Accreditation Report

for the New Undergraduate Study Programme in

Operation of:

Industrial Engineering and Management

Institution: International Hellenic University
Date: 1 July 2023
Report of the Panel appointed by the HAHE to undertake the review of the New Undergraduate Study Programme in operation of Industrial Engineering and Management of the International Hellenic University for the purposes of granting accreditation.
TABLE OF CONTENTS

Part A: Background and Context of the Review ............................................................. 4
  I.  The External Evaluation & Accreditation Panel .................................................. 4
  II. Review Procedure and Documentation .............................................................. 5
  III. New Undergraduate Study Programme in operation Profile .................................. 6

Part B: Compliance with the Principles ....................................................................... 8
  Principle 1: Strategic Planning, Feasibility and Sustainability of the Academic Unit .... 8
  Principle 2: Quality Assurance Policy of the Institution and the Academic Unit ......... 15
  Principle 3: Design, Approval and Monitoring of the Quality of the New Undergraduate Programmes ................................................................. 17
  Principle 4: Student-centred Approach in Learning, Teaching and Assessment of Students .... 20
  Principle 5: Student Admission, Progression, Recognition of Academic Qualifications and Award of Degrees and Certificates of Competence of the New Study Programmes ........................................... 22
  Principle 6: Ensuring the Competence and High Quality of the Teaching Staff of the New Undergraduate Study Programmes ........................................................................... 24
  Principle 7: Learning Resources and Student Support of the New Undergraduate Programmes ................................................................. 27
  Principle 8: Collection, Analysis and Use of Information for the Organisation and Operation of New Undergraduate Programmes ........................................................................... 30
  Principle 9: Public Information Concerning the New Undergraduate Programmes .......... 32
  Principle 10: Periodic Internal Review of the New Study Programmes ....................... 34
  Principle 11: Regular External Evaluation and Accreditation of the New Undergraduate Programmes ........................................................................... 36
  Principle 12: Monitoring the Transition from Previous Undergraduate Study Programmes to the New Ones ................................................................. 38

Part C: Conclusions ..................................................................................................... 40
  I.  Features of Good Practice ..................................................................................... 40
  II. Areas of Weakness ............................................................................................... 40
  III. Recommendations for Follow-up Actions .......................................................... 40
  IV. Summary & Overall Assessment ......................................................................... 41
PART A: BACKGROUND AND CONTEXT OF THE REVIEW

1. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the new undergraduate study programme in operation of Industrial Engineering and Management undergraduate program of the International Hellenic University comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

1. **Prof. Andreas Efstathiades (Chair)**
   European University Cyprus, Nicosia, Cyprus

2. **Prof. Konstantinos Salonitis**
   Cranfield University, Cranfield, United Kingdom

3. **Reader Jannis Angelis**
   KTH Royal Institute of Technology, Stockholm, Sweden

4. **Mr. Panagiotis Kataliakos**
   Member of Technical Chamber of Greece, Greece

5. **Mrs. Spyridoula Leventaki**
   Student, Department of Production Engineering and Management, Technical University of Crete, Chania, Crete, Greece
II. Review Procedure and Documentation

The panel was put together by HAHE which consisted of the individuals named at the front of this report of which they are the authors. The visit was held on 26th and 27th of June 2023. In preparation for this meeting, we were sent all the relevant documents that are required for the accreditation. Additional information requested by EEAP has been provided.

Prior to the visit the EEAP read all the provided material. The EEAP met on the evening of the first day of the visit to allocate tasks and identify areas that are needed to pay some further attention in. Overall, the information provided, and preparedness of the team was sufficient to conduct a thorough review of the department’s and course progress and to provide a fair view on the degree to which it meets the accreditation requirements.

The visit took place over two days during which we met with representatives from the following groups: OMEA and MODIP, teaching staff members, students, graduates and employers & social partners. We were also provided with a video of the main facilities. The panel member who attended the visit on campus has also visited the main facilities of the school/department. At the beginning and end of the visit, The EEAP met with the Vice Rector / President of MODIP and the Head of the department.

Overall, the EEAP were greeted warmly, and found the University team to be knowledgeable, enthusiastic and well prepared.
III. New Undergraduate Study Programme in operation Profile

The Industrial Engineering and Management course is in line with the knowledge field 07 – Engineering, manufacturing and construction, of the International Standard Classification of Education (ISCED). The aim of the program is to provide high level education in the field of Industrial Engineering and Management that includes fundamental concepts, specialised theoretical knowledge and skills as well as practical experience through internships. The Curriculum of the course is structured in 10 (ten) semesters and includes compulsory courses, compulsory electives including internship, and compulsory diploma project totalling 300 ECTS.

The course structure focuses around 3 pillars and 14 thematic areas as follows:

A. Pillars
   1. Mechanical and Electrical Engineering
   2. Product and systems production planning
   3. Industrial Management and Information Systems

B. Thematic Areas
   1. Engineering fundamentals
   2. Production Management
   3. Automation
   4. Quality
   5. Engineering Economics
   6. Operational research
   7. Information Systems
   8. Human Resources Management/ Ergonomics
   9. Logistics
   10. Project Management
   11. Sustainability
   12. Manufacturing Engineering
   13. Simulation/Modelling
   14. Industrial Vehicle Engineering

It includes forty-three (43) compulsory courses, a compulsory six-month thesis and fifty-seven elective (57) courses from which the student must choose fourteen (14). The program has taken its first students in the academic year 2019/20. The program is now attended by 593 students with 47 graduates. The teaching staff includes 23 faculty members, 1 special teaching
personnel and 2 Special Technical Laboratory Staff who organically belong to the Department. The teaching work is also supported by 11 temporary staff. The departmental work is supported by three Academic Administrators. The graduates of the program can be employed as production and Engineering executives in manufacturing and services organisations as executives of the wider public sector, as Engineering consultants, as researchers and trainers etc.
PART B: COMPLIANCE WITH THE PRINCIPLES

Principle 1: Strategic Planning, Feasibility and Sustainability of the Academic Unit

Institutions must have developed an appropriate strategy for the establishment and operation of new academic units and the provision of new undergraduate study programmes. This strategy should be documented by specific feasibility and sustainability studies.

By decision of the institutional Senate, the Institutions should address in their strategy issues related to their academic structure in academic units and study programmes, which support the profile, the vision, the mission, and the strategic goal setting of the Institution, within a specific time frame. The strategy of the Institution should articulate the potential benefits, weaknesses, opportunities or risks from the operation of new academic units and study programmes, and plan all the necessary actions towards the achievement of their goals.

The strategy of their academic structure should be documented by specific feasibility and sustainability studies, especially for new academic units and new study programmes.

More specifically, the feasibility study of the new undergraduate study programmes should be accompanied by a four-year business plan to meet specific needs in infrastructure, services, human resources, procedures, financial resources, and management systems.

During the evaluation of the Institutions and their individual academic units in terms of meeting the criteria for the organisation of undergraduate study programmes, particular attention must be placed upon:

a. The academic profile and the mission of the academic unit
The profile and mission of the department should be specified. The scientific field of the department should be included in the internationally established scientific fields of Higher Education, as they are designated by the international categorisation of scientific fields in education, by UNESCO (ISCED 2013).

b. The strategy of the Institution for its academic development
The academic development strategy for the operation of the department and the new study programme should be set out. This strategy should result from the investigation of the factors that influence the studies and the research in the scientific field, the investigation of the institutional, economic, developmental, and social parameters that apply in the external environment of the Institution, as well as the possibilities and capabilities that exist within the internal environment (as reflected in a SWOT Analysis: strengths, weaknesses, opportunities, and threats). This specific analysis should demonstrate the reason for selecting the scientific field of the new department.

c. The documentation of the feasibility of the operation of the department and the study programme
The feasibility of the operation of the new department should be justified based on:
   - the needs of the national and regional economy (economic sectors, employment, supply-demand, expected academic and professional qualifications)
   - comparison with other national and international study programmes of the same scientific field
   - the state-of-the-art developments
d. The documentation of the sustainability of the new department
Mention must be made to the infrastructure, human resources, funding perspective, services, and all other available resources in terms of:
- educational and research facilities (buildings, rooms, laboratories, equipment, etc.)
- staff (existing and new, by category, specialty, rank and laboratory). A distinct five-year plan is required, documenting the commitment of the School and of the Institution for filling in the necessary faculty positions to cover at least the entire pre-defined core curriculum
- funding (funding possibility from public or non-public sources)
- services (central, departmental / student support, digital, administrative, etc.)

e. The structure of studies
The structure of the studies should be briefly presented, namely:
- The organisation of studies: The courses and the categories to which they belong; the distribution of the courses into semesters; the alignment of the courses with the European Credit Transfer System (ECTS).
- Learning process: Documentation must be provided as to how the student-centered approach is ensured (modes of teaching and evaluation of students beyond the traditional methods).
- Learning outcomes: Knowledge, skills and competences acquired by graduates, as well as the professional rights awarded must be mentioned.

f. The number of admitted students
- The proposed number of admitted students over a five-year period should be specified.
- Any similar departments in other HEIs with the possibility of student transfers from / to the proposed department should be mentioned.

g. Postgraduate studies and research
- It is necessary to indicate research priorities in the scientific field, the opportunities for interdisciplinary research, the challenges towards new knowledge, possible research collaborations, etc.
- In addition, the postgraduate and doctoral programmes offered by the academic unit, the research projects performed, and the research performance of the faculty members should be mentioned.

Relevant documentation
- Introductory Report by the Quality Assurance Unit (QAU) addressing the above points with the necessary documentation
- Updated Strategic Plan of the Institution that will include its proposed academic reconstruction, in view of the planned operation of new department(s) (incl. updated SWOT analysis at institutional level)
- Feasibility and sustainability studies for the establishment and operation of the new academic unit and the new study programme
- Four-year business plan
Study Programme Compliance

Findings

The information about the Department is presented in the Department website which is available both in Greek and English. All the relevant information is easily accessible regarding the structure of the program and operation of the Department. The Student Guide with all relevant information is available on the University website in Greek and English.

The International University of Greece, in its current form, was created by Law 4610/2019, with the merger of the International University of Greece, which until then only offered English-language Master’s programs, and three Technological Educational Institutes (TEI) (Alexandreio Thessaloniki, Central Macedonia and Eastern Macedonia-Thrace). IHU offers 32 Undergraduate Studies Programs, 61 Master’s Degree Programs. It has around 400 faculty members and approximately 57,000 students. These are organised in 7 schools.

The Department of Industrial Engineering and Management (IEM) of the International University of Greece was created by the merger of the Departments of Automation Engineering and Mechanical Engineering Vehicles of the former Alexandria Technological Educational Institute of Thessaloniki in 2019. The Department is one of seven departments in the School of Engineering of the International University of Greece.

As a result of the transition to a university, the new department has reorganised the offerings of the former units as university level degree programs in the field of Industrial Engineering and Management at three levels: undergraduate, Masters, Doctoral. These programs are in the mainstream of the internationally recognized scientific fields.

The curriculum of the undergraduate program in Industrial Engineering and Management came into being in 2019. The Industrial Engineering and Management course is in line with the knowledge field 07 – Engineering, manufacturing and construction, of the International Standard Classification of Education (ISCED) The department is staffed with 24 faculty members and offers a five-year study program. The program has been offered since 2019 and is designed to satisfy identified industry needs. It includes forty-three (43) compulsory courses, a compulsory six-month thesis and fifty-seven elective (57) courses from which the student must choose fourteen (14). The aim of the program is to provide high level education in the field of Industrial Engineering and Management that includes fundamental concepts, specialised theoretical knowledge and skills as well as practical experience through internships.

The department offers 3 Masters study programs, and a PhD Degree program. The Master Degree programs that are currently in place are the following: 1. "Applied Automation Systems"; 2. "Robotics, STEAM and New Technologies in Education"; 3. "Surveying and maritime internet of things in education". In terms of research, the department has established collaborations with almost all Greek Universities, and with many universities abroad.
Analysis

In the Strategic Plan the Department has set eight specific goals along with Key Performance Indicators (KPI), measurement methods, data sources and the agent responsible for the measurements. These are:

1. To equip the students with the necessary skills and knowledge so as to satisfy industry needs.
2. To provide the abilities to the students in analysing and processing data and information.
3. To expose students to real life working conditions.
4. To adapt and reinforce the study programs with the latest research and scientific developments.
5. To expose the department, in the local and international community.

For each goal, the expert panel notes that the plan lists specific quantifiable KPIs which are relatively easy to identify and measure. For each measurement it specifies quantitative measures of performance, measurement procedures, source of the information and the agent responsible for the measurement and analysis of the data.

The Strategic Plan has been developed following the rational model and has concluded to a well-structured SWOT analysis. On the basis of the analysis, it has identified strengths and weaknesses in the areas of education and research considering the history, character and location of the university including the links to the elements of the private sector that the program aims to serve.

The plan also identifies weaknesses in a number of areas. Given the number of students, the Department does not have sufficient administration and technical staff to fulfil its mission. The number of incoming students is not controlled by the Department, but it is determined by the Ministry of Education. The absence of large auditoriums to accommodate large audiences is an identified weakness as well. The department demonstrates as a weakness the lack of professional rights of the graduates. This issue cannot be addressed at this moment. It is an issue beyond the authority of the institution to resolve and as such has no impact on the quality and sustainability of the program.

For each goal and weakness, the plan lists specific actions to be taken toward achievement of the goal and specifies quality indicators and metrics for monitoring the progress toward the goal.

Conclusions

The department has developed a well-documented strategic plan following a rational approach. The strategic plan addresses issues related to academic structure, and the study
programs (undergraduate and graduate ones) that support the profile, the vision, the mission, and the strategic objectives. The profile and mission of the department is well specified while the feasibility of the operation of the department is justified based on the needs of the national and regional economy. The question of professional licence for the graduates of the program seems to be of major concern to the students and some of the stakeholders. It is an issue beyond the authority of the institution to resolve and as such has no impact on the quality and sustainability of the program. The proposed undergraduate program is strategically placed to provide the type of human resources essential for the advancement of the local and the Greek economy while the faculty members possess the necessary and appropriate qualifications to support the program.
Panel Judgement

<table>
<thead>
<tr>
<th>Principle 1: Strategic planning, feasibility and sustainability of the academic unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. The academic profile and the mission of the academic unit</strong></td>
</tr>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
<tr>
<td><strong>b. The strategy of the Institution for its academic development</strong></td>
</tr>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
<tr>
<td><strong>c. The documentation of the feasibility of the operation of the department and the study programme</strong></td>
</tr>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
<tr>
<td><strong>d. The documentation of the sustainability of the new department</strong></td>
</tr>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
<tr>
<td><strong>e. The structure of studies</strong></td>
</tr>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
<tr>
<td><strong>f. The number of admitted students</strong></td>
</tr>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
<tr>
<td><strong>g. Postgraduate studies</strong></td>
</tr>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
</tbody>
</table>
### Principle 1: Strategic planning, feasibility and sustainability of the academic unit (overall)

<table>
<thead>
<tr>
<th>Compliance Level</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant</td>
<td>X</td>
</tr>
<tr>
<td>Substantially compliant</td>
<td></td>
</tr>
<tr>
<td>Partially compliant</td>
<td></td>
</tr>
<tr>
<td>Non-compliant</td>
<td></td>
</tr>
</tbody>
</table>

### Panel Recommendations

None.
Principle 2: Quality Assurance Policy of the Institution and the Academic Unit

The Institution should have in place an accredited Internal Quality Assurance System, and should formulate and apply a Quality Assurance Policy, which is part of its strategy, specialises in the operation of the new academic units and the new study programmes, and is accompanied by annual quality assurance goals for the continuous development and improvement of the academic units and the study programmes.

The quality assurance policy of the Institution must be formulated in the form of a published statement, which is implemented by all stakeholders. It focuses on the achievement of special annual quality goals related to the quality assurance of the new study programme offered by the academic unit. In order to implement this policy, the Institution, among others, commits itself to put into practice quality procedures that will demonstrate: the adequacy and quality of the academic unit’s resources; the suitability of the structure and organisation of the curriculum; the appropriateness of the qualifications of the teaching staff; the quality of support services of the academic unit and its staffing with appropriate administrative personnel. The Institution also commits itself to conduct an annual internal evaluation of the new undergraduate programme (UGP), realised by the Internal Evaluation Group (IEG) in collaboration with the Quality Assurance Unit (QAU) of the Institution.

The quality assurance policy of the academic unit includes its commitment to implement quality procedures that will demonstrate: a) the adequacy of the structure and organisation of the curriculum, b) the pursuit of learning outcomes and qualifications in accordance with the European and National Qualifications Framework for Higher Education, c) the promotion of the quality and effectiveness of the teaching work, d) the adequacy of the qualifications of the teaching staff, e) the promotion of the quality and quantity of the research work of the members of the academic unit, f) the ways of linking teaching with research, g) the level of demand for graduates’ qualifications in the labour market, h) the quality of support services, such as administration, libraries and student care, i) the implementation of an annual review and audit of the quality assurance system of the UGP through the cooperation of the Internal Evaluation Group (IEG) with the Quality Assurance Unit (QAU) of the Institution.

Relevant documentation
- Revised Quality Assurance Policy of the Institution
- Quality Assurance Policy of the academic unit
- Quality target setting of the Institution and the academic unit (utilising the S.M.A.R.T. methodology)

Study Programme Compliance

Findings

The department, as per the assessment submission proposal, is committed to implementing the QA policy they have set. A set of eight targets and actions have been identified in the QA policy aiming at the continuous improvement of the offered undergraduate programme, as well as the research, teaching and administration tasks undertaken by its staff. The QA policy as well as the quality associate targets are well documented and communicated to stakeholders and students in a number of different ways, including the department’s website, social media and student events. The student participation in the QA process is foreseen and the relevant procedures are in place. However, student participation in these procedures is not at the expected level. On the other hand, the students interviewed were positive about their student experience. The only concern raised by most of the students was associated with
the transportation from and to the campus, an issue that the department has no direct control over but should try to address and influence at the institutional level.

**Analysis**

The department fulfils all HAHE QA requirements regarding evaluating the courses, laboratories, and academic and teaching staff delivering them. Student participation in the evaluation process is limited, and the department should promote further the value of such evaluation for the students’ experience. All anticipated quality procedures are in place and function well; additionally, they are well documented and clearly communicated to all interested parties. The goal sets regarding the department’s new undergraduate programme are relevant, measurable and achievable. The actual effectiveness of all these procedures and measures, especially those regarding the program revision, cannot be verified due to the very short period of the Department’s operation under its new integrated master status.

**Conclusions**

The expert panel found that the department is fully compliant with Principle 2. All the HAHE-required measures, metrics and procedures are in place.

**Panel Judgement**

<table>
<thead>
<tr>
<th>Principle 2: Quality assurance policy of the Institution and the academic unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
</tbody>
</table>

**Panel Recommendations**

RE 2.1 The department should further promote evaluation value to the students in order to increase their participation.
Principle 3: Design, Approval and Monitoring of the Quality of the New Undergraduate Programmes

Institutions should design the new 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.

The Institutions develop their new undergraduate study programmes, following a well-defined procedure. The academic profile, the identity 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 European and National Qualifications Framework for Higher Education are described at this stage. An important new element in the structure of the programmes is the introduction of courses for the acquisition of digital skills. The above components should be taken into consideration and constitute the subject of the programme design, which, among other things, should include: elements of the Institution’s strategy, labour market data and employment prospects of graduates, smooth progression of students throughout the stages of the programme, the anticipated student workload according to the European Credit Transfer and Accumulation System (ECTS), the option of providing work experience to the students, the linking of teaching and research, the international experience in study programmes of similar disciplines, the relevant regulatory framework, and the official procedure for the approval of the programme by the Institution.

The procedure of approval or revision of the programmes provides for the verification of compliance with the basic requirements of the Standards by the Quality Assurance Unit (QAU).

Relevant documentation

- Senate decision for the establishment of the UGP
- Curriculum structure: courses, course categories (including courses for the acquisition of digital skills), ECTS awarded, expected learning outcomes according to the EQF, internship, mobility opportunities.
- Labour market data regarding the employment of graduates, international experience in a related scientific field.
- Student Guide
- Course outlines
- Teaching staff (list of areas of specialisation, its relation to the courses taught, employment relationship)
- QAU minutes for the internal evaluation of the new study programme and its compliance with the Standards
Study Programme Compliance

Findings

The 5-year programme and its curriculum are designed and based on appropriate commonly accepted standards regarding the education of industrial and manufacturing engineers in Greece and abroad. The study program is well articulated around a core of industrial engineering and management competences, organised along three specialisation divisions: (1) Mechanical and Electrical Engineering, (2) Design and Manufacturing of Products and Systems, and (3) Industrial Management and Computer Engineering Systems. As per Principle 2 above, the Department has in place an adequate QA policy and procedures that allow for the approval, evaluation and, eventually, revision of the program. The student guide is concise, complete, and very well written. The department has decided to keep the internship in the new undergraduate programme. However, this is only offered as an elective, and for a limited amount of time.

Analysis

The Department fulfils all HAHE requirements regarding the design, approval, and monitoring of the quality of the new undergraduate program. All due procedures and mechanisms are in place and are well documented, although their actual effectiveness cannot be verified due to the very short period of operation under the new integrated master status.

The department is very proud of its heritage and the courses that used to run from the Technological Education Institute (ATEI) era. As such, it has a strong track record and well-established teaching and research laboratories on both vehicle engineering and automation. However, such labs and pre-existing courses have not yet been perfectly integrated in the new programme, and the department should look into better defining its identity. The student-to-staff ratio is very high (125.0, Ref: KPI1.2.2). The number of laboratory support staff is low, with only four (4) technicians employed. This gap is partially bridged with the support from the academic and the adjunct staff.

Conclusions

As per the above findings and analysis, the Panel is of the opinion that the Department is substantially compliant with Principle 3. The main concern that the panel has is the poor integration of the heritage courses and labs in the new undergraduate programme. Additionally, the internship should be a compulsory course for a whole semester.
Panel Judgement

<table>
<thead>
<tr>
<th>Principle 3: Design, approval and monitoring of the quality of the new undergraduate programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
</tbody>
</table>

Panel Recommendations

RE 3.1 Integrate heritage courses and labs in the programme.

RE 3.2 The internship should be made a compulsory module in the programme.
Principle 4: Student-centred Approach in Learning, Teaching and Assessment of Students

The academic unit should ensure that the new 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.

In the implementation of student-centred learning and teaching, the academic unit:

✔ 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 application of 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 teaching staff
✔ promotes mutual respect in the student-teacher relationship
✔ applies appropriate procedures for dealing with students’ complaints

Relevant documentation

▪ Questionnaires for assessment by the students
▪ Regulation for dealing with students’ complaints and appeals
▪ Regulation for the function of the academic advisor
▪ Reference to the planned teaching modes and assessment methods

Study Programme Compliance

Findings

The academic unit implements different methods so as to be inclusive towards the programme students. The unit also tries to keep in touch and stay close to their students, in order to help them with their courses or counsel them regarding their studies. There is a positive connection between the students and the teachers, which is also an educational goal of the faculty and administration - it fosters an interest in learning and supports the student experience. Student complaints can be addressed either by student representatives or to the student counsellor, and then the protocol takes place, wherever it is applicable. The process is established and clear. The academic unit supports and embraces the modern teaching methods, such as Moodle, zoom meetings etc, and promotes mutual respect from the teachers to the students and vice versa. The teaching evaluation takes place through the e-class platform every semester and can be completed only by students. The results are being presented to the teachers approximately two months after collecting all the data.
Analysis

The academic unit is approachable and understands the difficulties of students in learning and tries to help them, providing them with more homework, extra lessons if needed, zoom meetings for solving questions and explaining parts that were not understood in class. That way, teachers come closer to their students, building bonds and respect towards each other. The teaching methods being used are compliant with the modern way of education, providing flexibility on pedagogical methods outside school, and the teachers are amenable in doing so. Students are satisfied with the amount of homework they are being given and support it as a rational amount of assignments, lab sessions etc. for them to cope throughout the semester. The students’ complaints are being dealt with appropriately by the student counsellor or superior members of the unit’s administration, depending on the gravity of the topic/situation. The students are also aware of the complaint protocol and know where to appeal to. The evaluation of the course teachers takes place at the end of every semester, and all students can participate, completing a form on e-class about their opinion regarding the prosecution of each course and the teacher. The evaluation time until results are shared is extensive, and may be more effective if shortened. Teachers then may process the comments from the students, and improve their teaching skills and methods as necessary when the course is still fresh in their mind. Student surveys, as is increasingly common in most programmes, are completed by a relatively small percentage of the unit’s students, making the process more difficult to achieve its goal.

Conclusion

The academic unit is fully compliant with the student-centred approach and embraces modern and flexible teaching practices, by encouraging students to take an active role in the learning process creation.

Panel Judgement

| Principle 4: Student-centred approach in learning, teaching and assessment of students |
|---------------------------------------------|-----------|
| Fully compliant                             | X         |
| Substantially compliant                     |           |
| Partially compliant                         |           |
| Non-compliant                              |           |

Panel Recommendations

RE 4.1 Increase student participation rates in course evaluations.
Principle 5: Student Admission, Progression, Recognition of Academic Qualifications and Award of Degrees and Certificates of Competence of the New Study Programmes

Academic units should develop and apply published regulations addressing all aspects and phases of studies of the programme (admission, progression, recognition and degree award).

All the issues from the beginning to the end of studies should be governed by the internal regulations of the academic units. Indicatively:

✔ the registration procedure of the admitted students and the necessary documents - according to the law - and the support of the newly admitted students
✔ student rights and obligations, and monitoring of student progression
✔ internship issues, granting of scholarships
✔ the procedures and terms for writing the thesis (diploma or degree)
✔ the procedure of award and recognition of degrees, the duration of studies, the conditions for progression and assurance of the progress of students in their studies as well as
  ✔ the terms and conditions for enhancing student mobility

Appropriate recognition procedures rely on relevant academic practice for recognition of credits among various European academic departments and institutions in line with the principles of the Lisbon Convention on the Recognition of Qualifications concerning Higher Education in the European Region. 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).

All the above must be made public within the context of the Student Guide.

Relevant documentation

- Internal regulation for the operation of the new study programme
- Regulation of studies, internship, mobility and student assignments
- Printed Diploma Supplement

Certificate from the President of the academic unit that the diploma supplement is awarded to all graduates without exception together with the degree or the certificate of completion of studies

Study Programme Compliance

Findings

The Department has established and published regulations which address all aspects of students’ admission, progression, recognition, and degree/certification award. The admission to the department is secured through the successful completion of entrance exams that are set, regulated and marked centrally by the Ministry of Education. The program study guide
includes detailed information about the program's intended learning outcomes, goals and structure and each course. The students interviewed by the expert panel also supported this view.

Each entering student is assigned an academic advisor who is a faculty member. This is reported by both students and faculty interviewed by the expert panel as a very successful way of monitoring the progress. Each student’s progress is continuously monitored through written and/or oral examinations, grading of laboratory reports, quizzes, and of other assigned projects. The program follows the ECTS credit system which is applied across the course curriculum. Student mobility is encouraged via the ERASMUS program although, to date, the number of participating students in this program is small.

Graduating students, with the first batch of graduates, will be issued both Diplomas and Certificates in both Greek and English, including an academic transcript which lists the individual achievements in greater detail.

**Analysis**

The Department has put in place a clear process for students to register and progress through to graduate the study program. Student mobility is limited, and there is scope for an increase in participating student numbers.

**Conclusion**

The Panel finds the Department in full compliance with Principle 5.

**Panel Judgement**

<table>
<thead>
<tr>
<th>Principle 5: Student admission, progression, recognition of academic qualifications, and award of degrees and certificates of competence of the new study programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
</tbody>
</table>

**Panel Recommendations**

RE 5.1 Encourage students to take advantage of the ERASMUS mobility programme.
**Principle 6: Ensuring the Competence and High Quality of the Teaching Staff of the New Undergraduate Study Programmes**

Institutions should assure themselves of the competence, the level of knowledge and skills of the teaching staff of the academic units, and apply fair and transparent processes for their recruitment, training and further development.

The Institution should attend to the adequacy of the teaching staff of the academic unit, the appropriate staff-student ratio, the suitable categories of staff, the appropriate subject areas and specialisations, the fair and objective recruitment process, the high research performance, the training – development, the staff development policy (including participation in mobility schemes, conferences and educational leaves- as mandated by law).

More specifically, 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 recognise 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.

**Relevant documentation**

- Procedures and criteria for teaching staff recruitment
- Regulations or employment contracts, and obligations of the teaching staff
- Policy for staff recruitment, support and development
- Performance of the teaching staff in scientific-research and teaching work, also based on internationally recognised systems of scientific evaluation (e.g., Google Scholar, Scopus, etc.)

**Study Programme Compliance**

**Findings**

The department has 23 members (6 professors, 9 associate professors, and 8 assistants). There are two positions available that are expected to be filled within the year. The expert panel notes that internal promotion to the next rank is being considered and has a process but that it also takes considerable time. For career progression, staff spend a significant amount of time in interaction with companies and external stakeholders, which is not always counted for career progression. On faculty professional development, there is both research leave and training for teaching available for all staff. Staff may apply for a research leave (Sabbatical) for every three years of service. In terms of staff mobility, encouragement and support mechanisms are in place, e.g., Erasmus mobility program. Steps have been taken to open a centre focused on education issues, teaching skills and its associated technologies and practices. The creation of a doctoral program will similarly have a positive effect on staff development and research skills. The teaching staff performance in class is regularly evaluated by the students through quality surveys.
The faculty published 142 papers in the 2019-2023 time period according to data provided, with about 2/3 of the staff being research active and proportionally higher if conferences are also counted. There is a collaborative approach to research, with co-authorships from other departments or even other institutions, including abroad. The faculty is encouraged to participate in professional conferences. Primarily this is supported through faculty managed research projects, but there is some internal funding available for all staff. A policy has been set that each faculty member may annually attend at least one conference. Faculty members themselves decide the relevance of attending a particular conference or scope of a publication outlet.

**Analysis of judgement**

The expert panel found that the measures in place and the overall culture of the department in terms of staff development are adequate and appropriate. There is a geographical scope of the network links maintained by the teaching staff, which may limit staff interests and in turn teaching scope. Similarly, there is almost daily faculty contact with companies, since faculty stay in close contact and in collaboration with companies in the region and in the country as a whole. This should support the programme relevance but may also make the teaching and research approach myopic. The faculty is growing, which may reduce the reliance on part time or external staff. Several students co-author papers (primarily for conferences) with their supervisors or teachers, which is indicative of a research supportive teaching environment. This should be encouraged. The overall publication record of the Department is modest, and the expert panel would encourage the faculty to publish more in higher tier journals. There is an opportunity to establish a clear strategy and incentives for all faculty members to target higher ranked journals, as a mechanism to strengthen the department’s research activities and elevate the teaching curriculum and relevance.

**Conclusions**

Overall, the expert panel finds that the processes are in place to ensure sufficient staff skills development in teaching and research. Care is given to ensure all staff are given the opportunity to develop. There are resources in place already, and there are ongoing further developments of this.
Panel Judgement

<table>
<thead>
<tr>
<th>Principle 6: Ensuring the competence and high quality of the teaching staff of the new undergraduate study programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
</tbody>
</table>

Panel Recommendations

RE 6.1 Provide the support needed to increase the proportion of research active staff, to further enhance their expertise and strengthen their teaching.
Principle 7: Learning Resources and Student Support of the New Undergraduate Programmes

Institutions should have adequate funding to meet the needs for the operation of the academic unit and the new study programme as well as the means to cover all their 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 resources, on a planned and long-term basis, to support learning and academic activity in general, in order to offer students the best possible level of studies. The above means include facilities such as, the necessary general and specific libraries and possibilities for access to electronic databases, study rooms, educational and scientific equipment, information and communication services, support and 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 students, students with disabilities), in addition to 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. Students should be informed about all available services. In delivering support services, the role of support and administration staff is crucial and therefore this segment of staff needs to be qualified and have opportunities to develop its competences.

Relevant documentation

- Detailed description of the infrastructure and services made available by the Institution to the academic unit to support learning and academic activity (human resources, infrastructure, services, etc.) and the corresponding specific commitment of the Institution to financially cover these infrastructure-services from state or other resources
- Administrative support staff of the new undergraduate programme (job descriptions, qualifications and responsibilities)
- Informative / promotional material given to students with reference to the available services

Study Programme Compliance

Findings
The infrastructure of the unit is in working order and the equipment used is new and modern. There are no dormitories allotted to the department. The information services need more employees to work properly and some information systems of the unit need updating. The existing support services of the unit and the Institution work well, and students are aware of when and where to find them. The Institution and the academic unit have limited planned and long-term financial resources and funds due to public services delays, creating difficulties in covering facility and teaching needs.

Analysis
The classrooms are modern and well designed, but with low capacity, thus being unable to support the amount of the freshman students being applied to the school. The reduction in
class size may alleviate this somewhat. The laboratories are well designed and have the necessary equipment given the set learning needs. The IT department is inadequate in terms of personnel, thus making the informatics maintenance of the unit unable to take place. There are also delays in outsourcing new IT equipment due to public services. The library, which is common for the Institution in general, is relatively small given the student body and has not been updated with appropriate material for the new undergraduate program, yet its infrastructure is good. There is a psychologist office in the campus where students can visit and be provided with the necessary counselling and/or help. A legal department is also set up in the campus.

The campus has sports facilities (e.g., gym), which can be used by students and teachers, and dormitories, which do not allow the housing of all the enrolled students of the Institution. The facilities are adequate, with infrastructure for people with disabilities in most of the buildings, yet there is still space for improvement. It has to be noted that the department itself does not obtain its own teaching facilities and is being housed along with the other departments of the campus. Students are aware of the facilities and the services of the campus and are actively using them. They are being informed in the beginning of every academic year, through the welcoming ceremony of the freshman students. Both the facilities and the services are available for everyone, and students and teaching staff have access to them. There have been complaints from the students regarding the transportation used to visit the school and to return home. More specifically, the bus taken by the students is often late and does not follow the schedule properly, thus making the students late for class, taking them time to be transported and sometimes having to get up really early in the morning to catch the bus. The administrative staff is inadequate, but constantly educated and supported in evolving their admin skills and practices. There is still a need for additional staff, so as to cover the requirements and needs of the unit and the student support.

Conclusion

The learning and support resources available are adequate but constrained. The administrative staff is well qualified with a constant skill improvement supported by the Institution. The students are well informed about the facilities the Institution has to offer.
Panel Judgement

| Principle 7: Learning resources and student support of the new undergraduate programmes |
|---------------------------------|----------------|
| Fully compliant                 |               |
| Substantially compliant         | X             |
| Partially compliant             |               |
| Non-compliant                   |               |

Panel Recommendations

RE 7.1 The available learning resources need to be adjusted for the student body of the new programme, such as library and IT support.

RE 7.2 Teaching facilities may need improvement, for instance the access to sufficiently large lecture halls.

RE 7.3 Accommodate student travel concerns in the lecture scheduling.
Principle 8: Collection, Analysis and Use of Information for the Organisation and Operation of New Undergraduate Programmes

The Institutions and their academic units 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.

Effective procedures for collecting and analysing information on the operation of Institutions, academic units and study programmes feed data into the internal quality assurance system. The following data is of interest: key performance indicators for the student body profile, student progression, success and drop-out rates, student satisfaction with the programme, availability of learning resources and student support. The completion of the fields of National Information System for Quality Assurance in Higher Education (NISQA) should be correct and complete with the exception of the fields that concern graduates in which a null value is registered.

Relevant documentation

- Report from the National Information System for Quality Assurance in Higher Education (NISQA) at the level of the Institution, the department and the new UGP
- Operation of an information management system for the collection of administrative data for the implementation of the programme (Students' Record)
- Other tools and procedures designed to collect data on the academic and administrative functions of the academic unit and the study programme

Study Programme Compliance

Findings

MODIP is responsible for supporting both the evaluation and accreditation procedures of the PPS, and the internal quality assurance system of the University, all within the framework of the principles, guidelines, and instructions of HAHE. The Internal Evaluation Team (OMEA – a three-member committee staffed by faculty members of the Department of Undergraduate Studies), is responsible for collecting data concerning the overall performance of the Undergraduate Program. Every semester, a survey is undertaken (questionnaires) concerning the evaluation of teaching staff, teaching work, administrative services, other infrastructure, as well as to express freely and anonymously their personal opinions. The questionnaire consists of closed type questions under a 5-scale Likert evaluation.

Analysis of judgement

There is ongoing collection of data for the internal quality system. All the procedures of collecting data are supported by custom-made information systems. In terms of data security and reliability, it may be useful to acquire a commercial information package, something that already is under progress according to MODIP.
Conclusion

There are processes in place to collect and analyse various aspects of the programme. The information system is placed is suitable, although for resilience purposes there may be updates.

Panel Judgement

<table>
<thead>
<tr>
<th>Principle 8: Collection, analysis and use of information for the organisation and operation of new undergraduate programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
</tbody>
</table>

Panel Recommendations

None.
Principle 9: Public Information Concerning the New Undergraduate Programmes

Institutions and academic units should publish information about their teaching and academic activities in a direct and readily accessible way. The relevant information should be up-to-date, clear and objective.

Information on the Institutions’ activities is useful for prospective and current students, graduates, other stakeholders and the public. Therefore, Institutions and their academic units must provide information about their activities, including the new undergraduate programmes they offer, the intended learning outcomes, the degrees awarded, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students. Information is also provided, to the extent possible, on graduate employment perspectives.

Relevant documentation

- Dedicated segment on the website of the department for the promotion of the new study programme
- Bilingual version of the website of the academic unit with complete, clear and objective information
- Provision for website maintenance and updating

Study Programme Compliance

Findings

IHU has a rather comprehensive website that is easy to navigate. It is a bilingual site, but there are some disparities between the two versions regarding the information that is displayed. The website includes information on IHU’s history, mission, administrative organisational structure, academic departmental personnel and functions, information on both undergraduate and graduate programmes, scientific laboratories and research facilities infrastructure.

Analysis of judgement

IHM has its dedicated webpage. The initial page seems outdated and not as professional as the rest of the site. The information presented concerning what an Industry & Management Engineer can do is epigrammatic. On the other hand, while navigating to the other pages the expert panel could find detailed and well-established information concerning every aspect of the PPS. There is a link to the Quality Policy and its objectives, but the most recent internal evaluation report is from the 2020-2021 academy year, so it needs to be updated.

Conclusion

There is information available to the public on the programme, but it needs updating, and the different language versions be better aligned.
Panel Judgement

<table>
<thead>
<tr>
<th>Principle 9: Public information concerning the new undergraduate programmes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant</td>
<td>X</td>
</tr>
<tr>
<td>Substantially compliant</td>
<td></td>
</tr>
<tr>
<td>Partially compliant</td>
<td></td>
</tr>
<tr>
<td>Non-compliant</td>
<td></td>
</tr>
</tbody>
</table>

Panel Recommendations

RE 9.1 The Department’s initial page should be updated, similar to the rest of the site. Most recent Internal evaluation report must be uploaded under the tab Quality Policy.
Principle 10: Periodic Internal Review of the New Study Programmes

Institutions and academic units should have in place an internal quality assurance system, for the audit and annual internal review of their new 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 the new study programmes aim at maintaining the level of educational provision and creating 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.

Relevant documentation

- Procedure for the re-evaluation, redefinition and updating of the curriculum
- Procedure for mitigating weaknesses and upgrading the structure of the UGP and the learning process
- Feedback processes on strategy implementation and quality targeting of the new UGP and relevant decision-making processes (students, external stakeholders)
- Results of the annual internal evaluation of the study programme by the QAU and the relevant minutes

Study Programme Compliance

Findings

There is a self-assessment procedure in place, with shared information and experiences between staff and MODIP members, as well as current students and alumni, in collecting and evaluating quality data from various sources. More specifically, the review takes into consideration various quality indicators, student evaluations, evaluations of student internships and feedback from employers and other constituents. An annual self-evaluation report is then created and used for discussion and constructive feedback. Thus, there is ongoing monitoring of the learning environment and support services. As needed, appropriate steps are taken to ensure even processes and standards. The expert panel noted that the programme evolves in line with technology trends. There is explicit comparison with other programmes for quality purposes, although primarily based on staff experience and access than geographic or industrial logic.

Analysis

There is an established internal review process in place that operates well. The internal reviews are taken into consideration, for instance in reducing total student intake and in actively seeking to rebalance the curriculum so as to better align theory with practice and provide
students with both academic rigour and practical tools. The latter is important, since given the previous programmes focus on technical aspects, there is a risk that the programme is weighted towards this rather than offering the broader education that similar programmes typically offer. This risk remains in the program. The expert panel also noted that there is a notable inclusion of social partners in the programme development and assessment, which should strengthen the program’s relevance. However, there is no data collection activity towards external stakeholders (employers, industry) in terms of identifying how MPD is conceived from the private sector and industry. This limits the department's ability to adjust and reform PPS according to the actual needs of the industry. The student feedback response rate based on surveys and reviews varies greatly depending on individual courses (10%-50%), while common in most programmes, may limit the capture of the student perspective. Responses that are received score the programme very highly.

**Conclusions**

The review panel finds that the internal review processes function well, and that captures information from a broad range of stakeholders. However, care should be taken so that the programme legacy does not dictate the current programme demands.

**Panel Judgement**

<table>
<thead>
<tr>
<th>Principle 10: Periodic internal review of the new study programmes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant</td>
<td>X</td>
</tr>
<tr>
<td>Substantially compliant</td>
<td></td>
</tr>
<tr>
<td>Partially compliant</td>
<td></td>
</tr>
<tr>
<td>Non-compliant</td>
<td></td>
</tr>
</tbody>
</table>

**Panel Recommendations**

RE 10.1 When for improvement purposes the programme is compared with competitor institutions, this should include relevant local or regional competitors.

RE 10.2 Ensure a stringent process for student self-assessment participation is applied in all courses for improved return rates.

RE 10.3 The department should form an Advisory Board with representatives from industrialists, technical chambers, permanent academic staff and alumni representatives, to have formal feedback towards improvement of undergraduate programmes, placement of graduates, placement of undergraduates for their internships, and/or joint projects.
Principle 11: Regular External Evaluation and Accreditation of the New Undergraduate Programmes

The new undergraduate study programmes should regularly undergo evaluation by panels of external experts set by HAHE, aiming at accreditation. The results of the external evaluation and accreditation are used for the continuous improvement of the Institutions, academic units and study programmes. The term of validity of the accreditation is determined by HAHE.

**HAHE** is responsible for administrating the programme accreditation process which is realised as an external evaluation procedure and implemented by a panel of independent experts. HAHE grants accreditation of programmes, based on the Reports submitted by the panels, 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 Standards, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees. Both academic units and institutions must consistently consider the conclusions and the recommendations submitted by the panels of experts for the continuous improvement of the programme.

**Relevant documentation**

- Progress report on the results from the utilisation of the recommendations of the external evaluation of the Institution and of the IQAS Accreditation Report.

**Study Programme Compliance**

There is an ongoing process of external evaluation of the undergraduate programme. Initially, information from the previous evaluations of assessments conducted in 2013 of the older programmes were considered for the new programme. This steered programme structure and content and sought to ensure appropriate processes and structures were in place. All stakeholders of the programme, internal and external, have been engaged in the preparatory work for the external programme review, and as can be assessed through the interview with the expert panel, appear eager to be involved in any follow-up actions. During the expert panel’s review, academic as well as administrative staff, students and social partners were readily available, indicating their awareness of the importance of the accreditation for the ongoing improvement of the programme.

**Analysis**

The programme builds upon previous programmes. For this accreditation, the Panel noted that the MODIP were helpful in clarifying how results from previous external assessments on the older programmes were incorporated into this one. This suggests that the external reviews are given importance and that external recommendations are acted upon. There is strong commitment from the local stakeholders in having a successful programme, and this can be relied upon to continue to develop the program. Note that, given the previous programmes’ focus on technical aspects, there is a risk that the programme is weighted towards its practical and technical elements.
Conclusions

The Panel finds the programme compliant with principle and encourages the continuation of the external evaluation procedure as a way to further improve the study programme.

Panel Judgement

<table>
<thead>
<tr>
<th>Principle 11: Regular external evaluation and accreditation of the new undergraduate programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
</tbody>
</table>

Panel Recommendations

None.
Principle 12: Monitoring the Transition from Previous Undergraduate Study Programmes to the New Ones

Institutions and academic units apply procedures for the transition from previously existing undergraduate study programmes to new ones, in order to ensure compliance with the requirements of the Standards.

Applies in cases where the department implements, in addition to the new UGPs, any pre-existing UGPs from departments of former Technological Educational Institutions (TEI) or from departments that were merged / renamed / abolished.

Relevant documentation

- The planning of the Institution for the foreseen transition period, the operating costs and the specific measures or proposals for the smooth implementation and completion of the programme
- The study regulations, template for the degree and the diploma supplement
- Name list of teaching staff, status, subject and the course they teach / examine
- Report of Quality Assurance Unit (QAU) on the progress of the transition and the degree of completion of the programme. In the case of UGP of a former Technological Educational Institution (TEI), the report must include a specific reference to how the internship was implemented

Study Programme Compliance

Findings

The current program is a transition from two previous programs, which had a narrower focus on technical aspects, tools, and techniques. In comparison, the current program offers a broader scope. There is an adequate and capable staff to handle the practical and technical aspects of the program. However, if the softer elements, such as electives or student numbers, expand, there may be challenges in managing such changes due to limited flexibility. For softer elements, there is staff available, but if this part grows in terms of electives or student numbers, there is less flexibility in managing such change. For the necessary learning resources, the current conditions provide support for staff development. This is equally applied among the staff. Improvements are underway to strengthen staff development.
Facility space, in particular lecture halls for softer, more management focused topics, is limited. The programme curriculum follows standards for ECTS per semester and for the programme as a whole. Processes and criteria for learning outcomes, and their assessment and dissemination are in place. Given the relatively newness of the programme, there are no graduated students yet. But progression through the program is tracked and ordinary. The experience from the previous programs is that employability will be high.

Analysis

Structure and management of the programme follow set standards. Structural programme considerations, such as credits, course structures and examinations are established and seem to operate well. There is a shortage of sufficiently large lecture halls that may limit some courses reliant on that type of teaching, but reduced student numbers for the future may help alleviate this problem somewhat. There is sufficient able staff to teach on the programme, but as it develops care must be made so that staff interests are closely aligned with developments of the programme as well as the technology field.

Conclusions

According to the expert panel's findings, the transition to the new program has been successful. The faculty and administrative staff are aware that certain areas may require additional attention. In terms of structure, the program format and content align with similar programs offered elsewhere.

Panel Judgement

<table>
<thead>
<tr>
<th>Principle 12: Monitoring the transition from previous undergraduate study programmes to the new ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant</td>
</tr>
<tr>
<td>Substantially compliant</td>
</tr>
<tr>
<td>Partially compliant</td>
</tr>
<tr>
<td>Non-compliant</td>
</tr>
</tbody>
</table>

Panel Recommendations

None
PART C: CONCLUSIONS

I. Features of Good Practice
   ● The processes and procedures required for successfully running the new UG programme are in place.
   ● The transition to the new programme was well considered and managed.
   ● The department has developed a well-documented strategic plan following a rational approach.
   ● The Department has designed an efficient and effective quality assurance system. All anticipated quality procedures are in place and function well.

II. Areas of Weakness
   ● The teaching facilities may need improvement, for instance the access to sufficiently large lecture halls.
   ● The integration of the heritage courses and labs in the new undergraduate programme is not well prepared.
   ● Student participation in course assessments is uneven and in instances too low to function as a feedback mechanism.
   ● The process of collecting information from the stakeholders is not formalized.
   ● The overall publication record of the Department is modest.

III. Recommendations for Follow-up Actions
   ● Create an Advisory Board with the social partners, to ensure programme relevance and further support student learning and later career opportunities.
   ● Make the internship a required course rather than an elective course.
   ● Ensure a stringent process for student self-assessment participation is applied in all courses for improved return rates.
   ● The available learning resources need to be adjusted for the student body of the new programme, such as library, IT support and labs.
   ● Encourage faculty members to publish more in high tier journals.
IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: 1, 2, 4, 5, 6, 8, 9, 10, 11, and 12.

The Principles where substantial compliance has been achieved are: 3 and 7.

The Principles where partial compliance has been achieved are: None.

The Principles where failure of compliance was identified are: None.

<table>
<thead>
<tr>
<th>Overall Judgement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully compliant</td>
<td>X</td>
</tr>
<tr>
<td>Substantially compliant</td>
<td></td>
</tr>
<tr>
<td>Partially compliant</td>
<td></td>
</tr>
<tr>
<td>Non-compliant</td>
<td></td>
</tr>
</tbody>
</table>
The members of the External Evaluation & Accreditation Panel

<table>
<thead>
<tr>
<th>Name and Surname</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prof. Andreas Efstathiades (Chair)</td>
<td></td>
</tr>
<tr>
<td>European University Cyprus, Nicosia, Cyprus</td>
<td></td>
</tr>
<tr>
<td>2. Prof. Konstantinos Salonitis</td>
<td></td>
</tr>
<tr>
<td>Cranfield University, Cranfield, United Kingdom</td>
<td></td>
</tr>
<tr>
<td>3. Reader Jannis Angelis</td>
<td></td>
</tr>
<tr>
<td>KTH Royal Institute of Technology, Stockholm, Sweden</td>
<td></td>
</tr>
<tr>
<td>4. Mr. Panagiotis Kataliakos</td>
<td></td>
</tr>
<tr>
<td>Member of Technical Chamber of Greece, Greece</td>
<td></td>
</tr>
<tr>
<td>5. Mrs. Spyridoula Leventaki</td>
<td></td>
</tr>
<tr>
<td>Student, Department of Production Engineering and Management, Technical University of Crete, Chania, Crete, Greece</td>
<td></td>
</tr>
</tbody>
</table>