



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
ΑΔΙΠ
ΑΡΧΗ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ
ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΣΤΗΝ ΑΝΩΤΑΤΗ ΕΚΠΑΙΔΕΥΣΗ

HELLENIC REPUBLIC
HQA
HELLENIC QUALITY ASSURANCE
AND ACCREDITATION AGENCY

Accreditation Report
for the Undergraduate Study Programme of:
Management Science & Technology
Institution: Athens University of Economics and Business
Date: June 2019

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Επιχειρησιακό Πρόγραμμα
Ανάπτυξη Ανθρώπινου Δυναμικού,
Εκπαίδευση και Διά Βίου Μάθηση
Με τη συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης



Report of the Panel appointed by the HQA to undertake the review of the Undergraduate Study Programme of **Management Science & Technology** of the **Athens University of Economics and Business** for the purposes of granting accreditation

Abbreviations used in this report:

AP	Accreditation Panel
AUEB	Athens University of Economics and Business
DMST	Department of Management Science and Technology
ECTS	European Credit Transfer and Accumulation System
EDIP	Support Teaching Staff
ETEP	Specialist Technical Staff
HEI	Higher Educational Institution
HQA/ADIP	Hellenic Quality Assurance and Accreditation Agency (ΑΔΙΠ)
IEGs/OMEA	Internal Evaluation Groups/ Department's Internal Evaluation Committee
KPIs	Key Performance Indicators
MST	Management Science & Technology
QAU/ MODIP	Quality Assurance Unit (ΜΟΔΙΠ)
QMS	Quality Management System
UGP	Undergraduate Study Programme
ΕΣΔΠ	Εσωτερικό Σύστημα Διασφάλισης Ποιότητας
ΟΠΑ	Οικονομικό Πανεπιστήμιο Αθηνών

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PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I. The Accreditation Panel

The Panel responsible for the Accreditation Review of the Undergraduate Study Programme of Management Science & Technology (MST) of the Athens University of Economics and Business (AUEB) comprised the following five (5) members, drawn from the HQA Register, in accordance with the Law 4009/2011:

- 1. Prof. Andreas Efstathiades (Chair)**
European University Cyprus, Nicosia, Cyprus
- 2. Prof. Emeritus Spyros Economides**
California State University, East Bay, USA
- 3. Prof. Kiki Ikossi**
George Mason University, USA
- 4. Dr. Paraskevas Dalianis**
UniSystems AEE, Quest group, Athens, Greece
- 5. Dr. Haralambos Hatzakis**
CEO Biotronics3D Ltd, London, United Kingdom

II. Review Procedure and Documentation

On Tuesday the 25 June 2019 at 9:30 the Accreditation Panel (AP) attended a meeting at the Hellenic Quality Assurance & Accreditation Agency (HQA) premises in Athens, at which Faculty members of the HQA (Prof. Pantelis Kyprianos, President, Dr. Christina Besta, General Manager, Ms. Charikleia Dimopoulou, Administrator) explained the Accreditation Procedure and the role and tasks of the AP members (HQA Orientation meeting). The AP members had a short meeting to organise their meetings, coordinate their work and be prepared for the accreditation event.

At noon, the AP members were transported to the premises of the Athens University of Economics and Business (AUEB), for the first day visit to the Department, which started at 13:00. The visit lasted approximately until 16:30.

At the welcome meeting, the AP met the Vice-Rector and President of the Quality Assurance Unit (MODIP), Professor Dimitrios Bourantonis, and the Head of the DMST, Professor Diomidis Spinellis. Initially, Professor Bourantonis welcomed the AP on behalf of AUEB and gave a broad overview of the history and developments of the University. He continued by informing the AP about the Quality Assurance procedures of the institution and highlighted the Quality Assurance practices which are introduced by MODIP and apply to the Departments. Professor Bourantonis emphasised the AUEB's commitment to be a Higher Education Institution (HEI) known for the highest Quality Assurance standards in Greece.

Professor Diomidis Spinellis, gave a presentation of the history of the Department, its aims and objectives, staffing and student numbers, highlighting on the Department's strong reputation. He also provided an overview of their study programme, the recently formed External Advisory Board, as well as some statistics that demonstrate the high respect their graduates enjoy in the labour market.

The AP subsequently had meetings with:

1. MODIP & OMEA: Dimitris Bourantonis, Professor, Deputy Rector for Academic Affairs, President of MODIP, Klas Eric Soderquist, Associate Professor (MODIP representative), Psiloutsikou Marina, Laboratory Teaching Faculty member (MODIP representative, Popi Kainou (MODIP); Nikolaou Ioannis, Associate Professor (OMEA representative), Pouloudi Nancy, Associate Professor (OMEA representative), Poulymenakou Angeliki, Associate Professor (OMEA representative), Refenes Apostolos, Professor (OMEA representative), Katzilieri Avra, Administrative (OMEA representative). Further explanations and clarifications with regard to the overall evaluation process and the way these are supported and coordinated by the OMEA were provided and answered a series of questions from the AP. Also supplementary information in response to a number of questions posed by the AP was provided.

Before leaving the AUEB premises, the AP members had a debriefing meeting, exchanging their understanding about the findings of the discussion, and organising the second day of the accreditation meetings at the Department.

On Wednesday 26 June 2019, the AP had meetings with the following groups:

2. Department's Teaching Faculty members: Spinellis Diomidis, Professor, Head of Department, Doukidis Georgios, Professor, Tarantilis Christos, Professor, Louridas Panagiotis, Associate Professor, Mourtos Yiannis, Associate Professor, Vrechopoulos Adam, Associate Professor, Pramadari Katerina, Associate Professor, Soderquist Eric, Associate Professor, Voudouris Irini, Associate Professor, and Deligianni Ioanna, Assistant Professor. During this meeting the AP had an extensive discussion about the student-centred teaching and learning processes, methods implemented on linking teaching and research, as well as, the structure, content

and evolution of the curriculum. Other topics, such as Faculty members professional development and career advancement, teaching and research workloads, Faculty members mobility, and funding opportunities were also considered. A number of best practices, which the Department has implemented for many years now, were also detailed, such as that of the Academic Advisor, the Department's orientation and Welcome Day, the mandatory Practical Training (internship), the Department's commitment to student mobility, the connections with the labour market and the Faculty members' effort towards offering an up-to-date study programme. Some additional documentation was asked by the AP, such as examples of the implementation of certain processes, and material related to the initiation of some of the best practices already applied by the Department.

3. Undergraduate students: Antonogiannaki Maria-Elvira, Chroni Alexandra, Doumeni Artemis, Gkoulta Maria, Houdra Ioanna, Kotti Zoe, Marinakos Konstantinos, Slamari Maria, Sozos Stergios, and Vratsanou Evaggelia. During this meeting, the students expressed their satisfaction with the Department and the programme of study, their contribution in the evaluation processes, and their appreciation of their study programme, practice and research opportunities provided to them. In addition, they commented on a number of additional student-centred activities supported by the Department. They emphasised the various activities which are practiced for many years benefiting the students. For example, the Department's Welcome Day, the annual Student Congress, the support provided by the Faculty members through the Department's education portal and the students' clubs such as ThinkBiz, which are actively supported by Faculty representatives. These activities allow them to approach the labour market and enhance their knowledge and understanding of the subjects of study. The students had a very positive opinion about their relationship with the members of the teaching Faculty members and their support, responsiveness and the attention they received throughout their academic life. They also expressed their enthusiasm for their overall learning experience and their plans following their graduation.

Following the student meeting, the AP had the opportunity to visit available facilities, such as classrooms, lecture halls, libraries, and student laboratories. The visit was organised by the Head of Department, Prof. Diomidis Spinellis and it was attended by Associate Professor Ioannis Nikolaou and other academic Faculty members. During the visit at the educational laboratory members of the Support Teaching & Specialist Technical (EDIP - ETEP) were also available and presented the IT infrastructure.

4. Meeting with graduates: Koumpli Christina, Imelos Yannis, Koutsioumpi Kyriaki, Kyriakou Olga, Nanis Ioannis, Papagiannopoulou Konstantina, Safras Spyros, Sideri Athanasia, Skiadopoulos Georgios. The participants expressed their gratitude to the MST study programme, which offered them the qualifications and skills for a successful professional career. They mentioned the support they had from the Faculty members beyond graduation, their beneficial relations with the Department and their commitment and availability to offer cooperation and support. They also shared with the AP members their experience from the academic life in the Department, such as, the Welcome Day event, the Annual DMST Student Conferences, ThinkBiz, TEDxAUEB, etc.
5. Employers and Social Partners: Fraidaki Katerina (Chair of the Greek, E-commerce Association), Chailazopoulou Elena (Convert Partner), Iliakis Stelios (General Manager Slead), Peppa Angelika (SAS Institute), Konouklas Grigoris (Vodafone / HR Business), Mouzaliotou Ioanna (Procter & Gamble, HR Talent Acquisition Manager & Employee & Labor Relations Manager Greece), Syrros Yannis (General Director of the Federation of Hellenic I.T Enterprises, Deputy Chairman of the Executive Committee of the World Information Technology and Services Alliance –WITSA-), Vassalakis Dimitris (HR Manager Intrasoft). The group had positive comments regarding the Department and its students, highlighting the employability of graduates and the respect the Department enjoys by the Industry. They

mentioned the Department's willingness to cooperate with the market and update the curriculum based on the latest business and technology market trends, benefiting the graduates' professional careers.

6. Final meeting with OMEA and MODIP: Dimitris Bourantonis, Professor, Deputy Rector for Academic Affairs, President of MODIP, Soderquist Klas Eric, Assoc. Professor (MODIP representative), Psiloutsikou Marina, Laboratory Teaching Faculty member (MODIP representative), Popi Kainou (MODIP), Nikolaou Ioannis, Assoc. Professor (OMEA representative), Pouloudi Nancy, Assoc. Professor (OMEA representative), Poulymenakou Angeliki, Assoc. Professor (OMEA representative), Refenes Apostolos, Professor (OMEA representative) Katzilieri Avra, Admin. (OMEA representative). The AP asked for additional information and clarifications and provided initial feedback, outlining the main findings of the accreditation visit.

The AP was pleased to find that all members of the Department were very willing to collaborate and provide further information as requested. The extensive documentation provided in advance, the hard copy and electronic material made available during the sessions and the material supplied on the AP's request, served as the basis of the current accreditation report.

The documentation and the supporting material provided to the AP included:

- the evaluation guide created by HQA,
- the mapping grid, created by HQA, mapping the contents of the different principles to questions to be answered during the site visit,
- the accreditation proposal (“Πρόταση Ακαδημαϊκής Πιστοποίησης του ΠΠΣ”) prepared by the Department,
- a set of annexes with the accreditation proposal, explicating various issues and providing detailed information; including the study guide, course descriptions, policies' documents, etc.,
- a set of documents presenting quality indicators both for the Department and the study program,
- the report of the 2013 external evaluation conducted by HQA for the DMST,
- a set of presentations used by the HQA members to present the purpose, goals and procedures of the accreditation,
- the presentation provided by the Head of the Department,
- Department's Information material, such as brochures, newsletters, samples of exam tests and scripts, student projects and deliverables, Thesis papers, surveys and statistics, employers' surveys, etc.

III. Study Programme Profile

The Athens University of Economics and Business (AUEB) has 3 schools: a) School of Economic Sciences, b) School of Business, and c) School of Information Science and Technology. Each of the 3 schools consists of individual departments that cater to specialized knowledge. The School of Economic Sciences has 2 departments, The Department of Economics and the Department of International and European Economic Studies. The School of Information Science and Technology, has 2 departments the Department of informatics and the Department of Statistics. The School of Business (AUEB-SB) has four (4) Departments. The Department of Management Science and Technology, the Department of Marketing and Communication, the Department of Accounting and Finance and the Department of Business Administration. The Department of Management Science and Technology (MST) is the subject of this report.

The Department of Management Science and Technology was founded in May 1999 and the first students enrolled in the academic year 2000-2001. The Department is part of the School of Business in AUEB and offers a four-year Bachelor's degree based on a study programme combining modern management science with computer and information technologies and organisational studies.

The Department fosters and maintains strong relationships with business and industry. Its attractiveness is evidenced by the fact that the 170 new students enrolled each year are all highly ranked at the Pan-Hellenic entrance examinations. The integrated technological and administrative background of the graduates offers them a competitive edge as business professionals and prepares them for post graduate studies.

The Department ensures the development of practical skills and an analytical and conceptual problem-solving approach for its students, by requiring a mandatory practical training (Internship) and a Thesis project to graduate.

DMST runs independently and in collaboration with other University Departments high-level graduate programs, a Doctoral Programme and Executive Programs for working professionals.

PART B: COMPLIANCE WITH THE PRINCIPLES

Principle 1: Academic Unit Policy for Quality Assurance

INSTITUTIONS SHOULD APPLY A QUALITY ASSURANCE POLICY AS PART OF THEIR STRATEGIC MANAGEMENT. THIS POLICY SHOULD EXPAND AND BE AIMED (WITH THE COLLABORATION OF EXTERNAL STAKEHOLDERS) AT ALL INSTITUTION'S AREAS OF ACTIVITY, AND PARTICULARLY AT THE FULFILMENT OF QUALITY REQUIREMENTS OF UNDERGRADUATE PROGRAMMES. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL STAKEHOLDERS.

The quality assurance policy of the academic unit is in line with the Institutional policy on quality, and is included in a published statement that is implemented by all stakeholders. It focuses on the achievement of special objectives related to the quality assurance of study programmes offered by the academic unit.

The quality policy statement of the academic unit includes its commitment to implement a quality policy that will promote the academic profile and orientation of the programme, its purpose and field of study; it will realise the programme's strategic goals and it will determine the means and ways for attaining them; it will implement the appropriate quality procedures, aiming at the programme's continuous improvement.

In particular, in order to carry out this policy, the academic unit commits itself to put into practice quality procedures that will demonstrate:

- a) the suitability of the structure and organization of the curriculum;*
- b) the pursuit of learning outcomes and qualifications in accordance with the European and the National Qualifications Framework for Higher Education;*
- c) the promotion of the quality and effectiveness of teaching;*
- d) the appropriateness of the qualifications of the teaching Faculty members;*
- e) the enhancement of the quality and quantity of the research output among Faculty members of the academic unit;*
- f) ways for linking teaching and research;*
- g) the level of demand for qualifications acquired by graduates, in the labour market;*
- h) the quality of support services such as the administrative services, the Library, and the student welfare office;*
- i) the conduct of an annual review and an internal audit of the quality assurance system of the undergraduate programme(s) offered, as well as the collaboration of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU);*

Study Programme compliance

The Department of Management Science and Technology implements a Quality Assurance policy that is in line with that of the University's aiming at the continuous improvement of the programme. The Department's Quality Assurance policy focuses on its educational, scientific, research and administrative work, and is communicated to all its members who are committed for its implementation. Through the policy statement the Department is committed to the implementation of a quality policy that supports the academic profile and orientation of the curriculum, promotes its purpose, implements its strategic objectives and determines the means, actions and ways to achieve it. In particular, the quality policy statement requires the implementation of quality procedures, with an aim to ensure continuous improvement of the quality of the program and the service provided to the students.

The Department has set objectives and associated measurable Key Performance Indicators (KPIs) which are fully compatible with the objectives of the Programme and the University strategic goals. Special emphasis is given on the student satisfaction, retention rates, research output and teaching methods.

Furthermore, an action plan has been developed, the implementation of which ensures the achievement of the KPIs and quality objectives and consequently safeguards:

- a. the proper organisation and structure of the curriculum
- b. the achievement of the program learning outcomes
- c. the promotion of the quality and effectiveness of teaching
- d. the appropriateness of the qualifications of the Faculty members
- e. the enhancement of the quality and quantity of the research output among Faculty members of the Department
- f. the linking of teaching and research.

Evidence is given that the above objectives and KPIs are communicated to all the members of the Department and all Faculty members were involved in their development. The document was approved by the Department general assembly and all the Faculty members are committed towards their achievement.

The Quality Policy is uploaded on the website and is accessible to all the stakeholders.

Panel judgement

Principle 1: Institution Policy for Quality Assurance	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

The Department should consider to include in the Quality Policy statement a list of the procedures that are in place so as to indicate clearly the way the continuous improvement is implemented.

Principle 2: Design and Approval of Programmes

INSTITUTIONS SHOULD DEVELOP THEIR UNDERGRADUATE PROGRAMMES FOLLOWING A DEFINED WRITTEN PROCESS WHICH WILL INVOLVE THE PARTICIPANTS, INFORMATION SOURCES AND THE APPROVAL COMMITTEES FOR THE PROGRAMME. THE OBJECTIVES, THE EXPECTED LEARNING OUTCOMES, THE INTENDED PROFESSIONAL QUALIFICATIONS AND THE WAYS TO ACHIEVE THEM ARE SET OUT IN THE PROGRAMME DESIGN. THE ABOVE DETAILS AS WELL AS INFORMATION ON THE PROGRAMME'S STRUCTURE ARE PUBLISHED IN THE STUDENT GUIDE.

Academic units develop their programmes following a well-defined procedure. The academic profile and orientation of the programme, the objectives, the subject areas, the structure and organisation, the expected learning outcomes and the intended professional qualifications according to the National Qualifications Framework for Higher Education are described at this stage. The approval or revision process for programmes includes a check of compliance with the basic requirements described in the Standards, on behalf of the Institution's Quality Assurance Unit (QAU).

Furthermore, the programme design should take into consideration the following:

- *the Institutional strategy*
- *the active participation of students*
- *the experience of external stakeholders from the labour market*
- *the smooth progression of students throughout the stages of the programme*
- *the anticipated student workload according to the European Credit Transfer and Accumulation System*
- *the option to provide work experience to the students*
- *the linking of teaching and research*
- *the relevant regulatory framework and the official procedure for the approval of the programme by the Institution.*

Study Programme compliance

The study programme has been designed to cover identified national industry / economy needs. The curriculum is designed to prepare executives for business and organisations capable of successfully coping with today's and future technological, economic and social challenges.

There are well defined learning outcomes while the structure and delivery of the program safeguards their fulfilment.

The structure of the program includes three categories:

- a. Core courses (basic and applied knowledge)
- b. Elective courses (specialisation)
- c. Internship

The elective courses are spread over 5 thematic areas giving a form of specialisation. The Internship is a mandatory course, which usually relates to the thesis work as well. This is considered as one of the major characteristics that differentiates this course and establishes links with the industry with all the benefits that could be achieved through those links.

The Student Guide provides complete and concise information on the programme structure, curriculum and course content.

The curriculum is well designed and is compatible with universally accepted standards in the area. This conclusion is reinforced with the high mobility of the students (Erasmus+ mobility).

The design of the curriculum has been developed considering the University strategy, guidelines and the standards defined by the relevant international associations, such as INFORMS, AIS, ACM, IEEE, USENIX and ABS, and is adapted to meet the needs of the Greek Industry/ Economy. The information regarding the needs of the Greek economy is obtained through informal consultations with employers, monitoring employment and occupation status of graduates etc. Further information is obtained through monitoring the process of the industrial placement of the students. Moreover, industrialists are invited as guest lecturers to the courses providing extra input for curriculum design and development.

The review of the programme is also supported through information that is collected by monitoring the output of the individual courses/instructors evaluation done by the students once a semester for each course. Information on research developments is given via the research centers of the Department.

All this information is forwarded to the Academic programme committee for further refinement. The Academic committee develops a recommendation to the Department General Assembly for final decision.

It is noted that the Department has set up an External Advisory Board for the Programme aiming at assisting towards the identification of the industry / economy needs. The proposed membership is:

- representatives of the alumni association,
- representatives of private / public including organisations with a wide range of cooperation in the context of Internship,
- representatives from employer’s organisations,
- distinguished members of the academic community in areas related to the course thematic areas.

The board shall meet once every 2 years starting from 2020.

The Department has followed a rather semi - formal approach in the process of involving the stakeholders in the collection of relevant information towards the design and updating of the study programme.

Panel judgement

Principle 2: Design and Approval of Programmes	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

The Department should establish a written procedure with the proposed documentation that should be in place for the periodic revision of the program curriculum. The suggestion is to develop a flow diagram specifying the procedure that should be followed and the documentation that should be in –place.

Principle 3: Student- centred Learning, Teaching and Assessment

INSTITUTIONS SHOULD ENSURE THAT THE UNDERGRADUATE PROGRAMMES ARE DELIVERED IN A WAY THAT ENCOURAGES STUDENTS TO TAKE AN ACTIVE ROLE IN CREATING THE LEARNING PROCESS. THE ASSESSMENT METHODS SHOULD REFLECT THIS APPROACH.

Student-centred learning and teaching plays an important role in stimulating students' motivation, self-reflection and engagement in the learning process. The above entail continuous consideration of the programme's delivery and the assessment of the related outcomes.

The student-centred learning and teaching process

- *respects and attends to the diversity of students and their needs, enabling flexible learning paths;*
- *considers and uses different modes of delivery, where appropriate;*
- *flexibly uses a variety of pedagogical methods;*
- *regularly evaluates and adjusts the modes of delivery and pedagogical methods aiming at improvement*
- *regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys;*
- *reinforces the student's sense of autonomy, while ensuring adequate guidance and support from the Faculty members;*
- *promotes mutual respect in the student - teacher relationship;*
- *applies appropriate procedures for dealing with students' complaints.*

In addition :

- *the Faculty members are familiar with the existing examination system and methods and are supported in developing their own skills in this field;*
- *the assessment criteria and methods are published in advance;*
- *the assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary is linked to advice on the learning process;*
- *student assessment is conducted by more than one examiner, where possible;*
- *the regulations for assessment take into account mitigating circumstances*
- *assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures;*
- *a formal procedure for student appeals is in place.*

Study Programme compliance

The Study program for the Department of Management Science and Technology, School of Business at the Athens University of Economics and Business (AUEB) is well designed to fit the needs of the students, the emerging trends in technology, management, the job market and the realities of the recovering Greek economy.

The Department is the newest Department and at the time of the visit has been in operation for 19 years. The founders of the Department had a unique vision foreseeing the dominance of technology in the economic and world market and established this unique Department with pioneering curriculum. The Department is the only one in Greece with specialisation in Management Science and Technology. The panel was positively impressed by the state-of-the-art knowledge and cutting-edge technical expertise of the Faculty who designed a very educational, well rounded and challenging curriculum for the students. The curriculum offers 3 areas of academic knowledge. Information Systems and Technologies,

Business Research and Management Science, and Business Management and Organisation Management. The students at MST can study and graduate with major and minor specializations in 5 areas. a) Operations Research and Business Analytics, b) Management of Operations and Supply Chains, c) Software Engineering and Data Science, d) Information Systems and Electronic Commerce, and e) Strategy, Entrepreneurship and Human Resources.

The student learning process is well founded in solid principles. The Department benefits from a highly skilled entry level student body freshmen that are selected through rigorous National entrance examinations. The course sequence ensures that the students acquire the necessary knowledge to take the more advanced courses in subsequent semesters. This builds a solid unified knowledge base for all students that makes the MTS graduates of high demand.

The student focus culture is evident by the strong support the Athens University of Economics and Business, School of Business, Department of Management Science and Technology students have. From the first day of their admission and throughout their studies, students feel at home and feel strongly supported.

The feedback received by the students and the written student surveys provide input to the periodic curriculum update and other teaching and research improvements. The Faculty is very cooperative and helpful to each other with focus being the education of the undergraduate student and servicing of their developmental and intellectual needs. The unique nature of the Department curriculum ensures that all students have the solid foundation they need to excel. The first 2.5 years of core courses establishes the foundation followed by the specialisation for each discipline. By the 3rd year of study the students declare a major but also have the option to choose a minor. The major/minor system ensures broad knowledge for the graduate and ability to apply their education to diverse fields at the workplace. The overall program is designed to last 4 years. The student takes about 5 courses per semester. Each course carries 6 ECTS (credit units). There are core courses that are required and elective courses for specialisation. During the final year an internship and thesis is also required. The total number of ECTS for graduation is 240 ECTS credit units.

The Department uses different modes of delivering knowledge when appropriate. Of particular notice is the annual student conference. Last was on May of 2019 on Management and Artificial Intelligence. The conference allows students and researchers to present their work and learn the new trends in management science and technology. The student conference prepares the student for research, graduate programs and scholarly activities. The fact that the Department continuously supported this conference for the last 16 years verifies the commitment and dedication to promoting innovation and advance development.

The Youth Entrepreneurship Summer (YES) programme is another programme the Department founded and is continuously supporting for the last 10 years. This programme aims in involving high school students in learning the basics of starting a business and learning how business functions.

The students benefit from diversity in learning environment with course offerings from traditional lectures, labs, practice sessions, on-line access to course material 24/7, team projects, opportunities to study abroad with the Erasmus programme, opportunities to join student clubs like ThinkBiz (the student entrepreneurship club), opportunities to do original research in one of the 7 research labs associated with the Department, participation in an annual research conference organised by the Department, practice or internships, and a final thesis. This is just to mention a few of the unique opportunities the MTS program offers to its students. There is no doubt that the Department attends to the diversity of the student needs and has in place flexible and innovative learning paths.

Student Surveys are used in all courses and the results are tabulated and evaluated by the Department. Feedback is given to all the professors and adjustments are made as needed. This was confirmed by the committee meetings with the academic staff and the Department OMEA members.

The Department is actively reinforcing student autonomy in selecting their course of study and actively guides them to a successful outcome. The students are free to select their internship topic and company to work with and free to pursue the Erasmus program as well as research with one of the many research labs of the Department. The students provide feedback on their learning experiences after each course and after each milestone (like the internship). The Faculty members are enthusiastically involved in every aspect of the student's educational development and academic maturity.

Of notice is also the presence of the student association "Sotiris Petroulas" that allows the students to be represented and have a voice in the University Senate and the Department General Assemblies.

The students as well as the graduates commented enthusiastically on the positive teacher-student relationship they had with the Faculty that continued into their careers. Graduates mentioned that they always felt welcomed to call upon their professors for guidance. This continues involvement of the Faculty with the student and working alumni is unique and indicates the mutual respect in the student teacher relationship that evolves in a lifelong professional relationship.

Student complaints follow a clear procedure that is well publicised. All students we encountered at the visit indicated that they were aware of the procedure but they never had to use it because of the friendly and open-door policy of the Faculty.

The committee meetings with the Faculty and the students confirmed that the student needs were a priority and often extra helpful classes were added to bring the students abilities up to the demands of the courses. The adoption of the "tutor" principle where each student is assigned a "tutor" that follows them through their studies, is helpful to the student resource. Tutors or advisors are a good practice and it appears that the Department is actively implementing this resource.

New curriculum courses are introduced based on a combination of market and industry needs and information from research and conference participation by the Faculty. One thing became apparent that the Department is a leader in the curriculum development area. For example, the fact that the Faculty senate, in May of 2019, already approved the addition of a new class on "machine learning" for the undergraduates was quite impressive. Machine learning is a research topic in most engineering schools. Although for this committee was not clear how the process was initiated or what the steps were that lead to the senate approval, the end results are clearly commendable.

The student assessment criteria and methods are well publicised. Freshmen are informed upon their arrival to the University and throughout their studies professors and tutors inform them and help them prepare for the assessment methods.

The student assessment allows the students to demonstrate what they learned. Awards are given annually by the Department to reward the best performers. The student tutors (advisors) consult with the students regularly. The advisors consider student's interests and performance to guide their development. Students have the opportunity to join research labs and be involved actively in original research. This is possible because the Department has an exceptionally strong graduate program with seven research labs. Each Faculty is actively involved in research and the students can benefit from scholarly pursuits and alternative learning processes.

Student assessment is conducted through their participation in the classes. Regular tests and projects are assigned. The students we met commented on how their group projects helped them learn in depth the topics taught.

A unique feature of the Department is the existence of practice (internship) and a thesis for graduation. During practice (Internship) the students are employed by the industry for a 3-month period. AUEB-SB-MST students/interns finding easy to obtain placements with the industry and international institutions such as CERN. The committee was pleased to see that all the students we met had plans for pursuing advanced degrees and/or starting their own businesses.

The available system for student examinations is clear and fair to the students. The examinations are available to the students throughout their studies at designated dates. The students should preferably take the final examinations at the end of the semester they attended the particular class but have the option to take it at a later designated time. The students also have the option to retake an exam to achieve a higher grade. This option is available to them 4 times during their studies.

The regulations that exist for assessing the students take into account mitigating circumstances and allow the students to retake examinations. Furthermore, the exam schedule is taking into account the scheduling demands from the courses and projects.

The courses offered have clear objectives and are accompanied by a calendar that designates in advance the test dates and material to be covered. List of textbooks and bibliography with additional information is also provided. A unique feature of Greek education is the free availability of textbooks to all students. The students also benefit from a free access to a very rich library in educational texts in economics- (first and best in Greece). Free access to online research journals and interlibrary book loans adds to the impressive resources available to the MTS student. During the 2019 semester the students of the MTS had the highest success rate in their examinations (73% success in passing the examinations).

The committee was able to confirm that a formal procedure for student appeals is in place. The process is posted on the University website and elaborated in department documents for accreditation proposal. During the meeting with the students they confirmed the existence of a formal appeal process which is satisfactory to them.

The committee acknowledges the systemic problem in the Greek Higher education system that allows students to extend their studies above the expected time frame but notes that the Department statistics are very good.

The high demand of the AUEB-MST graduates is evident from the key indicators that show 80% of the new graduates are employed, 52% of the students get a job offer before they graduate, 18% of the graduates are employed abroad. Other key indicators show that 60% of students graduate within the expected 4 years of study. 30% of the students graduate with a grade over 8/10. These are very good statistical points that supports the committees' observations that the MST Department is delivering high quality education fulfilling a key need in the Greek economy and its graduates are in great demand at the workplace.

Panel judgement

Principle 3: Student- centred Learning, Teaching an Assessment	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

The Department is performing innovative and pioneering work and remains a leading Institution in the cross disciplinary domain of the Management Science and Technology education.

Principle 4: Student Admission, Progression, Recognition and Certification

INSTITUTIONS SHOULD DEVELOP AND APPLY PUBLISHED REGULATIONS COVERING ALL ASPECTS AND PHASES OF STUDIES (ADMISSION, PROGRESSION, RECOGNITION AND CERTIFICATION).

Institutions and academic units need to put in place both processes and tools to collect, manage and act on information regarding student progression.

Procedures concerning the award and recognition of higher education degrees, the duration of studies, rules ensuring students progression, terms and conditions for student mobility should be based on the institutional study regulations. Appropriate recognition procedures rely on institutional practice for recognition of credits among various European academic departments and Institutions, in line with the principles of the Lisbon Recognition Convention.

Graduation represents the culmination of the students' study period. Students need to receive documentation explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed (Diploma Supplement).

Study Programme compliance

The MST Department is fully compliant, and has created practices for award and recognition of higher education degrees, studies duration, rules for students' progression, recognition of credits among various European academic Institutions according to Lisbon Recognition Convention.

The Department has introduced and implemented a Welcome Day for its new students since 2001, which is taking place every year well before from the University-wide orientation events taking place at the beginning of the academic year for all new University students, which are organised centrally by the Institution. Students and graduates commented on how this MST welcome event, provided them a full insight into their study programme, the Department, its research and teaching activities and supporting processes available, such as that of the Academic Advisor, which the Department also introduced well before 2005.

The Department maintains comprehensive induction processes to support new students transitioning from high school to the demands of the academic programme. Students receive documentation explaining learning outcomes, context, level, content of studies culminating in qualification gained.

The Department actively encourages and supports students' mobility. Students undertake an obligatory Practical Training in industry and completing the associated Thesis as a requirement for graduation.

Upon graduation, a Diploma Supplement is automatically provided to all students, following a University-wide policy, including achieved learning outcomes, information on ECTS credits obtained, as applicable.

Panel judgement

Principle 4: Student Admission, Progression, Recognition and Certification	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

It is suggested the Department provides a full Thesis Handbook, documenting all information related to the quality requirements, procedures and steps required for the completion of the Thesis.

Principle 5: Teaching Staff

INSTITUTIONS SHOULD ASSURE THEMSELVES OF THE QUALIFICATIONS AND COMPETENCE OF THE TEACHING STAFF. THEY SHOULD APPLY FAIR AND TRANSPARENT PROCESSES FOR THE RECRUITMENT AND DEVELOPMENT OF THE TEACHING STAFF.

The Institutions and their academic units have a major responsibility as to the standard of their teaching staff providing them with a supportive environment that promotes the advancement of their scientific work. In particular, the academic unit should:

- *set up and follow clear, transparent and fair processes for the recruitment of properly qualified staff and offer them conditions of employment that recognize the importance of teaching and research;*
- *offer opportunities and promote the professional development of the teaching staff;*
- *encourage scholarly activity to strengthen the link between education and research;*
- *encourage innovation in teaching methods and the use of new technologies;*
- *promote the increase of the volume and quality of the research output within the academic unit*
- *follow quality assurance processes for all staff members (with respect to attendance requirements, performance, self-assessment, training etc.);*
- *develop policies to attract highly qualified academic staff;*

Study Programme compliance

The Department consists of 22 full time Faculty members of which 7 are full professors, 12 associate and 3 appointed professors. There are also temporary appointed and lecturers as well as emeritus. The AP Committee believes that the Faculty of the Department is exceptional in teaching and research.

The Department is well funded and offers opportunities for professional development to all Faculty members. They are expected to be active in research and are offered funding to travel to conferences to present their work and interact with other colleagues, in order to remain current in their research and the fast-changing technology bringing back an extra value to the Department.

The Department encourages scholarly activity and promotes innovative research. The active involvement of undergraduates in research offers a direct link between education and research. Furthermore, as the Faculty members enthusiastically discussed their research and informed us that graduate level courses are incorporated in undergraduate curriculum very often, as advanced technology rapidly becomes common practice.

The meeting with the academic personnel confirmed the Department is encouraging innovation and new methods of teaching. The Department has adopted an annual award for excellence in teaching.

The Department has clear guidelines that set a balance between research quality and volume. Junior Faculty are actively mentored. In addition to graduate students, a number of undergraduate students involved in Faculty research have published research papers.

The Department has attracted highly qualified Faculty members. This is evident by the high volume and quality of the academic research publications, international awards and distinctions of the Faculty. The teaching excellence is also evident by the results and the international job and academic recognition the graduates of the program are enjoying.

Panel judgement

Principle 5: Teaching Staff	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

The work performed with regards to recruiting, mentoring and promoting the Department's Faculty members is highly commendable. The AP congratulates the Department for establishing a solid path for Academic excellence in a cross disciplinary field.

Principle 6: Learning Resources and Student Support

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER TEACHING AND LEARNING NEEDS. THEY SHOULD –ON THE ONE HAND- PROVIDE SATISFACTORY INFRASTRUCTURE AND SERVICES FOR LEARNING AND STUDENT SUPPORT AND–ON THE OTHER HAND- FACILITATE DIRECT ACCESS TO THEM BY ESTABLISHING INTERNAL RULES TO THIS END (E.G. LECTURE ROOMS, LABORATORIES, LIBRARIES, NETWORKS, BOARDING, CAREER AND SOCIAL POLICY SERVICES ETC.).

Institutions and their academic units must have sufficient funding and means to support learning and academic activity in general, so that they can offer to students the best possible level of studies. The above means could include facilities such as libraries, study rooms, educational and scientific equipment, information and communications services, support or counselling services.

When allocating the available resources, the needs of all students must be taken into consideration (e.g. whether they are full-time or part-time students, employed or international students, students with disabilities) and the shift towards student-centred learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organised in various ways, depending on the institutional context. However, the internal quality assurance ensures that all resources are appropriate, adequate, and accessible, and that students are informed about the services available to them.

In delivering support services the role of support and administrative staff is crucial and therefore they need to be qualified and have opportunities to develop their competences.

Study Programme compliance

DMST has adequate infrastructure to support and enhance a variety of student learning and research activities. These infrastructures include special services provided by human resources such as Faculty members, students or a combination of both, as well as physical facilities.

HUMAN RESOURCES BASED SUPPORT SERVICES

The noteworthy student support and/or advisory services for students that may be either exclusive to the Department or provided under the University umbrella include but are not limited to:

1. Student Advisors (tutors) assigned to a group of students to individually guide and advise them on issues related to their academic performance and progress.
2. The mandatory Practical Training / Internship course which is very essential and important in the departmental curriculum. As such, departmental Faculty get involved with students on a personal tutoring and guidance basis related to the projects undertaken by the students during their internship period with businesses. In addition, there is an on-going three Faculty committee which oversees, monitors and resolves problems and issues of procedural nature that all internship students may encounter during the different phases of their project.
3. The Department has a very thorough, comprehensive and well-established orientation and guidance program in place for first time students. The students have expressed their gratitude and have made very positive comments regarding this support function.
4. The support structure for employment and career planning (ΔΑΣΤΑ) promotes:
 - a. student involvement and development in entrepreneurship and career planning
 - b. networking of students and alumni with the job market
 - c. networking and relations between the Department and businesses and

- d. assists in the mandatory student internship and practical training / exercise with employers.
5. The University Office of Practical Training (Internships) is managing and assisting the workload associated with internships.
6. The Office of Networking and Career Development, which organizes and conducts a variety of activities, such as Career Days with employers, and theme seminars, provides a wide range of advisory services associated with entrepreneurship and innovation for the students that may be interested in focusing on these knowledge areas.
- All activities and services provided by ΔΑΣΤΑ and associated working units are tracked and recorded over time, so that the statistical record can be used for development of a variety of performance and assessment indicators to monitor and enhance the quality of the services rendered to all student categories, such as full time, part time, working students, international students or students with special needs.
7. Counsellor for psychological support and advice.
6. Team of Social Concern and Psychological Support for incoming students to cope with problems that may arise due to the transition from a protected family environment to the academic life.
7. Advisory team for the successful completion of studies at the University for students who for several reasons encounter difficulties which impact their academic performance and their ability or strength to further pursue their studies.
8. Services supporting students with special needs. Structures such as ramps have been installed at the main building to facilitate access. Special provisions exist for examinations taken by these students. Electronic access to bibliography associated with the courses is made available to the students with visual impairment through the library's (AMELib) system. It is the AP's opinion that more can be done to better serve the students with special needs. However, with the physical dispersion of the University's four buildings this is not an easy task.
9. International Programs and International student mobility, especially in the form of the ERASMUS+ program on the departmental level is very well developed, managed and supported by the dedicated University office. In addition, the Department has its own Mobility/ Erasmus committee. DMST has a strong interest and excellent record of performance in placing and accepting students, one that in the last year has exceeded its targeted projections. Several program courses, as needs have risen, have been adapted for delivery in English.
10. University Educational Training services offer a two semester program for graduating students of the Department who wish to acquire teaching skills.
11. The students of the Department can get involved in several social and cultural activities, such as athletic events or performances organized by the University or the Student Union.
12. A group of students of the Department took the initiative to organize an Annual Student Conference, which has become a regular, annual popular conference bringing together present and past students of the Department, alumni and Faculty. The conference hosts many contemporary discussion topics of interest to the participants with self-evident benefits.
13. The Department has a well-designed web site that includes links related to all of the support functions and activities mentioned above. DMST maintains a dedicated educational portal (Eduportal) within the centralized information Management System, which the students can access privately and remotely, seek pertinent information and communicate regarding administrative, academic and learning issues related to course material and schedules.

FACILITIES INFRASTRUCTURE AND SUPPORT

The AP visited and observed the facilities which support the various student learning processes and functions.

1. The University has four buildings all of which include facilities to serve the various learning functions. The classroom facilities are of various sizes, including five amphitheatres. They are distributed among those buildings, and are in good, clean condition and well equipped with electronic infrastructure adequate for the delivery of departmental courses. The Faculty offices are clean, comfortable and sufficiently equipped.

2. The Department operates the following five laboratories, all of which are well staffed and equipped; the learning and research activities of which relate to the learning tracks offered in the undergraduate program:

- a. Laboratory of Management Science (MSL)
- b. Laboratory of Electronic Commerce and Electronic Business (ELTRUN)
- c. Laboratory of Business Analysis (BALab)
- d. Laboratory of Information and Technology Management Systems (ISTLab)
- e. Laboratory of Management, Strategy and Business

It must be noted that the Faculty members associated with these laboratories promote the associated learning and research activities to the job market with the purpose of establishing professional relations between industry and academia for mutual benefits and especially the placement and career development of the Department's graduates.

3. The University library serves the learning and research needs of the students of the Department, especially through a structure of a well-developed electronic network system. Controlled remote access for the students in the delivery of learning material is available. The library itself is a member of the Association of Hellenic Academic Libraries (HEAL-Link) with access to several well-known international data bases and publications.

4. The Department students have access to a modern, adequately staffed and well-equipped Computer Network system and Computer equipment associated with 2 laboratories for instruction and practical training with a capacity of 72 users.

5. Student boarding services are not well developed since the Department belongs to an urban type University without a central campus. However, there is a facility with limited boarding space in which students can reside while the major student population must seek living space privately.

6. There is a dining facility located in the main University building where the Department students can have good meals at a reasonable price.

Panel judgement

Principle 6: Learning Resources and Student Support	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

The Department could take an active role in suggesting to the University to expand and upgrade its support facilities for students with special needs.

Principle 7: Information Management

INSTITUTIONS BEAR FULL RESPONSIBILITY FOR COLLECTING, ANALYSING AND USING INFORMATION, AIMED AT THE EFFICIENT MANAGEMENT OF UNDERGRADUATE PROGRAMMES OF STUDY AND RELATED ACTIVITIES, IN AN INTEGRATED, EFFECTIVE AND EASILY ACCESSIBLE WAY.

Institutions are expected to establish and operate an information system for the management and monitoring of data concerning students, teaching staff, course structure and organisation, teaching and provision of services to students as well as to the academic community.

Reliable data is essential for accurate information and for decision making, as well as for identifying areas of smooth operation and areas for improvement. Effective procedures for collecting and analysing information on study programmes and other activities feed data into the internal system of quality assurance.

The information gathered depends, to some extent, on the type and mission of the Institution. The following are of interest:

- *key performance indicators*
- *student population profile*
- *student progression, success and drop-out rates*
- *student satisfaction with their programme(s)*
- *availability of learning resources and student support*
- *career paths of graduates*

A number of methods may be used for collecting information. It is important that students and staff are involved in providing and analyzing information and planning follow-up activities.

Study Programme compliance

The AP was very pleased with the collection, organization, management, analysis and dissemination of all categories of information utilized for the purpose of serving the academic and administrative needs as well as its use for Program Quality Assurance and Quality Improvement, for which the OMEA and MODIP are responsible.

The departmental information resides on the centralized information system network of the University, it is managed through the departmental portal which includes the following modules that collectively can be thought as the departmental Electronic Secretarial Office:

1. STUDENT ENROLLMENT AND ATTENDANCE INFORMATION MODULE

For the students, this module tracks the submission of applications for issuing various kinds of certificates, course grading results and student profile in terms of academic progress. For the Faculty, this module mainly facilitates the submission of grades. For the administrative staff, this module tracks and maintains the student profile, automates the issuing of various types of certificates requested by the students, tracks statistical information related to student attendance, tracks statistical information related to student grades.

2. ACADEMIC SUPPORT INFORMATION MODULE

This module facilitates the delivery of all types of learning material from Faculty to students as well as providing the capability of communication between students and Faculty.

3. ADMINISTRATIVE SUPPORT INFORMATION MODULE

This module manages career information of the Faculty members. These members can submit applications and request certificates relating to their profile, track and update career progress, track and

update changes in their functions and responsibilities. The module also manages office space assignments.

4. QUALITY ASSURANCE INFORMATION MODULE

This module is very important because it is maintained and utilized by the members of OMEA and MODIP, the two groups responsible for information management, statistics and documentation related to all issues of the Quality Assurance for the Department.

One category of information in this module relates to tracking and documentation of the departmental instructional and research work including:

- a. Evaluation of Faculty instructional and research activity accompanied by the updating and issuing of resume data.
- b. Information related to the study programs (both undergraduate and graduate) in terms of various factors and indicators such as ECTS, learning outcomes, written comments of student evaluations, work-load of Faculty members and others.

Another category of information in this module relates to the management, use and presentation of data recorded for use in the evaluation and certification of the undergraduate program's Quality Assurance, as required by the HQA. For compliance with this requirement, several statistical tables and indicators can be designed and generated by the system to be used as metrics of achievement of goals and assessment of progress on various issues of interest over time such as budgets, research activity or study program updates.

5. STUDENT, GRADUATE and ALUMNI EVALUATION MODULE

The evaluation process by the students in the undergraduate program is considered as a significant feedback mechanism for the achievements, maintenance and assessment of the program's Quality Assurance. Thus, a very important module of the information system is the one that gathers, analyzes, organizes and presents the student evaluation data. The Department conducts student evaluations manually, on the course instructor, the course content, the associated support mechanisms and learning outcomes manually in the classroom following the universally accepted protocol. The data is entered into the relevant departmental information system module. There is great flexibility in the manipulation of the data to extract statistical information of interest and KPIs that can be used for many purposes that serve the assessment of the program in terms of level of quality and suggest ways to improve it or identify deficiencies and problem areas to be corrected. The output is available to the individual evaluators, to the Faculty member that is subject of the evaluation, to the appropriate administrators and decision makers and the Members of OMEA or MODIP as it may be appropriate, with associated levels of security access. Results of this module in the form of KPIs, if generated, may also serve for benchmarking purposes against similar undergraduate programs of other domestic or international institutions or determine the ranking of the program in the domestic or international lists.

Panel judgement

Principle 7: Information Management	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

OMEA and MODIP should embark into an effort to describe and document all of the steps and / or flow of actions involved in Information Management.

Principle 8: Public Information

INSTITUTIONS SHOULD PUBLISH INFORMATION ABOUT THEIR TEACHING AND ACADEMIC ACTIVITIES WHICH IS CLEAR, ACCURATE, OBJECTIVE, UP-TO-DATE AND READILY ACCESSIBLE.

Information on Institution's activities is useful for prospective and current students, graduates, other stakeholders and the public.

Therefore, institutions and their academic units provide information about their activities, including the programmes they offer, the intended learning outcomes, the qualifications awarded, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students, as well as graduate employment information.

Study Programme compliance

The Department operates under the principles of the University's Quality Management (procedure 6: Disclosure of information, University Quality Manual, version 1, July 2018) and satisfies Principle 8 by using procedures and process to disseminate its activities to the public. The University Quality Manual, is in line with the best Academic practices and especially those of the European Universities, and the guidelines of the HQA.

In implementing this procedure, the Department Council defines:

- the activities and type of materials to be published
- the intended audience (current students, graduates, members of the Faculty, the Greek and international academic community, public and private organisations, and the public)
- the communication channels and mechanisms to be used (the Department's website, the "eduportal" – an internal portal for managing study material, the quarterly newsletter, the social and professional online networks, and various activities for public engagement)
- control mechanisms to monitor the objectiveness, quality and clarity of the information
- the ownership of the process for periodic updates.

Moreover, the Department's General Assembly has instituted two of the eight Department committees to advice and further coordinate those activities; the Newsletter Committee and the Public Promotion Committee. The structure of those committees are defined, and their role is to submit proposals to the periodic Department's General Assembly for further dissemination actions and activities.

The AP believes that the process followed is properly documented ("Proposal for the Accreditation of the Department", Chapter 8, April 2019) and is well structured, highly efficient and in line with the guidance of HQA.

All the dissemination channels described in the process are actively used to promote the activities of the Department. We found the Department's website very well structured, easy to navigate, modern looking, well presented, informative, up to date and containing the right amount of information. The information presented is in line with the intended audience. The online study guide was comprehensive and up to date. The quarterly newsletter (current issue 19) was accessible and with recent activities and Department news. Manuals for students which are available online. The five research labs and their research activities were well promoted and explained with links to the individual lab websites. It is notable that the Department devotes a section of its webpage on Quality Policies. It is also notable the openness of the information given, as well as the inherent Department's culture for awarding excellence and for engaging with the wider public and not only with the academic community.

The AP was allowed to access the online internal portal (eduportal). This portal is used mainly to provide digital access to course related materials and to enhance the course related communication between Faculty members and students. It is notable that this portal was accessible from various devices, including a mobile version. The AP performed random sampling of two courses, “Introduction to Marketing” (1st semester) and “Digital Innovation and entrepreneurship” (8th semester) and found the information presented well structured, comprehensive and informative.

The Department maintains a media profile by utilising the common social media platforms (facebook, twitter, linkedin, youtube, blogspot). This profile was up to date with relevant information in all media used.

The AP believes that the Department devotes substantial effort in the ongoing engagement with the public, by instituting and performing a number of outwards facing activities such as seminars, newspaper articles, presentation to local secondary education institutions, and other public activities. One of the most notable of those activities is the annual Summer Camp of Entrepreneurship (YES), targeted to students in the last two years of secondary education.

The Department, during its 20 years of operations has developed a strong outwards facing culture, where engagement with the local professional community, the local society and the international academia is actively encouraged and promoted. In meeting the requirements of the University’s Quality Manual, the Department defines and utilises a number of channels to promote its mission and activities. By doing that, the Department maintains a rich framework of acquiring feedback from various stakeholders (industry, public bodies, society, academia) to continuously adapt its curriculum, in order to better train its students according to the requirements of the market.

The AP believes that all requirements and recommendations of the HQA principle 8 are fully met.

Panel judgement

Principle 8: Public Information	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

The AP would like to encourage the Department to maintain this outward facing ethos, and if anything, to try to do even more to engage with the local community.

The AP would also encourage the Department to engage more with social sustainability/responsibility related activities (either independently or as part of the University Social Responsibility activities), and by doing that, to promote and instil those principles to its students. We believe it is important for modern companies and their executive teams to define a social sustainability/responsibility culture within their corporate mission and as such modern executives must be exposed and trained in those cultures.

Principle 9: On-going Monitoring and Periodic Internal Review of Programmes

INSTITUTIONS SHOULD HAVE IN PLACE AN INTERNAL QUALITY ASSURANCE SYSTEM FOR THE AUDIT AND ANNUAL INTERNAL REVIEW OF THEIR PROGRAMMES, SO AS TO ACHIEVE THE OBJECTIVES SET FOR THEM, THROUGH MONITORING AND AMENDMENTS, WITH A VIEW TO CONTINUOUS IMPROVEMENT. ANY ACTIONS TAKEN IN THE ABOVE CONTEXT SHOULD BE COMMUNICATED TO ALL PARTIES CONCERNED.

Regular monitoring, review and revision of study programmes aim to maintain the level of educational provision and to create a supportive and effective learning environment for students.

The above comprise the evaluation of:

- *the content of the programme in the light of the latest research in the given discipline, thus ensuring that the programme is up to date;*
- *the changing needs of society*
- *the students' workload, progression and completion;*
- *the effectiveness of the procedures for the assessment of students*
- *the students' expectations, needs and satisfaction in relation to the programme;*
- *the learning environment, support services and their fitness for purpose for the programme*

Programmes are reviewed and revised regularly involving students and other stakeholders. The information collected is analysed and the programme is adapted to ensure that it is up-to-date. Revised programme specifications are published.

Study Programme compliance

The Department's Quality Policy for the ongoing monitoring and periodic internal review of the Study Programme is in line with the University's Quality Manual, ver. 1, July 2018 Procedure 4.1, and the general guidelines of the HQA. Its mission is the continuous improvement of the quality of its curriculum. In executing its policy the Department uses procedures to safeguard operations related to structuring, improving and delivering the study programme. The outcome of the study programme feeds in the some of the performance related KPIs for the Department's ongoing monitoring of its activities.

The Department follows a well-structured and efficient internal practice for the on-going self-assessment and improvement of the study programme. This can be summarized in five (5) steps:

1. Information and feedback gathering from industrial collaborations, students' feedback, academic curricula of similar nature at other exemplar Universities, intuition/experience and research activities. Informal one-to-one internal discussion between members of the Faculty.
2. Discussions at periodic thematic area ("πυλώνες") meetings of the strategic direction and the relevant subjects in the programme guide, providing input to the Study Programme Internal Committee
3. Discussions around Study Programme strategy and structure at the Study Programme Committee periodic meetings, providing input to the Department General Assembly.
4. Discussion, decision and action plans at the Department's General Assembly meetings.
5. Implementation of changes and other amendments to the study Programme.

The cycle is followed at least annually. It was noted the new institution of the External Advisory Board, expected to also provide input to the process, something which will commence in 2020.

The AP performed random sampling of the process followed for recent changes to the study Programme (The inclusion of a "machine learning" course and the exclusion of "Development of internet and Cloud applications" course.). It gathered evidence for the exchange of information between the 5 steps in form of emails (from 4/3/19 to 16/5/19), and found the practice to be effective, with outcomes beneficial to the Department. Those outcomes are properly recorded and eventually submitted to the QUA. The

various findings are shared within the academic unit using structured and unstructured methods, resulting in action plans which are implemented in a timely fashion. The AP have seen enough evidence to confirm that this established practice is well followed.

The AP believes that the guiding principles of HQA's Principle 9: "on-going monitoring and periodic internal review of programmes" are followed and efficient mechanisms and practices are in place to pursue the relevance to the Department mission of the structure and the organization of the curriculum.

Panel judgement

Principle 9: On-going Monitoring and Periodic Internal Review of Programmes	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

The process for the on-going monitoring and periodic internal review of study programmes is well established and results driven. The fact that it is followed even after the recent high academic and administrative Faculty reduction is a testimony to the maturity of the process. However, the AP believes that such a vital and core process, central to the mission statement of the Department, should be well documented, and supported with minuted meetings.

It is advisable and perhaps mandatory for the Department to design and document the procedure of monitoring and periodic reviewing the study programme. This procedure should be in line with the structure and guiding principles of the University's Quality Manual ΕΣΔΠ/ΟΠΑ and as such to include and define: Scope, ownership, procedural steps, inputs, outputs, controls, measurable targets. This procedure document should describe and formalise the existing and very efficient process which now, although it is followed unstructured, it is adequate.

Records of the process implementation should be kept and as minimum the meeting minutes of the General Assembly (which are already kept), the Programme Study Committee meetings and the thematic area strategy meetings.

One of the challenges is not to overload administrative and academic Faculty with additional activities, and the right balance should be found. We believe by documenting the process, the Department could find the opportunity to reflect upon the followed process, something which will lead to not only to better organizational practices but also improved operations.

Principle 10: Regular External Evaluation of Undergraduate Programmes

PROGRAMMES SHOULD REGULARLY UNDERGO EVALUATION BY COMMITTEES OF EXTERNAL EXPERTS SET BY HQA, AIMING AT ACCREDITATION. THE TERM OF VALIDITY OF THE ACCREDITATION IS DETERMINED BY HQA.

HQA is responsible for administering the programme accreditation process which is realised as an external evaluation procedure, and implemented by a committee of independent experts. HQA grants accreditation of programmes, with a specific term of validity, following to which revision is required. The accreditation of the quality of the programmes acts as a means of verification of the compliance of the programme with the template's requirements, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees.

Both academic units and institutions participate in the regular external quality assurance process, while respecting the requirements of the legislative framework in which they operate.

The quality assurance, in this case the accreditation, is an on-going process that does not end with the external feedback, or report or its follow-up process within the Institution. Therefore, Institutions and their academic units ensure that the progress made since the last external quality assurance activity is taken into consideration when preparing for the next one.

Study Programme compliance

The accreditation review of the Department follows an evaluation review that was conducted in 2013. In the interim, the Department took into serious consideration the suggestions and recommendations made by the External Evaluation Committee. The recommendations were assigned to appropriate departmental review committees or Faculty members and more than 80% which were within the departmental jurisdiction and control were implemented and adopted. A very thorough, verifiable and well-organized table of the recommendations, as they were adopted, was presented to the AP's satisfaction.

Panel judgement

Principle 10: Regular External Evaluation of Undergraduate Programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

PART C: CONCLUSIONS

I. Features of Good Practice

- The panel was positively impressed by the state-of-the-art knowledge and cutting-edge technical expertise of the Faculty who designed a very educational, well rounded and challenging curriculum for its students.
- The Department is unique in terms of its mandatory Study Program requirement of a Practical Training / Internship course. Furthermore, it is unique in its additional requirement of a “Bachelor’s Thesis” especially as a follow up or extension of the practical training exercise.
- The Department has seriously considered the outcome of the last external evaluation and to its credit has implemented 80% of the recommendations it received at the time.
- The Department is performing innovative and pioneering work and remains a leading Institution in the cross disciplinary domain of the Management Science and Technology education.
- The work performed with regards to recruiting, mentoring and promoting the Department’s Faculty members is highly commendable. The AP congratulates the Department for establishing a solid path for Academic excellence in a pioneering field.

II. Areas of Weakness

- The incomplete documentation of steps and action flow for some of the core departmental procedures.

III. Recommendations for Follow-up Actions

- The Department should consider to include in the Quality Policy statement a list of the procedures that are in place so as to indicate clearly the way the continuous improvement is implemented.
- It is suggested the Department provides a full Thesis Handbook, documenting all information related to the quality requirements, procedures and steps required for the completion of the Thesis.
- OMEA and MODIP should embark into an effort to describe and document all of the steps and / or flow of actions involved in Information Management.
- It is advisable and perhaps mandatory for the Department to design and document the procedure of monitoring and periodic reviewing the study programme. This procedure should be in place and in line with the structure and guiding principles of the University’s Quality Manual ΕΣΔΠ/ΟΠΑ and as such to include and define: Scope, ownership, procedural steps and flow diagram, inputs, outputs, controls, measurable targets. This procedure document could describe and formalise the existing and very efficient process which now, although it is followed unstructured, it is adequate. Records of the process implementation should be kept and as minimum the meeting minutes of the General Assembly (which are already kept), the Programme Study Committee meetings and the thematic area strategy meetings.

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are:

Principle 1: Academic Unit Policy for Quality Assurance

Principle 3: Student – centred Learning, Teaching and Assessment

Principle 4: Student Admission, Progression, Recognition and Certification

Principle 5: Teaching Staff

Principle 6: Learning Resources and Student Support

Principle 7: Information Management Principle

Principle 8: Public Information

Principle 10: Regular External Evaluation of Undergraduate Programmes

The Principles where substantial compliance has been achieved are:

Principle 2: Design and Approval of Programs

Principle 9: On-going monitoring and Periodic Internal Review of Programmes

The Principles where partial compliance has been achieved are:

None

The Principles where failure of compliance was identified are:

None

Overall Judgement	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

The members of the Accreditation Panel for the Undergraduate programme Management Science and Technology of the Athens University of Economics and Business

Name and Surname

Signature

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