GOVERNMENT GAZETTE

OF THE HELLENIC REPUBLIC

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DECISIONS

No. 17855

Update of the Regulation for the Operation of the Postgraduate Program entitled: "Business Analytics" of the Department of Management Science and Technology of the School of Business Administration of the Athens University of Economics and Business.

THE SENATE
OF THE ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS (Meeting 1/14.09.2023/5D)

Having regard to:

1. Law 4957/2022 "New Horizons in Higher Education Institutions": Strengthening the quality, functionality and link of the Higher Education Institutions to the society and other provisions"(A 141), in particular para. Article 16 (4)(w), Article 79 (2)(c) and Article 80,

2. Article 5 (2) of Law 3469/2006 "National Printing Office, Government Gazette and other provisions" (A 131),

3. Article 90 of the Code of Legislation for the government and governmental bodies (P.D. 63/2005, A '98), which was kept in force by Article 119(22) of Law 4622/2019 (A' 133),

4. the act no. 4503/01.09.2022 (Online Publication No.: ΨΒΑΨ469Β4Μ-ΨΛΙ) dated 01.09.2022 of the Rector on the reconstruction of the Senate of the Athens University of Economics and Business,

5. Decision No 4521/22.06.2018 (B 2774) of the Senate of the Athens University of Economics and Business (Meeting 12 /24-04.2018) concerning the re-establishment of the Postgraduate Program entitled "Business Analytics" of the Management Science and Technology Department of the School of Business Administration of the Athens University of Economics and Business,

6. Decision No 5144/12.07.2018 (B 3347) of the AUEB Senate (Meeting 16 /05.07.2018) concerning the Regulation on Postgraduate Studies of the Postgraduate Program entitled "Business Analytics" of the Management Science and Technology Department of the School of Business Administration of the Athens University of Economics and Business, as amended and in force.

7. Decision No 6706/08.05.2023 (decision B 3140) of the Athens University of Economics and Business Academic Council (11th meeting/06.04.2023/5) concerning the Regulation of Postgraduate and Doctoral Programs of the AUEB,

8. the decision of the Postgraduate Studies Committee dated 26.06.2023 concerning the preparation of a standard draft Regulation for the Operation of a postgraduate program;

9. the decision of the Department's Assembly of Management Science and Technology (Meeting 14/24.07.2023) of the Postgraduate Program entitled "Business Analytics" of the Department of Management Science and Technology of the School of Business Administration of the Athens University of Economics and Business, as transmitted included in the document with the reference information YS 921/12.09.2023 issued by the Deputy Head of the Postgraduate and Doctoral Studies Secretariat of the School of Business Administration;

10. the proposal No. ΥΣ 929/13.09.2023 of the Vice-Rector on Academic Affairs and Personnel,

11. the fact that, pursuant to Article 90 of the Code of Legislation on the Government and governmental bodies, the application of this decision does not result in any expense to the State Budget or the Budget of the Athens University of Economics and Business, decides**:**

A. The update of the Regulation for Operation of the Postgraduate Program entitled "Business Analytics" of the Management Science and Technology Department of the School of Business Administration of the Athens University of Economics and Business, as follows:

REGULATION OF OPERATION OF THE POSTGRADUATE PROGRAM "BUSINESS ANALYTICS" OF THE DEPARTMENT OF MANAGEMENT SCIENCE AND TECHNOLOGY OF THE SCHOOL OF BUSINESS ADMINISTRATION OF THE ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS

GENERAL PROVISIONS

The Postgraduate Program entitled “Business Analytics” of the Department of Management Science and Technology of Athens University of Economics and Business was re-established by Decision No 4521/22.06.2018 (B 2774) of the Senate of the Athens University of Economics and Business. Its operation is governed by the provisions of Law 4957/2022 of this Regulation, the Regulation of Postgraduate and Doctoral Studies of the Athens University of Economics and Business (B 3140/2023) and the relevant decisions of the Senate of the Athens University of Economics and Business.

The Operation Regulation of the PSP The “Business Analytics” program shall be prepared by decision of its competent bodies, approved by the Senate, published in the Government Gazette and posted on the website of the Postgraduate Program (MSc). The Operation Regulation may be amended and revised periodically without losing its basic structure and content, by following the above procedure.

Article 1
SUBJECT FIELD – OBJECTIVE

1. The Postgraduate Program (MSc) entitled “Business Analytics” aims at providing specialized postgraduate studies in the key areas of Business Analytics and focuses on the following fields of study:

(a) business performance and innovation management;

(b) quantitative methods in decision-making;

(c) data analysis and management; and

(d) operational applications and analytics tools.

2. The objective of the MSc is to prepare executives who will best combine knowledge in business management, data analysis and management techniques, and analytics tools based on statistical and operational research, with a view to making optimal business decisions; that is, executives who will be able to handle the information of a fast and constantly changing world full of data, in a way that is flexible, efficient and effective for their working environment.

3. The PSP may cooperate with respective postgraduate programs of recognised Higher Education Institutions, domestic and/or foreign. The Coordination Committee (CC) of the PSP through the Department’s Assembly, notifies the Senate of the decision of any such cooperation.

Article 2
Master Degrees

Upon completion of the Postgraduate Program (MSc) the students are awarded a Master of Science in Business Analytics.

Article 3
Administrative Bodies of the Program

The bodies competent for the organisation and operation of the PSP in accordance with Law 4957/2022, are:

a) the Senate of the Institution, which exercises the powers set out in Article 82 (1) of Law 4957/2022.

(b) the Department’s Assembly, which exercises the powers set out in Article 82 (2) of Law 4957/2022.

(c) the Coordination Committee (CC) of the PSP, which exercises the powers set out in Article 82 (3) of Law 4957/2022.

(d) the Director of the PSP who exercises the powers of Article 82 (4) of Law 4957/2022.

Article 4
Number of entrants - Categories of Candidates

1. The number of admissions to the Postgraduate Program (MSc) per year is set at a maximum of sixty (60) postgraduate students, in total, for the full-time and part-time programs.

2. Holders of a qualification of the first cycle of studies at a domestic or similar recognised foreign Higher Education Institutions (level six (6)) of the National and European Qualifications Framework in accordance with Article 47 of Law 4763/2020) shall be accepted in the PSP.

Article 5
Criteria and Procedure for the Selection of Candidates

1. The selection of entrants shall take place in accordance with the provisions of this Regulation.

2. By decision of the Department’s Assembly, a notice for the admission of postgraduate students in the PSP shall be published and posted on the website of the PSP and the Institution. The notice shall contain all relevant details (dates and place of submission of the application, necessary supporting documents accompanying it, selection criteria etc.). The applications together with the necessary supporting documents shall be submitted electronically or submitted to the Secretariat of the PSP, within a period specified in the notice and may be extended by a decision of the Department’s Assembly.

3. The necessary supporting documents submitted by each candidate shall be as follows:

a) Application with a recent photo.

b) A degree copy together with a transcript of records. Graduates must submit a declaration under Law 1599/1986 that they shall be accepted on condition that they will obtain their degree until the examination period of following September,

c) English language certification verifying a very good command of the language. Those who do not hold the required qualification during the period of submission of applications must submit a declaration under Law 1599/1986 that they shall be accepted on condition that they will obtain the required proof of command of the English language.

(g) Two letters of reference from university professors and/or employers,

(e) Proof of employment (if any),

(f) CV in English,

(g) GMAT/GRE scores (if any).

4. Applicants with qualifications from foreign institutions must submit the relevant equivalence certificates from the Hellenic National Academic Recognition and Information Centre (DOATAP or former DIKATSA). A certificate of equivalence is not required if the graduation institution and the qualification are included in the published Registers of DOATAP (National Registry of Foreign Recognized Higher

Education Institutions and National Registry of Qualification Types of Recognized Higher Education Institutions), in accordance with the applicable provisions.

5. The selection criteria for the candidates are the following:

(a) Grade of degree(s)

(b) Grades on the undergraduate courses that are relevant to the PSP courses

(c) Performance in Master's thesis, where this is required at an undergraduate level,

(d) Duration and type of employment, if applicable,

(e) Other skills (grade in GMAT/GRE exams, IT skills, relevant seminars, etc.),

(f) University and originating Department,

(g) Type of research experience,

η) C1 level English,

(i) Command of another foreign language,

(j) Interview,

k) Letters of recommendation from Professors or employers. l) Any distinctions/awards.

6. The details of application of the criteria (e.g. points, weights) are decided by the Department's Assembly.

7. The selection procedure shall be as follows:

(a) The Secretariat of PSP shall draw up a complete initial list of applicants.

(b) The Committee for the assessment of Candidates shall:

(i) reject candidates who do not meet the selection criteria

(ii) award points to candidates according to the criteria decided;

(iii) prioritize the candidates by the points awarded and issue a provisional selection list

iv) call for an interview those candidates for whom it has been decided to be invited.

(v) Based on the final score of the candidates, it shall draw up the final selection list.

8. The final list of suitable candidates and any runners-up shall be validated by the Department's Assembly.

9. The suitable candidates, after being informed by the Secretariat, are invited to reply in writing within five (5) working days, whether they accept their admission to the Postgraduate Program. The expiry of the above deadline without any action taken shall be equivalent to a refusal of acceptance following which the Secretariat of PSP shall notify the next candidate in line of the assessment from the relevant list of suitable candidates. To join the Postgraduate Program, it is necessary to deposit the amount of €1500 for the full-time version of the program and €500 for the part-time version as the 1st instalment of the tuition fees within ten (10) working days from the sending of the acceptance letter.

Article 6
Enrolment

1. The enrolment of postgraduate entrants each year shall be realised from June to October within deadlines set by the Director upon approval of the CC of the Postgraduate Program.

2. The candidate, before enrolling,shall take note of the present Regulation of Operation of the Postgraduate Program, the Regulation of the Postgraduate and Doctoral Programs of the AUEB (B 3140/2023), of the Code of Ethics and Good Practice of the Athens University of Economics and Business (B 7257/2022) and shall declare in writing that he accepts them. For reasons of exceptional necessity, the Department's Assembly may, upon a reasoned request of the interested party, decide that enrolment may take place within one month of the expiry of such period.

3. Candidates who will not be able to meet the requirements under which they were admitted or leave the PSP, at any time after accepting the position offered to them, may not be entitled to a refund. By way of exception, by decision of the competent body of the PSP, the amount paid as the 1st instalment shall be refunded, if the candidate is accepted and enrols at a later time in another PSP of the AUEB. This possibility expires on 31 August of the year in which the application is submitted.

Exceptionally, candidates who have been admitted to the Full or Part-time program may apply for a transfer to the Part-time or Full-time program respectively; the application must be fully documented and examined by the Department's Assembly.

Article 7
Duration of Studies - Terms of Study

1. The duration of studies for the award of the Master' s Degree is set at two (2) semesters for the full-time program and four (4) semesters for the part-time program, which includes the preparation time of a master's thesis.

2. The maximum time allowed to complete the studies is set at four (4) semesters for the full-time program and six (6) semesters for the part-time program. In exceptional cases, such as illness, serious family reasons, conscription, it is possible to grant an extension of studies for up to one year, following the presentation of the necessary supporting documents by the postgraduate students and a reasoned decision of the Department's Assembly.

3. Upon request, the postgraduate student may request a reasoned temporary suspension of studies which shall not exceed two semesters in total. When the student status is suspended, the suspended semesters shall not be counted against the prescribed maximum duration of studies. The student, upon their return, is still subject to the studies program of their enrolment as a postgraduate student (full or part-time program). The resumption of the studies after the suspension takes place under the conditions and rules of operation of the program upon their return.

4. Postgraduate students have the rights and obligations as defined in the Regulation of Postgraduate and Doctoral Programs of the Institution [Article 11, (B 3140/2023)].

5. In order to improve the operation of PSP in the context of the student-centred approach, the mechanism for the management of complaints and objections of postgraduate students of the PSP is in place, in order to ensure the quality of the educational and administrative services provided. (Decision of the Rector's Council 19th meeting / 23-05-2023).

Article 8
Course Schedule

1. The PSP commences on the winter semester of each academic year. The total ECTS credits of the program are ninety (90).

2. During the studies, postgraduate students are required to attend and pass postgraduate courses, conduct research work and write scientific papers, prepare a diploma thesis or complete field study.

3. The classes are held in person, or live by remote learning means, or remotely in accordance with the provisions in force. The organization of the educational procedure by remote learning methods ensures the accessibility of people with disabilities and special educational needs.

4. Classes are held on a weekly basis and are conducted in English. The language of the thesis is English.

5. In order to obtain the Master's Degree (MD), the following are required:

a) Compulsory attendance and successful examination in nine (9) compulsory courses with five (5) credits each, six (6) compulsory courses with two and a half (2.5) credits each; the above courses correspond to a total of 60 credits.

b) Elaboration of a diploma thesis or completion of a Field Study Project which corresponds to 30 credits.

6. Course Schedule

(a) The curriculum shall be defined as follows:

1st SEMESTER OF STUDIES			
CODE	COURSE TITLE	COURSE TYPE	ECTS credits
m82101f	Information Systems and Business Process Management	COMPULSORY	5
m82102f	Large Scale Optimization	COMPULSORY	5
m82117s	Fundamentals in Data Management	COMPULSORY	5
m82104f	Statistics for Business Analytics I	COMPULSORY	5
m82118s	Business Intelligence & Data Engineering	COMPULSORY	5
m82119s	Data Visualization	COMPULSORY	2.5
m82120s	Requirements Engineering for Analytics	COMPULSORY	2.5
TOTAL ECTS CREDITS FOR THE SEMESTER			30
2nd SEMESTER OF STUDIES			
CODE	COURSE TITLE	COURSE TYPE	ECTS credits
m82109f	Statistics for Business Analytics II	COMPULSORY	5
m82121s	Python for Analytics and Artificial Intelligence	COMPULSORY	5
m82122s	AI for Business Analytics	COMPULSORY	5
m82115f	Business Analytics Use Cases	COMPULSORY	5
m82123s	Advanced Topics in Data Analysis	COMPULSORY	2.5
m82124s	Data Governance and Privacy	COMPULSORY	2.5
m82107f	Innovation and Entrepreneurship	COMPULSORY	2.5
m82125s	Cloud Infrastructures for Analytics	COMPULSORY	2.5
TOTAL ECTS CREDITS FOR THE SEMESTER			30

3rd SEMESTER OF STUDIES			
m82116f	Field Study Project or Thesis	COMPULSORY	30
TOTAL ECTS CREDITS FOR THE SEMESTER			30
GRAND TOTAL			90

(b) The curriculum may include a range of educational activities aimed at deepening and consolidating students' knowledge at a high level in the scientific areas of the curriculum. Educational activities may include seminars and lectures by specialized individuals, undertakings-organizations and/or distinguished academics with relevant experience in the subject of JPPS, experiential activities, educational trips, tuition training/exercises within the curriculum, workshops, case studies analysis, educational simulation programs, educational events, preparation and acquisition of professional certifications, trainings, workshops with distinguished academic and guest speakers, development and conduct of business games.

(c) An annex to this Regulation indicates the content of the postgraduate courses as well as the minimum teaching hours per course.

7. The two semesters in the full-time program are divided into three teaching periods and the four semesters in the part-time program are divided into six teaching periods. Exams for both programs (full and part-time) take place three times each academic year, in the following months: December/January, March/April and June/July.

8. The courses/assignments and exams schedule for each period shall be drawn up and communicated at least ten days before the beginning of the semester.

9. Postgraduate students shall declare the courses they will attend at the beginning of each academic period on dates notified by the Secretariat of the PSP.

10. In the event of an impediment to give a lecture, the instructor shall immediately inform the Director of the PSP and the Secretariat and the lecture shall be rescheduled. The PSP's students shall be informed about the new date of the lecture in an appropriate manner and within a reasonable time.

11. Course attendance shall be compulsory. In case the absences in a course exceed 1/3 of the total teaching hours, the student is considered to have failed in the course and repeats it once more in the next teaching period. In the event that the number of days absent is greater than that set by the Operation Regulation of the PSP and the reasons for absence are considered serious, at the request of the interested postgraduate student, the case shall be examined by the Coordination Committee of the PSP, which may or may not approve the request and shall forward their recommendation to the Department's Assembly for the final approval.

12. The Postgraduate Program provides postgraduate students with the possibility of having courses from previous postgraduate degrees recognized on the condition that the course in question from the previous program covers 80% of the material of the corresponding course of the Postgraduate Program. The recognition is carried out by decision of the CC of the Postgraduate Program at the request of the postgraduate student.

Article 9

Examination and Performance assessment Rules

1. Course assessment takes place by written or oral examination, assignment, exculpatory assignment or a combination of the above, in person or by digital assessment methods if necessary.

2. The determination of the manner and the procedure of assessment of students in a course shall be the sole responsibility of the teacher to whom the teaching in the course has been assigned by the Department's Assembly.

3. The final grade for each course shall be determined by the respective teachers. The individual and group assignments of the students may be taken into account for the grade.

4. Participation in the exams on the specific date announced in accordance with the Program is compulsory. In the event that a student does not appear, without justification, on a specific examination date, the student forfeits the examination period and is considered to have failed the course.

5. The grading scale is set from zero (0) to ten (10), including percentage units and half-units. Any grade from 5 and higher is a passing grade.

6. Re-evaluation for an exam for the student to obtain a passable grade or to improve their score is not allowed. Correction of a grade after its notification by the Secretariat is allowed, if a justified error or cumulative error has been entered (attached in writing), upon receipt of a document by the teacher and the decision of the Department's Assembly.

7. In case the student fails a course, they may be re-examined in this course in a repetitive examination period. More specific arrangements and cases are examined by the CC.

8. Each postgraduate student of the full-time program may fail courses of up to 30 credits per academic year, while each postgraduate student of the part-time program may fail courses of up to 15 credis per academic year. By decision of the Department's Assembly, specific cases of force majeure

(illness, workload, etc.) are defined in which a higher number of courses may be allowed to be failed.

9. The internal rules of operation of the Higher Education Institution regulate: (a) alternative methods for assessing students with disabilities and special educational needs; (b) measures for the assessment of students who are proven to be ill or recovering from a serious illness during the examination period. Until the issuance of the Internal Operation Regulation of the Institution, these matters will be regulated by a decision of the Senate.

10. The Department's Assembly, following a recommendation by the CC, may decide to remove postgraduate students (except for the cases provided for in the relevant legislation) in the following cases:

a) Insufficient progress of the postgraduate student. b) Non-fulfilment of the financial obligations up to the maximum time allowed for the completion of the studies, including the completion of the Master's Thesis, if provided for, set out in the Operation Regulation of the Postgraduate Program.

c) Incomplete fulfilment of other obligations defined by the relevant Regulation;

d) Offensive conduct against academic ethics under current legislation

e) Upon request of the postgraduate student

11. In case of removal of the postgraduate student as described above, the refund of any tuition fees paid is not possible, unless there are special reasons and the Department's Assembly decides on a reasoned basis. following a proposal of the CC of the PSP.

Article 10
Master's Thesis

1. The dissertation or field study project is compulsory and applies to full and part-time students upon completion of the course, i.e. in the semester from 1 August to 31 January of the following year. The students of the program may choose (a) a field study project instead of a dissertation, with few hours of weekly meetings of the student in the company, to solve real-life problems related to the subject of the dissertation. The above options shall be equally important and equal Credits as for the dissertation shall be awarded, as specified in the studies regulation.

The requirements and procedure for the preparation of the Master's thesis are laid down in the Guide to the Postgraduate Program or the Guide for the Preparation of a Master's Thesis.

2. Teachers falling under cases a) to f) of Article 83(1) of Law 4957/2022 have the right to supervise the preparation of the Master's thesis provided that they hold a doctorate. By decision of the Department's Assembly the supervision of the thesis may also be entrusted to members of the Teaching and Research Academic Personnel (DEP), the Special Educational Personnel (EEP) and the Laboratory Teaching Personnel (EDIP) of the Department, who have not undertaken teaching work in the PSP Article 83 (3) of Law 4957/2022). In exceptional cases of objective failure to carry out supervisory tasks for a long period of time or the existence of another important reason, the Department's Assembly may, after justifying its decision, replace the supervisor or a Member of the Three-Member Examination Committee.

3. Specific issues concerning the writing of the Master's thesis are determined in the Guide for the preparation of the Master's thesis which is issued upon decision of the Department's Assembly and posted on the website of the PSP.

4. The language of the thesis is English.

5. In order to evaluate the thesis, the postgraduate student must present it before the Three-Member Examination Committee. The presentation and examination of the thesis can take place in person or by digital assessment methods.

6. In the event of failure in the examination of the dissertation or field study project, the student may submit the dissertation once again, but neither earlier than three months nor later than six months. In case of a second failure, the student shall be deleted from the Program following a decision of the Department's Assembly.

Article 11
Master's Degree Award and Grade

1. The postgraduate student shall complete their studies and be awarded the Master's Degree once they have fulfilled all obligations prescribed under the Program, i.e. they have succeeded in the exams for the courses of the curriculum, their Master's thesis or field study has been approved and they have paid off their tuition fees, if envisaged. If the above deadlines are not met, the postgraduate student shall only be entitled to a simple certificate of successful attendance of the courses indicating that they have earned a passable grade, and their study in the Program shall end.

2. The final grade of the Postgraduate Degree (MSc) shall be calculated taking into account the grades awarded in the postgraduate courses and the grade of the dissertation or field study project, as follows: the sum of the total average grade in the courses multiplied by 0.75 and the grade of the dissertation or field study project multiplied by 0.25.

3. The grade of the Master's Degree (MSc) certifies that the postgraduate student has successfully completed their studies. The awarded Master's Degrees bear the indications "Good", "Very Good", "Excellent", corresponding to the following grades:

"Excellent" from 8.51 to 10

"Very Good" from 6.51 to 8.50

"Good" from 5 to 6.50

4. For the period until the Degree is awarded, the Secretariat of the PSP shall issue a certificate of completion of studies indicating the graduation date.

Article 12
Faculty Adviser
Postgraduate Students

For each postgraduate student, a member of the Teaching and Research Academic Personnel is appointed by the Department's Assembly as a Faculty Adviser, with the aim of supporting them during their studies according to the decision of the AUEB Senate (Meeting 6/12-01-2023) and the Regulation of Postgraduate and Doctoral Programs of the Institution [Article 12, (B 3140/2023).

Article 13
Funding Sources - Tuition Fees

1. The funding of PSP may come from: donations, benefits, bequests, sponsorships, research programs, EU programs; or other international organizations, tuition fees and other sources, as provided for by the legislation in force.

2. The tuition fees for the attendance of the Postgraduate Program are set at € 7,200 for full-time and part-time studies and there is also a possibility of paying in installments.

(a) Installments for the full-time program:
1st installment: € 1500 (upon acceptance of the position),
2nd installment: € 2,850 (by the end of December)
3rd installment: € 2,850 (by the end of March)
(b) Installments for the part-time program:
1st installment: € 500 (upon acceptance of the position),
2nd installment: €1,800 (by the end of December)
3rd installment: €1,800 (by the end of March)
4th installment: € 1,800 (by the end of December)
5th installment: € 1,300 (by the end of March)
(c) The above instalments may be adjusted by decision of the competent body.

3. Postgraduate students must pay all their financial obligations on time.

4. In case of non-compliance with the financial obligations, it is possible to temporarily suspend the studies or to remove the student from the Program, following a decision of the Department Assembly.

5. Registered students of the PSP may study free of charge in accordance with the legislation in force.

Article 14
Scholarships - Prizes

1. The Postgraduate Program may grant scholarships to students, based on objective, academic, economic and social criteria, in accordance with a decision of the Department's Assembly, which shall specify the amount and number of scholarships, the criteria and the relevant supporting documents, the procedure for granting such scholarships, as well as the obligations and rights of the scholarship holders. In the event that scholarship holders are not in compliance with their obligations, the Department's Assembly shall withdrawn their scholarship.

2. The Postgraduate Program may also award prizes to students with outstanding performance, according to the criteria and procedure determined by a decision of the Department's Assembly.

3. In addition, the Postgraduate Program may, after a reasoned decision of the Department's Assembly, exempt students in whole or in part from the obligation to pay tuition fees, on the condition that they provide work relating to the Program or for the Institution.

Article 15
Teachers of the PSP- Assignment of teaching

1. Each course is taught by one or more teachers. The assignment of a teaching project in the PSP is carried out in accordance with the provisions in force.

2. The obligations of instructors shall include, inter alia, the provision of information to students about the description of the course, the summary and title of the lectures with a reference to the relevant literature, the manner of examination of the course, the supervision of the thesis, the communication with postgraduate students. It is suggested that the teaching personnel should use the digital platform of the University or the PSP or the course they teach, if such a platform is available, which shall include notes, presentations, aids, etc.

Article 16
Oath-taking ceremony

1. A student who has successfully completed their postgraduate studies takes an oath at a graduation ceremony in front of the Rector or the Vice Rector as a representative of the Rector, the Dean of the School, the Head of the Department and the Director of the PSP. The oath-taking ceremony is not an integral part of the successful completion of studies, but it is a prerequisite for the award of a master's degree.

2. For reasons of force majeure and at their request to the Secretariat of the IPSP the graduate student may request the grant of the title without taking part in the graduation ceremony or request to take part in the next graduation ceremony. Prior to their graduation or discharge, a certificate may be issued to the graduates for the successful completion of their studies.

3. Graduates who do not wish to take an oath of a religious type are allowed to simply swear on their honour and conscience.

Article 17
Administrative - Financial Support

1. The PSP is supported by the Department of Secretariat of Postgraduate and Doctoral Studies of the School of Business Administration of the AUEB, according to the decision no. 6094/27-09-2019 (B 3803) of the Senate of AUEB.

2. The IPSP also has a special secretariat, which serves the students and teachers of the Program and assists the work of the C.C. and the Director.

3. The financial management and execution of the budget of the PSP shall be carried out by the Special Account for Research (E.L.K.E.)/AUEB in accordance with the applicable provisions.

Article 18
Duration of validity

The PSP "Business Analytics" Program in its current form will operate until the academic year 2028-2029 in accordance with the applicable provisions.

Article 19
Transitional provisions

1. This Regulation applies to students enrolled at the time when the present Regulation entered into force, as well as to students enrolled and begin their studies in the academic year 2023-2024.

2. Any matters not regulated in this Regulation will be regulated by decisions of the competent bodies in accordance with applicable law.

APPENDIX - Content of Courses - Minimum Teaching Hours

The minimum teaching hours corresponding to the courses of 2.5 Credits are eighteen (18) hours and to the courses of 5 Credits thirty-six (36) hours. The courses are conducted in English.

Information Systems & Business Process Management

This course introduces the notion of information systems (I.S.) used in enterprises, links them with business analytics (B.A.) and analyses business processes (B.P) as the fundamental element of modern enterprises and the management of their performance. It consists of four parts:

(a) Information Systems for Enterprises: Basic principles and functions of I.S. Presentation of IS categories and applications in enterprises. Strategic advantage and I.S. planning. Managing I.S and I.S resources in organizations.

(b) Business Analytics in Enterprise I.S.: Developing new insights and understanding of business performance through I.S. Achieving the basic types of analytics through I.S.: decisive, descriptive, **predictive, prescriptive. Examples of B.A. systems for marketing, retail sale**s, supply-chain, financial services, telecommunications, e-commerce etc.

(c) Business Process Management: Types of B.P and their function in the enterprise. BP process modelling techniques. Application of IT tools for BP process modelling and management. Comprehension of BP architecture. Specification of requirements for new IS and infrastructure.
(d) Principles of BP Performance Management: Process performance metrics and practical case examples of enterprise and inter-organizational systems: ERP, CRM, MIS, e-commerce and e-government. Process management frameworks and the balanced scorecard approach.

Large Scale Optimization

This course introduces advanced optimization tools and techniques with the main emphasis being on the application of computational intelligence algorithms to different large scale optimization problems and cases which arise in business and industry, such as transportation, logistics, production and services. On completion of this course, students should be able to: broaden their exposure to computational methodologies; analyze and design effective computational intelligence algorithms for complex business problems, and; provide examples and cases of how the computational intelligence algorithms can be used to solve real-life problems. The course material includes the following thematic areas: construction and local search algorithms; simulated annealing algorithms; tabu search algorithms; ant colony optimization; evolutionary algorithms.

Fundamentals in Data Management

This course provides a thorough presentation in the principles, technologies, and practices essential for working with modern data systems. Introduction to data management and data analysis, emphasizing the role of data in decision-making and the data lifecycle. Data modeling, covering Entity-Relationship (ER) modeling and the relational model. SQL and hands-on examples. Brief description of core database concepts such as indexing, query optimization, and transaction processing and distributed databases. Non-relational data paradigms (NoSQL databases), including document stores (MongoDB), key-value stores (Redis), and graph databases (Neo4j). Real-time data processing using stream engines (Azure Event Hubs/Stream Analytics) and Kafka, highlighting their roles in event-driven architectures and data pipelines.

Statistics for Business Analytics I

Topics will include: introduction to Probability (introduction, laws, Bayes theorem, independence); introduction to statistics (random variables, moments, some discrete/continuous distributions univariate/multivariate); inferential statistics (point/interval estimation & hypothesis testing); regression (simple, multiple, logistic); quality control (Magnificent 7, Pareto charts, control charts, CUSUM, EWMA); Bayesian statistics, decision theory (loss function, Bayes optimality, minimax rules).

Business Intelligence & Data Engineering

This graduate-level course on Business Intelligence (BI) and Data Engineering equips students with both the conceptual foundations and practical skills necessary to support data-driven decision making in modern organizations. Introduction to business intelligence, focusing on its role in strategic and operational decision-making. Data warehousing: architectures, identifying data sources, the ETL process, data modeling, multi-dimensional/OLAP analysis, cubes, performance issues, visualization. Data engineering: emphasis in the ETL process. Tools, platforms and programming languages for cleaning and transforming data. Defining and managing data pipelines, data orchestration and tools to support these (e.g. AirFlow). Exploratory business analytics tasks

by applying Unix command-line tools to extract, transform, filter, process, load, and summarize data.

Data Visualization

Basic concepts in data visualizations. Good and bad practices. Basic Principles for good graphs. Visual perception. Vision and psychology. Data to ink ratio. Color selection. Different color pallettes. Grammar of graphics: the different layers. A gallery of graphics:different plots for different data and purposes. Data for flows. Subsetting and trellis plots. Different types of maps. Dashboards and infographics. Story telling and communication of graohics. Interactive graphics. Basic principles like animation, hoovering,filtering and other. Applications like shiny for interactive graphs.

Requirements Engineering for Analytics

This course equips students with the principles, methods, and tools needed to translate business needs into clear, actionable requirements for analytics projects. It focuses on bridging the gap between business stakeholders, data professionals, and technical teams through structured elicitation, documentation, and validation of requirements specific to analytics solutions—such as dashboards, predictive models, machine learning systems, and decision support tools. The course blends classical requirements engineering practices with modern analytics- specific approaches and emphasizes cross-functional communication, data literacy, and iterative development.

Statistics for Business Analytics II

Topics will include: sampling; data reduction (PCA and factor analysis); clustering methods (hierarchical, partition methods, K-means and other algorithms); classification methods (discriminant, decision trees, kernel based methods, other methods); predictive analytics.

Python for Analytics & Artificial Intelligence

The “Python for Analytics and AI” course will cover the following topics: Data analysis, Data visualization, Statistical analysis, statistical significance, statistical power, Machine Learning methods, Machine Learning metrics and evaluation of Machine Learning models, Hyperparameter optimization, Neural Networks and neural network architectures,
Attention, transformers, Large Language Models (LLMs), Generative AI, Artificial Intelligence and Machine Learning ethics, bias, fairness, interpretability, security.

AI for Business Analytics

The course focuses on the recent developments in Generative AI and Deep Learning. We will study the basic concepts and methodologies and get hands-on experience on effective deep learning techniques and best practices of how to set up, organize and perform AI analytics tasks and applications. A brief overview of the course content: Transformers and Large Language Models (LLMs), Fine-tuning Foundation Models, Advanced Prompt-Engineering, Topics in Natural Language Processing (NLP), Multimodal and Vision LLMs, Retrieval Augmented Generation Systems (RAGs), Building AI Agents, Synthetic Data, Agentic Workflows powered by LLMs, Reasoning Techniques, Explainability, Evaluation.

Business Analytics Use Cases

Use Cases bring theory to life in the classroom. This course is comprised by a series of case studies on how business analytics are applied in different types of industries and/or business departments (IT, Finance, Pharma, Insurance, Marketing, HR, etc.). This enables students to apply theoretical concepts in real-situation scenarios and enhance their skills for professional advancement.

Advanced Topics in Data Analysis

This course will cover two areas of data analysis among several, possibly different each year depending on the students mix. These areas include: social network analysis, association rules, time-series analysis, graph analytics.

Data Governance and Privacy

Data Governance: Introduction to the principles, frameworks, and practices essential for managing data as a strategic asset. Data ownership, stewardship, quality, and lifecycle management, roles and responsibilities within a data governance structure. Governance frameworks and policies: regulatory compliance, risk management, and ethical considerations. Implementation strategies, including governance operating models, data cataloging, metadata management, and the integration of governance with business and IT processes.

Data Privacy: Introduction into basic terms/notions: privacy, data protection, confidentiality, security. Information: regulation and governance. Theoretical and regulatory approaches in Greece, EU and abroad. The notion of personal data. Regulation of the use of personal data in EU/ Greece. Analysis of the main concepts, approaches and requirements of General Data Protection Regulation (legal grounds, principles, rights of data subjects). Data Protection by Design and Data Protection Impact Assessment and BA. Big Data Analytics: characteristics of Big Data Analytics and techno- economical context and impact on personal data governance. Big Data Analytics and Data protection principles (purpose limitation, data minimization). Profiling and Decision making. Artificial Intelligence/ Machine learning and processing of personal data. Accountability, transparency and explainability of AI (applications). The issues concerning discrimination and impact of predicting/decision making. Ethics and Business/ Data Analytics.

Innovation and Entrepreneurship

The growth of electronic channels over the last decade paired with developments in social media, Web 2.0 and crowd sourcing, sensor networks and ubiquitous computing has led to an explosion of data. Due to the speed of developments, most of these data remain unexploited and the need to derive meaningful information and knowledge out of them has increased to an unprecedented degree. This fact has created a new landscape for innovation and entrepreneurship, opening up new opportunities for the development of new tools, services and offerings that respond to this need. The objective of this course is to provide the theoretical and practical basis that will allow students to identify business opportunities and innovation areas associated with the exploitation of big data and design innovative services in response to the identified business needs. Moreover, the course will provide guidelines in the area of business planning to support an entrepreneurial mindset. A series of case studies will be discussed under this perspective, while students will have the opportunity to propose their own ideas exploiting big data analytics, evaluate alternative business models and practically develop the respective business plans

Cloud Infrastructures for Analytics

The course centers on Azure Databricks, covering its architecture, collaborative workspace, data ingestion, transformation using Spark, and integration with Delta Lake for scalable and reliable data pipelines. Students learn how to orchestrate workflows, manage compute resources, and deploy machine learning models in the Databricks environment. Broader cloud data engineering concepts are discussed, including storage solutions (e.g. Azure Data Lake), data movement (e.g. Data Factory), and monitoring. Complementary overviews of comparable services in AWS (e.g., Glue, Redshift, SageMaker) and GCP (e.g., BigQuery, Dataflow, Vertex AI) provide a cross-platform perspective, helping students understand trade-offs in cloud service selection. The course combines theoretical grounding with practical labs, giving students hands-on experience building analytics solutions end-to-end in the cloud.

B. As of the publication hereof, the decision No. 5144/12.07.2018 (B 3347) of the AUEB Senate (Meeting 16 /05.07.2018) concerning the Regulation on Postgraduate Studies of the Postgraduate Program entitled “Business Analytics” of the Management Science and Technology Department of the School of Business Administration of the Athens University of Economics and Business.

This decision shall be published in the Government Gazette.

Athens, 11 October 2023
The Rector
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