li>• Develop data warehousing applications: defining business goals, identifying data sources, using tools/methods to extract and transform data, designing star schemas and cubes and perform multi-dimensional analysis. Understand data mining concepts.</li> <li>• Understand and apply the additional technologies to bring business intelligence to the big data era.</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<ul style="list-style-type: none"> <li>• Introduction to Data Management</li> <li>• Fundamentals of Data Management and Relational Systems, SQL</li> <li>• Business Intelligence: Fundamentals, Architecture and Performance</li> <li>• Non-relational Data Management &amp; Big Data Era</li> </ul>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• Multidimensional Databases &amp; Data Warehousing, by Christian S. Jensen, Torben Bach Pedersen, and Christian Thomsen.</li> <li>• Database Systems: The Complete Book, by Hector Garcia-Molina, Jeff Ullman, Jeniffer Widom.</li> <li>• Ερευνητικά άρθρα</li> </ul>
<b>Teaching methods</b>	Face-to-face lectures
<b>Assessment methods</b>	Two large projects and written exams
<b>Language of instruction</b>	Greek/English

### Developing Competencies for Management and Innovation

<b>Course title</b>	<b>Developing Competencies for Management and Innovation</b>
<b>Course code</b>	Full Time Program: m81219f Part Time Program: m81219p
<b>Type of course</b>	Elective

<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 4 <sup>th</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Dr Ioanna Kinti
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	Students will be enabled to exercise, develop and master the fundamental soft skills in professional performance at Work, in Teams, and in Innovation Contexts.
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	Leadership Skills, Team Work Skills, Lifelong Learning Skills, Conflict Resolution and Negotiation Skills, Creative Collaboration in Entrepreneurship and Innovation Teams
<b>Recommended reading</b>	Armstrong's Handbook of Human Resource Management Practice (2020) – Part III People Management Skills
<b>Teaching methods</b>	Lectures, Self-Assessment Exercises, Case Studies, Role Playing
<b>Assessment methods</b>	Class Participation & Final Exam
<b>Language of instruction</b>	Greek/English

### Business Intelligence

<b>Course title</b>	<b>Business Intelligence</b>
<b>Course code</b>	Full Time Program: m81218f Part Time Program: m81218p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 2 <sup>nd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Damianos Chatziantoniou, Associate Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<ul style="list-style-type: none"> <li>• Develop an application in relational systems: design relational schemas, write SQL, use APIs to connect to a relational database within a programming language.</li> <li>• Develop data warehousing applications: defining business goals, identifying data sources, using tools/methods to extract and transform data, designing star schemas and cubes and perform multi-dimensional analysis. Understand data mining concepts.</li> <li>• Understand and apply the additional technologies to bring business intelligence to the big data era.</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<ul style="list-style-type: none"> <li>• Introduction to Data Management</li> <li>• Fundamentals of Data Management and Relational Systems, SQL</li> <li>• Business Intelligence: Fundamentals, Architecture and Performance</li> <li>• Non-relational Data Management &amp; Big Data Era</li> </ul>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• Multidimensional Databases &amp; Data Warehousing, by Christian S. Jensen, Torben Bach Pedersen, and Christian Thomsen.</li> </ul>

	<ul style="list-style-type: none"> <li>• Database Systems: The Complete Book, by Hector Garcia-Molina, Jeff Ullman, Jeniffer Widom.</li> <li>• Ερευνητικά άρθρα</li> </ul>
<b>Teaching methods</b>	Face-to-face lectures
<b>Assessment methods</b>	Two large projects and written exams
<b>Language of instruction</b>	Greek/English

### Digital Marketing

<b>Course title</b>	<b>Digital Marketing</b>
<b>Course code</b>	Full Time Program: m81220f Part Time Program: m81220p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 3 <sup>rd</sup>
<b>Number of credits allocated</b>	2.5 ECTS
<b>Name of lecturer</b>	Adam Vrechopoulos, Professor Chris Lazaris, Member of the Laboratory Teaching Faculty (Tutorials/Labs)
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<ul style="list-style-type: none"> <li>• Acquisition of integrated theoretical knowledge through an interdisciplinary approach</li> <li>• Understanding of practical applications (i.e. connection of theory with practice)</li> <li>• Training on modern tools and practices</li> <li>• Familiarization with scientific research</li> <li>• Recognition, evaluation and development of strategies</li> <li>• Synthesis of concepts in the context of a Marketing Plan</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	The course aims to cover all the important issues positioned in the scientific sector of Digital Marketing, combining the relevant theoretical background with the new technologies and the evolving business and consumer practices. Indicatively, the course includes the following subjects: Electronic Retailing and Consumer Behaviour (e.g. Multichannel/Omnichannel Retailing and Consumer Buying Behaviour, Design and Effects of Retail Store Atmosphere), Electronic Marketing Research (e.g. Marketing Analytics, Experimental Design), Electronic Customer Relationship Management (eCRM), Integrated Marketing Communications (e.g. Electronic Advertising, Social Media, Electronic Sales), Strategic Digital Marketing Planning (Electronic Marketing Plan, Marketing Mix Strategies), Special Topics in Digital Marketing.
<b>Recommended reading</b>	The course does not require and specific textbook. Analytical information about relevant literature (e.g. scientific papers, books, case studies, research results, etc.) and the way of access to these sources are given in the syllabus of the course and in the context of the course lectures.
<b>Teaching methods</b>	The course is conducted through lectures and tutorials/labs. Also, students participate in a team assignment which they also present in the class (i.e. 2 deliverables).

<b>Assessment methods</b>	Written Exams (70%) and Assignment (30%)
<b>Language of instruction</b>	Greek / English

### Digital Services' Design

<b>Course title</b>	<b>Digital Services' Design</b>
<b>Course code</b>	Full Time Program: m81221f Part Time Program: m81221p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 4 <sup>th</sup>
<b>Number of credits allocated</b>	2.5 ECTS
<b>Name of lecturer</b>	George Lekakos, Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>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.</p> <p>At the end of the course students will be able to:</p> <ul style="list-style-type: none"> <li>• Understand how human-computer interaction works as well as the way the human brain perceives the stimuli it receives</li> <li>• To apply the principles of design thinking in practice</li> <li>• Understand the meaning of the user experience and its dimensions</li> <li>• Evaluate quantitatively and qualitatively prototypes and services</li> <li>• Apply techniques to improve the user experience at the interface level</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<ul style="list-style-type: none"> <li>• Basic concepts - human as an information processor</li> <li>• Rules and principles for designing easy-to-use services</li> <li>• The role of emotions in creating an improved user experience</li> <li>• Heuristic, cognitive walk, experimental evaluation</li> <li>• Persuasiveness and influence strategies to optimize user effectiveness and loyalty</li> <li>• Case studies</li> </ul>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• Dix, A., Finlay, J., Abowd, G., Beale., R.. Επικοινωνία Ανθρώπου - Υπολογιστή. Μ. Γκιούρδας</li> <li>• K. Chorianopoulos, Ο Προγραμματισμός της Διάδρασης, <a href="http://www.pibook.gr">www.pibook.gr</a></li> <li>• Jennifer Preece, Yvonne Rogers, Helen Sharp, Interaction Design: Beyond Human-Computer Interaction, John Wiley &amp; Sons, 2002</li> <li>• 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.</li> <li>• B.J. Fogg, Persuasive technologies, Morgan Kaufmann, 2003</li> </ul>

	<ul style="list-style-type: none"> <li>R. Gialdini, Influence: science and practice, Pearson International, 2009</li> </ul>
<b>Teaching methods</b>	Lectures using powerpoint presentations, case study analysis, practical application using prototyping and UX evaluation tools, final project assignments presented by the students.
<b>Assessment methods</b>	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 (30%) and the exam (70%)
<b>Language of instruction</b>	Greek / English

### Combinatorial Optimization

<b>Course title</b>	<b>Combinatorial Optimization</b>
<b>Course code</b>	Full Time Program: m81222f Part Time Program: m81222p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 4 <sup>th</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	George Zois, Post-doctoral Researcher Yiannis Mourtos, Associate Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	The aim of this course is to make students acquainted with: a) the basic concepts and tools of Combinatorial Optimisation, b) the modeling of real industrial cases through such tools, c) the knowledge of solution methods and existing software tools in a modern industrial context, where optimisation problems are defined by Digital Twins (i.e., decision ‘agents’). The course aims also to enhance the possibility to apply such methods and tools in different fields, where optimal decisions are sought using known techniques and algorithms, focusing on real-life optimisation problems and experimenting with real data inputs. At the same time the course favors the development of analytical thinking both in terms of modeling and in terms of problem solving.
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	Combinatorial Optimization proposes models and solution methods for decision making in problems of combinatorial nature, i.e., problems in which some 'decision variables' are discrete or integer. Such problems occur in many application areas of Management Science such as production, transport, market design or cooperative practices, network design or investment.  This course offers an introduction to seminal concepts and tools of Combinatorial Optimization (matchings, flows, paths), as well as on standard optimisation problems in an industrial environment as part of Digital Twins that are allowed to change their state reactively or proactively, thus getting more resilient. The course places particular emphasis on modeling modern cases from specific application fields (e.g.,

	logistics, textile) through these tools, to produce efficient data-driven solutions as part of Digital Twins.
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• Combinatorial Optimization: Theory and Algorithms, B. Korte, J. Vygen, 2012.</li> <li>• Διακριτή Βελτιστοποίηση, Π. Μηλιώτης, Ι. Μούρτος, Εκδόσεις Οικονομικού Πανεπιστημίου Αθηνών, 2009.</li> <li>• Surveys in combinatorial optimization, Silvano Martello, North-Holland, Amsterdam, 1987.</li> <li>• The traveling salesman problem: a guided tour of combinatorial optimization, E. L. Lawler, Jan Karel Lenstra, A. H. G. Rinnooy Kan, D. B. Shmoys, Wiley 1985.</li> </ul>
<b>Teaching methods</b>	The course is taught in six lectures, during which small individual tasks are given, while an optional group work is proposed for algorithm development in a specific programming language.
<b>Assessment methods</b>	Final Exams, Individual assignment, Optional group assignment
<b>Language of instruction</b>	Greek/English

### Digital Marketing in Tourism

<b>Course title</b>	<b>Digital Marketing in Tourism</b>
<b>Course code</b>	Full Time Program: m81223f Part Time Program: m81223p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 2 <sup>nd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Dr. Katerina Fraidaki
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	Attendees, at the end of the course will be able to: <ul style="list-style-type: none"> <li>- Design the digital marketing strategy based on the needs of the market</li> <li>- Study the market using digital tools</li> <li>- Design, apply and evaluate digital campaign made with: google ads, facebook ads</li> <li>- Apply SEO strategy</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	In every lecture, a digital tool for the design, application and evaluation of digital marketing strategy will be presented
<b>Recommended reading</b>	Slides that will follow the lectures
<b>Teaching methods</b>	Slides, live tools presentation, use of collaborative tools for group exercises, videos
<b>Assessment methods</b>	Assignment
<b>Language of instruction</b>	Greek / English

### Transportation Systems Management

<b>Course title</b>	<b>Transportation Systems Management</b>
<b>Course code</b>	Full Time Program: m81224f Part Time Program: m81224p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 4 <sup>th</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Konstantinos Androutsopoulos, Assistant Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>The objective of this course is to introduce students to transportation systems planning. The course consists of two parts. The first part is focused on presenting the operational features of transportation systems, and the interaction of transport with the economy and the environment. The second part includes the analysis and modeling of basic decision making problems arising in managing transportation systems. After successfully completing the course, the students will be able to:</p> <ul style="list-style-type: none"> <li>▪ Understand the operations of a transportation system and its interrelationships with the economic and social environment</li> <li>▪ Understand the operational features of the transportation modes and the major decisions arising in transportation management</li> <li>▪ Develop mathematical models for addressing transportation systems planning problems.</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p><b>Introduction:</b> Transportation Systems features. Interrelations with the economy and the environment. The role of energy and safety. Transport demand and supply.</p> <p><b>Transportation Modes.</b> Road Transport, Rail Transport, Sea Transport, Air Transport.</p> <p><b>Road Transport Planning Problems.</b> Service Network Design. Vehicle Allocation Problem (Full-truckload). Container Routing Problem.</p> <p><b>Maritime Transport Logistics (I):</b> Liner Shipping Planning Problems. Industrial and Tramp Shipping planning problems.</p> <p><b>Maritime Transport Logistics (II):</b> Oil and chemical products Maritime transportation. Port logistics.</p> <p><b>Air Transport Planning:</b> Strategic Slot Allocation Problem. Gate Assignment</p>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>▪ Lecture notes</li> <li>▪ Books: <ul style="list-style-type: none"> <li>○ Joseph Sussman, "Introduction to Transportation Systems", Artech House Its Library, 2000(ISBN13: Artech House Its Library).</li> <li>○ Gianpaolo Ghiani, Gilbert Laporte, and Roberto Musmanno, "Introduction to Logistics Systems Planning and Control", John Wiley &amp; Sons, Inc., 2004.</li> <li>○ M. Christiansen, K. Fagerholt, B. Nygreen, D. Ronen (2004)</li> </ul> </li> </ul>



	<p>Maritime Transportation, in Handbook in OR &amp; MS, Vol. 14, (Eds.) C. Barnhart and G. Laporte, Elsevier B.V (DOI: 10.1016/S0927-0507(06)14004-9)</p> <ul style="list-style-type: none"> <li>○ M. Christiansen, K. Fagerholt, B. Nygreen, D. Ronen (2013) Ship routing and scheduling in the new millennium, European Journal of Operational Research 228 (2013) 467–483</li> <li>○ M. Christiansen, K. Fagerholt, D. Ronen (2004) Ship Routing and Scheduling: Status and Perspectives. Transportation Science, Vol. 38, No. 1, pp. 1–18</li> </ul>
<b>Teaching methods</b>	Lectures. The course's content is presented using a mixture of lectures, case-studies discussions and in-class presentations. The lectures are further supported by the presentation of numerous practical examples highlighting how theory is applied and used in real-life situations.
<b>Assessment methods</b>	Written exam.
<b>Language of instruction</b>	Greek / English

### Electronic Commerce

<b>Course title</b>	<b>Electronic Commerce</b>
<b>Course code</b>	Full Time Program: m81225f Part Time Program: m81225p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 2 <sup>nd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Konstantinos Fouskas, Associate Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>The aim of the course is to understand and familiarize students with the integration of e-commerce and e-business in the strategy of existing companies, as well as the development of companies based on Information and Communication technologies.</p> <p>An additional goal is to familiarize students with how to develop and operate business applications of Electronic / Mobile Commerce and Electronic / Mobile Business, by presenting and analyzing best practices and case studies in various business disciplines.</p>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p>The lectures of the course will focus on:</p> <ul style="list-style-type: none"> <li>● The Digital future examples from the digital transformation in significant markets</li> <li>● Finding a digital business idea</li> <li>● Identification and selection of appropriate ideas and technologies</li> <li>● Customer market recognition and competition identification for the digital business idea</li> <li>● Creating a business model of a digital business idea</li> <li>● Digital business idea implementation strategy</li> </ul>

	<ul style="list-style-type: none"> <li>• Presentation of a digital business idea</li> </ul>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• Το Ψηφιακό Μέλλον, Γεώργιος Δουκίδης (επιμέλεια), Εκδόσεις Σιδέρης, 2019</li> <li>• Ηλεκτρονικό Εμπόριο 2018, 14η Έκδοση, Laudon Kenneth, Traver Carol Guercio, Εκδόσεις Παπασωτηρίου, 2018</li> <li>• Ψηφιακό Μάρκετινγκ: Από τη θεωρία στην πράξη, Βλαχοπούλου Μάρω, Εκδόσεις Rosili, 2020</li> <li>• Driving Digital Strategy: A Guide to Reimagining Your Business, Sunil Gupta, Harvard Business Review Press, 2018</li> <li>• The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company, Steve Blank, Bob Dorf, Wiley, 2020</li> <li>• Why Digital Transformations Fail: The Surprising Disciplines of How to Take Off and Stay Ahead, Tony Saldanha, Berrett-Koehler Publishers, 2019</li> </ul>
<b>Teaching methods</b>	Lectures
<b>Assessment methods</b>	Work and work presentations: 100%
<b>Language of instruction</b>	Greek/English

### Business Strategy

<b>Course title</b>	<b>Business Strategy</b>
<b>Course code</b>	Full Time Program: m81226f Part Time Program: m81226p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 3 <sup>rd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	-
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<ul style="list-style-type: none"> <li>• To acquire familiarity with the principal concepts, frameworks and techniques of strategic management.</li> <li>• To gain expertise in applying these concepts, frameworks and techniques</li> <li>• To develop the capacity for strategic thinking and associated managerial skills</li> </ul>
<b>Prerequisites</b>	None No prerequisites
<b>Course contents</b>	<p><b>Session 1. Introduction</b> Introduction to the course. The role and nature of strategy. A framework for strategy analysis. Strategy making in practice.</p> <p><b>Session 2. Analysis of industry and competition</b> How industry structure determines competition, and the level of industry profitability. Porter's Five Forces of Competition framework. Intra-industry, competitor, and segmentation analysis.</p> <p><b>Session 3. Analysis of Resources and Capabilities</b></p>

	<p>Resource-based strategies. Identifying and appraising resources and capabilities. The determinants of sustainable competitive advantage. The role of knowledge, and the knowledge based view of the firm.</p> <p><b>Session 4. Organization Structure and Management Systems for Strategy Implementation</b></p> <p>Principles of organizational design, alternative structural forms, and management systems for coordination and control.</p> <p><b>Session 5. Nature and Sources of Competitive Advantage</b></p> <p>Porter's "generic strategies." The sources of cost and differentiation advantage. Using the value chain to analyze cost and differentiation advantage.</p> <p><b>Session 6. Corporate Strategies</b></p> <p>Vertical integration strategies and the scope of the firm. Diversification strategies.</p>
<b>Recommended reading</b>	Robert M. Grant, Contemporary Strategy Analysis (9th ed, Wiley, 2010) Additional academic papers for each session
<b>Teaching methods</b>	Face-to-face lectures and discussion
<b>Assessment methods</b>	Written exams
<b>Language of instruction</b>	Greek/English

#### Introduction to Business Analytics using Python

<b>Course title</b>	<b>Introduction to Business Analytics using Python</b>
<b>Course code</b>	Full Time Program: m81228f Part Time Program: m81228p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 2 <sup>nd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Associate Professor Nikolaos Korfiatis (Visiting), Norwich Business School, University of East Anglia, Norwich, United Kingdom.
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	The goal of this course is to introduce the use of Python in the context of business analytics and in particular the handling of business data across the phases of well-established frameworks in the practice of business analytics. The course will make use of the Cross Industry Standard Model for Data Mining (CRISP-DM) and use python to guide the students between the nexus of business understanding, data understanding, modelling and evaluation of models in both exploratory and predictive analytics contexts.
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<ol style="list-style-type: none"> <li>1. Introduction to the Python Programming environment and general language use. The python package ecosystem and Jupyter Notebooks.</li> <li>2. Handling of data in business analytics settings. Data structures, control flow and loops. Connecting to databases using python.</li> </ol>

	<ol style="list-style-type: none"> <li>3. Handling datasets using Pandas, the data quality lifecycle. Augmenting, aggregating and cleaning datasets. Basic descriptive statistics and contingency tables.</li> <li>4. Unstructured data, web scraping using selenium. Building and inspecting datasets for business analytics.</li> <li>5. Supervised learning. Statsmodels and regression frameworks. Econometric models and forecasting.</li> <li>6. Unsupervised learning. Classification and decision trees. ROC curves and model selection.</li> </ol>
<b>Recommended reading</b>	<p>The course material will be provided in slides and videos as well as exercise packs from Datacamp.</p> <p>The students can source examples of python use from the following books:</p> <ul style="list-style-type: none"> <li>• McKinney, W., (2017). Python for data analysis: Data wrangling with Pandas, NumPy, and IPython. (2<sup>nd</sup> Edition). O'Reilly.</li> <li>• Navlani, A., Fandango, A., &amp; Idris, I. (2021). Python Data Analysis: Perform data collection, data processing, wrangling, visualization, and model building using Python. Packt Publishing Ltd.</li> </ul> <p>Basic understanding of the CRISP-DM process for business analytics can be sourced from:</p> <ul style="list-style-type: none"> <li>• Liebowitz, J. (Ed.). (2013). Business analytics: An introduction. CRC Press.</li> <li>• Wirth, R., &amp; Hipp, J. (2000). CRISP-DM: Towards a standard process model for data mining. In Proceedings of the 4th international conference on the practical applications of knowledge discovery and data mining (Vol. 1). London, UK.</li> </ul>
<b>Teaching methods</b>	<p>The course will be supported by datacamp and requires both synchronous and asynchronous participation. The main content will be provided by Datacamp which will sponsor the participation of the students for this module and is provided only to students taking part of this module. There will be learning units and exercises for each of the parts that the course will cover. A synchronous 3-hour weekly session will be facilitated where the Datacamp material will be introduced and exercises and examples will be provided along with the basic interfaces for solving business analytics problems as described in the course contents.</p>
<b>Assessment methods</b>	<p>The course will be evaluated in three levels.</p> <ol style="list-style-type: none"> <li>1. An individual assignment which will require the completion of the relevant modules from datacamp as set by the instructor. This will count for 20% of the grade.</li> <li>2. A further 10% will be calculated by the open assessment score that will be obtained by the datacamp facilitated assessment and will open in the last week of the course.</li> <li>3. The remaining 70% will be provided by a group assignment which will require the students to form groups of four and replicate and expand an existing python kernel from a list of Kaggle competitions that will be provided by the instructor.</li> </ol>

Language of instruction	Greek / English
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### Project Management

<b>Course title</b>	<b>Project Management</b>
<b>Course code</b>	Full Time Program: m81229f Part Time Program: m81229p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 3 <sup>rd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	George Diakonikolaou, Ph.D. PMP, Visiting Faculty
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>Successful students will be able to:</p> <ol style="list-style-type: none"> <li>1. Understand the difference between project and non-project (functional/operational) work</li> <li>2. Understand the nature of the project management work.</li> <li>3. Understand stakeholder requirements and expectations as key elements of the project success.</li> <li>4. Evaluate different methods of leadership styles for deploying authority and power to successfully reach the project goals.</li> <li>5. Integrate different planning and control methods to manage projects in a multi-project environment.</li> <li>6. Understand the value of communication and be able to use a number of approaches to plan communications and effectively engage the project Stakeholders</li> <li>7. Understand the nature of project risk and the issues that influence effective risk management (threats and opportunities).</li> <li>8. Understand the importance of teamwork and be able to integrate a number of tools and techniques to actively involve and motivate the project team to achieve the project objectives</li> <li>9. Know about the importance of budgeting and cash flow for the project</li> <li>10. Understand the importance of procurement work to the project success</li> </ol>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p>The course content is aligned with the Project Management Institute's Standards for Project Management as well as the ISO 21500 "Guidance on Project Management".</p> <p>It follows the latest developments in the sector and covers the following areas</p> <ol style="list-style-type: none"> <li>1. Interpersonal Skills for Project Managers. These include communication, conflict management, team development, motivation, influence and stakeholder management</li> <li>2. Process skills for Project Managers. These follow the Project</li> </ol>

	<p>Management Body of Knowledge 6<sup>th</sup> edition and the Agile Practice Guide</p> <p>3. Business Skills for Project Managers. These cover areas like Organisational Development and Organisational Culture as well as Company Policies to Support Projects in Organisations.</p> <p>The above contents are covered in the following modules:</p> <ol style="list-style-type: none"> <li>1. The Project Environment</li> <li>2. The Role of the Project Manager</li> <li>3. Organisational Issues for Projects</li> <li>4. Project Integration Management</li> <li>5. Project Stakeholders Management</li> <li>6. Project Scope Management</li> <li>7. Project Schedule Management</li> <li>8. Project Cost Management</li> <li>9. Project Quality Management</li> <li>10. Project Resource Management</li> <li>11. Project Communications Management</li> <li>12. Project Risk Management</li> <li>13. Project Procurements Management</li> </ol> <p>These modules are covered in 6 lecture sessions.</p>
<p><b>Recommended reading</b></p>	<p>The primary reference for this course is the <b>PMBOK Guide 6<sup>th</sup> edition</b>. It represents the accumulation of knowledge and best practices in Project Management, published by the Project Management Institute (<a href="http://www.pmi.org">www.pmi.org</a>), it is an ANSI standard and has sold more than three million copies until now. Also, the ISO 21500, an international standard on project management, is mostly based on the PMI's approach.</p> <p>Other recommended references are:</p> <p><b>Agile Practice Guide</b>  Author: Project Management Institute  Publisher: Project Management Institute  The importance of this reference is growing as the value to agile approaches to the current working environment.</p> <p><b>Project Management: A Systems Approach to Planning, Scheduling, and Controlling</b>  Author: Harold Kerzner  Publisher: Wiley  It is considered the "Bible of Project Management". A very insightful and extensive reference to practically all project management issues, mostly from a traditional point of view.</p> <p><b>Effective Project Management: Traditional, Agile, Extreme, Hybrid</b>  Author: Robert K. Wysocki  Publisher: Wiley  A good reference to compare various approaches for project or product work</p> <p><b>Fundamentals of Technology Project Management, 2nd Edition</b>  Author: Colleen Garton with Erika McCulloch</p>

	<p>Publisher: MC Press  <b>Project Managers Portable Handbook, 3rd Edition</b>  Author: David Cleland and Lewis Ireland  Publisher: McGraw-Hill  <b>Information Technology Project Management, 7th Edition</b>  Author: Kathy Schwalbe  Publisher: Cengage Learning  <b>Essential Scrum: A Practical Guide to the Most Popular Agile Process</b>  Author: Kenneth S. Rubin  Publisher: Addison-Wesley  <b>Project Management: The Managerial Process</b>  Author: Erik Larson  Publisher: McGraw-Hill  <b>The Project Management Tool Kit: 100 Tips and Techniques for Getting the Job Done Right</b>  Author: Tom Kendrick  Publisher: AMACOM</p>
<b>Teaching methods</b>	Mix of presentations and workshops followed by discussions.
<b>Assessment methods</b>	40% coursework (team project) 60% final exam
<b>Language of instruction</b>	Greek / English

#### **Digital Payment Systems and Blockchain Applications**

<b>Course title</b>	<b>Digital Payment Systems and Blockchain Applications</b>
<b>Course code</b>	Full Time Program: m81230f Part Time Program: m81230p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 4 <sup>th</sup>
<b>Number of credits allocated</b>	2.5 ECTS
<b>Name of lecturer</b>	George Lekakos, Professor
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<p>The course has a dual purpose: on the one hand to analyze the most important technologies and practices of electronic payments (such as e-banking, e-invoicing, etc.) highlighting the importance of utilizing digital payment systems at both business and national level and from the other to introduce students to the emerging realm of virtual currencies, such as Bitcoin, and blockchain technologies.</p> <p>At the end of the course students will be able to:</p> <ul style="list-style-type: none"> <li>• Understand the technologies and electronic payment systems that a modern business can take advantage of.</li> <li>• Understand the necessary redesign of processes required by the utilization of digital transactions, such as electronic invoicing, as well as the security requirements related to the use of e-payment systems.</li> <li>• Understand the factors that influence the adoption of electronic</li> </ul>

	<p>payment systems (eg e-banking).</p> <ul style="list-style-type: none"> <li>• Understand the components of digital currency based on blockchain technology, the process of issuing digital currency, proof of work mechanisms, the concept of common consent and decentralized ledgers.</li> <li>• Understand advanced uses of blockchain, such as guarantee services, asset registration, confirmation and smart contracts.</li> <li>• Understand the potential effects of digital currencies on existing monetary and banking systems.</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<ul style="list-style-type: none"> <li>• Digital payments: technologies and applications.</li> <li>• Process redesign and assessment of the utilization of electronic payment / transaction systems - case studies.</li> <li>• Factors of adoption and use of electronic payment systems.</li> <li>• Introduction to digital currencies (history, decentralized consensus through proof-of-work, Bitcoin / blockchain principles).</li> <li>• Practical examples (business applications, digital currency projects, case studies).</li> <li>• Innovation and growth: how can digital currencies and blockchains be viewed through innovation frameworks and what are their potential to accelerate economic growth.</li> </ul>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• Antonopoulos, A. (2014) <i>Mastering Bitcoin</i>, O'Reilly Publishing.</li> <li>• Lai, V., Li H., (2005) Technology acceptance model for internet banking: an invariance analysis <i>Information &amp; Management</i> 42, pp. 373–386.</li> <li>• Lekakos, G., Vlachos, P., Koritos, C. (2014) "Green is Good but is Usability Better? Consumer Reactions to Environmental Initiatives in e-Banking Services", <i>Ethics and Information Technology</i>, vol. 16, pp. 103-117.</li> <li>• Nakamoto, S. (2008) <i>Bitcoin: A Peer-to-Peer Electronic Cash System</i>.</li> </ul>
<b>Teaching methods</b>	Lectures using powerpoint presentations, case study analysis, micro-project and final project assignments presented by the students.
<b>Assessment methods</b>	The evaluation of the course will be based on the evaluation of the assignment, which will be orally presented.
<b>Language of instruction</b>	Greek / English

### Mathematical Programming

<b>Course title</b>	<b>Mathematical Programming</b>
<b>Course code</b>	Full Time Program: m81234f Part Time Program: m81234p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 2 <sup>nd</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 3 <sup>rd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Yiannis Mourtos, Associate Professor



	Stathis Plitsos, PhD
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	This course has several intertwined aims, namely: <ol style="list-style-type: none"> <li>1. To offer a lucid and in-depth understanding of the main methods and mathematical theory regarding optimisation.</li> <li>2. To develop the art of model building in mathematical programming via a series of exercises and case-studies, which cover a broad and representative set of applications.</li> <li>3. To gain familiarity with state-of-the-art commercial solvers in terms of both encoding and solving optimisation problems.</li> <li>4. To obtain insight into real-life settings and applications.</li> </ol>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	Mathematical programming methods, models and solvers enjoy a long-standing applicability and a recent revival in developing and using them. This course will offer a concise presentation of the major mathematical programming principles and methods in order to then focus mostly on the development of models of real problems, their encoding using algebraic languages and the subsequent use and fine-tuning of commercial solvers. In that manner, it will provide an end-to-end investigation of a typical operations research approach that exploits a verbal description of a real problem to provide a mathematical formalisation and a method finding the optimal solution. Several particularities of mathematical programming methods will be discussed while moving along a series of modeling exercises, while also establishing its main application-independent principles that make it an attractive solution approach.
<b>Recommended reading</b>	Lecture notes, hand-outs and slides are provided, together with software documentation and updated journal papers.
<b>Teaching methods</b>	Six 3-hour lectures, during which we interplay between workshops on modelling in appropriate software and mathematical modelling on a white board.
<b>Assessment methods</b>	A compulsory set of exercise will be handed out, possibly in the form of a unified project with intermediate deliverables, and will count for 50% of the final mark, the remaining 50% arising from the final course exam.
<b>Language of instruction</b>	Greek/English

### Business and Technological Ethics

<b>Course title</b>	<b>Business and Technological Ethics</b>
<b>Course code</b>	<b>Full Time Program: m81246f Part Time Program: m81246p</b>
<b>Type of course</b>	<b>Elective</b>
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>

<b>Number of credits allocated</b>	2.5 ECTS
<b>Name of lecturer</b>	Ioanna Deligianni, Assistant Professor Maria Boura, PhD
<b>Objective of the course (preferably expressed in terms of learning outcomes and competences)</b>	<ul style="list-style-type: none"> <li>• Understanding the role of ethics in business. The recognition of ethical issues within companies</li> <li>• The application of important concepts and theories (eg utilitarianism, ethics, etc.) regarding ethical values for resolving business issues</li> <li>• Understanding the benefits of business ethics and relating to the concepts of competitiveness and sustainability</li> <li>• Understanding of modern ethical dilemmas arising from the development of new technologies (artificial intelligence and ethics, big data and ethics, etc.)</li> <li>• Acquiring a global understanding of current issues related to corruption and implementation of anti-corruption mechanisms in modern organizations</li> </ul>
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p>1. Business Ethics: What is it and why does it matter?</p> <ul style="list-style-type: none"> <li>• Conceptual definition of business ethics. Ethical issues faced by modern businesses</li> <li>• Clarification of the current and important nature of ethics for the survival and long-term success of modern business</li> <li>• The role of business in modern society. The importance of stakeholders.</li> </ul> <p>2. Ethics and Decision Making</p> <ul style="list-style-type: none"> <li>• Introduction to the theories and philosophies that guide ethical decision making (eg utilitarian, deontology, etc.)</li> <li>• Relativism. Concept, examples and critique.</li> <li>• Utilitarianism. Concept, method of application, advantages, disadvantages, practical application.</li> <li>• Ethics. Duty and rights. Concepts and practical applications. • Justice. Basic principles and application in practice.</li> <li>• Virtue and ethics. Basic principles and practical application.</li> </ul> <p>3. Ethics and Business</p> <ul style="list-style-type: none"> <li>• Causes of immoral behavior in business.</li> <li>• Ethical dilemmas in the workplace (employees, discrimination, privacy, sexual harassment, bullying)</li> <li>• Ethical dilemmas and consumers</li> </ul> <p>4. Ethics and Technology</p> <ul style="list-style-type: none"> <li>• Ethical dilemmas from emerging technologies (artificial intelligence, big data, electronic surveillance and workplace rights, protection of users' personal data, social media, copyright theft, data amnesia, google effect, etc.)</li> </ul>
<b>Recommended reading</b>	<ul style="list-style-type: none"> <li>• Thanopoulos G. 2003. Business Ethics and Deontology, Interbooks. (in Greek)</li> <li>• Stanwick P &amp; Stanwick S. 2014. Understanding Business Ethics. Sage</li> <li>• Ronald L. Sandler ed. 2013. Ethics and Emerging Technologies. Palgrave</li> </ul>

	Macmillan." Haski-Leventhal Debbie (Επιμέλεια Κ. Μανασάκης, Γ. Θερίου). 2018. Στρατηγική Εταιρική Κοινωνική Ευθύνη, Εκδόσεις Τζιόλα & Υιοί Α.Ε.
<b>Teaching methods</b>	<ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case Studies</li> <li>• Videos</li> <li>• Guest Speakers</li> </ul>
<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Final Exam 60%</li> <li>• Compulsory Assignment 40%</li> </ul>
<b>Language of instruction</b>	Greek/English

### Management of People and Groups

<b>Course title</b>	<b>Management of People and Groups</b>
<b>Course code</b>	Full Time Program: m81247f Part Time Program: m81247p
<b>Type of course</b>	Elective
<b>Year of study</b>	Full Time Program: 1 <sup>st</sup> Part Time Program: 1 <sup>st</sup>
<b>Semester/trimester</b>	Full Time Program: 2 <sup>nd</sup> Part Time Program: 2 <sup>nd</sup>
<b>Number of credits allocated</b>	2.5ECTS
<b>Name of lecturer</b>	Ioannis Nikolaou, Professor Sofia Chatzi, PhD
<b>Objective of the course</b>	The course studies the behavior of people in the workplace, with particular emphasis on new managers, ie those who will be called to lead a working group for the first time. This knowledge is necessary not only for every executive who manages a team, but also for every employee, as long as it is related to his personal and professional development.
<b>Prerequisites</b>	No prerequisites.
<b>Course contents</b>	<p>This course will develop the most modern and scientifically substantiated theoretical approaches to the study of Human Resource Management and Organizational Behavior / Psychology.</p> <ol style="list-style-type: none"> <li>1. Understand the critical role of effective management of their associates and more generally of effective human resource management.</li> <li>2. Understand organizational behavior and, consequently, be able to manage themselves and others more effectively in the workplace.</li> <li>3. Understand the basic functions of the Human Resources Management for the success of modern organizations.</li> <li>4. Recognize key concepts and critical theories of organizational behavior and development.</li> </ol>
<b>Recommended reading</b>	Vakola, M. & Nikolaou, I. (2019). <i>Organizational Psychology &amp; Behavior</i> . Athens: Rosili Lectures/ Scientific Paper Recommended Resources

	<ul style="list-style-type: none"> <li>• Penney, L. M., David, E., &amp; Witt, L. A. (2011). A review of personality and performance: Identifying boundaries, contingencies, and future research directions. <i>Human Resource Management Review</i>, 21(4), 297-310.</li> <li>• Hansen, M. T., Ibarra, H., Peyer, U., &amp; von Bernuth, N. (2013). The Best-Performing CEOs in the World. <i>Harvard Business Review</i>, 91(1/2), 81-95.</li> <li>• Robinson, S. L. (1996). Trust and breach of the psychological contract. <i>Administrative Science Quarterly</i>, 41(4), 574-599.</li> <li>• Huckman, R., &amp; Staats, B. (2013). The Hidden Benefits of Keeping Teams Intact. <i>Harvard Business Review</i>, 91(12), 27-29.</li> <li>• Sonnentag, S., &amp; Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. <i>Journal of Organizational Behavior</i>, 36(1), 72-103.</li> <li>• Nikolaou, I. (2014). Social Networking Web Sites in Job Search and Employee Recruitment. <i>International Journal of Selection and Assessment</i>, 22(2), 179-189.</li> </ul>
<b>Teaching methods</b>	This course is based on the suggested book, class discussions, lectures, case studies, guest speakers and videos.
<b>Assessment methods</b>	<p><b>Written Assignment (WA) (weighting-50%):</b> Each student must select a topic related to Human Resources Management/Organizational Behavior and submit 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 must include at least four quality research sources. (5,000-8,000 words).</p> <p><b>Final Exam (FE) (weighting-50%):</b> 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 will be made available through Eduportal on the day of exams, and students will 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 will be submitted through Turnitin software).</p>
<b>Language of instruction</b>	Greek/ English

## **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 MSc in Management Science and Technology, 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>).