Doc. 300.1.1

Date: April 8, 2021

External Evaluation Report

(Conventional-face-to-face programme of study)

- **Higher Education Institution:**
  European University Cyprus

- **Town:** Nicosia

- **School/Faculty (if applicable):** School of Sciences

- **Department/ Sector:** Computer Science and Engineering

- **Programme of study- Name (Duration, ECTS, Cycle)**
  In Greek:
  Πληροφοριακά Συστήματα (4 Έτη / 240 ECTS, Πτυχίο)
  In English:
   Computer Information Systems (4 Years / 240 ECTS, B.Sc.)

- **Language(s) of instruction:** English

- **Programme's status: :** Currently operating Program of Study

- **Concentrations (if any):**
  In Greek: Concentrations
  In English: Concentrations

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CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION

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A. Introduction
This part includes basic information regarding the onsite visit.

Unfortunately due to the COVID situation it wasn't possible to perform the evaluation on-site. The whole procedure was therefore performed online. Documents were provided beforehand in particular Document: 200.1 APPLICATION FOR EVALUATION – ACCREDITATION, the payment receipt and the cover letter as well as virtual video based tours of the university. March 31, 2021 a full day Zoom session was organized to meet with the different people. This was a mix of people involved in the program at various levels from management and administration to teaching staff and students of the program. Some of the sessions had short presentations, most of the time was spent on discussions initiated by questions of the evaluation committee. The following is the list of sessions and the people present.

Session 1: Meeting with the Vice Rector of Academic Affairs – short presentation of the Institution and meeting with the members of the Internal Evaluation Committee. Prof. L. Symeou (Vice Rector of Academic Affairs, Chair of the Internal Quality Assurance Committee), Dr. P. Papageorgis (Dean of the School of Sciences), Dr. M. A. Nikiforou (Chairperson of Department), Dr. P. Chourides (Internal Quality Assurance Member-Quality Assurance Expert), Dr. Vasiliki Gkretsi.

Session 2: Meeting with the Head of the relevant department and the programme's Coordinator and presentation of the School's / Department's structure. Dr. Panagiotis Papageorgis (Dean of the School of Sciences), Dr. Marina Appiou Nikiforou Assistant (Chairperson of Department), Dr. Pericles Leng-Cheng (Program Coordinator).

Session 3: The programme's standards, admission criteria for prospective students, the learning outcomes and ECTS, the content and the persons involved in the programme's design and development. Dr. P. Leng Cheng (Program Coordinator), Dr. C. Dimopoulos, Dr. K. Papanikolaou, Dr. A. Grondoudis, Dr. Yianna Danidou, Dr. A. Calzada, Dr. D. Domic, Dr. P. Chourides, Dr. G. Papageorgiou, Dr. D. Kyriacou, Ms. M. Angeli, Mr. C. Ellinas.

Session 4: Continuation with the teaching staff of the above session focusing on the individual courses and the content of the program.

Session 5: Students and graduates: Current Students: Valanidou Maria Costas, Bipin Maharjan Graduates: Mylordos Christos, Efstathiou Demetris, Savvides Evagoras Giorgos, Chrysostomou Andreas.

Session 6: Administrative staff: Ms L. Nardi (Director of Admissions), Ms E. Markantoni (Director of the Office of Students Affairs), Mr T. Tzitzimbourounis (Head Librarian), Ms C. Kolatsi (Department of Enrolment), Ms F. Theodorou (School Administrator), Mr M. Georgiou (MIS Department).

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The above sessions were followed by a meeting with Prof. Symeou, Dr. Papageorgis, Dr. Nikiforou and Dr. Cheng to have a final discussion and clarifications. After that the committee was invited to a live (on-line) lecture by S. Gurov which was attended by Prof. Worring and M. Michael.

The committee acknowledges the preparations done for the meetings and the hospitality that was given.

B. External Evaluation Committee (EEC)

Name	Position	University
Prof. Marcel Worring (chair)	Full professor Multimedia Analytics, Informatics Institute	University of Amsterdam, The Netherlands
Professor Christina Lioma	Leader of the Machine Learning Section, Leader of the Information Retrieval Lab, Department of Computer Science	University of Copenhagen, Denmark
Professor D.K.Arvind	Chair of Distributed Wireless Computation, School of Informatics	University of Edinburgh, Scotland
Michalis Michael	Student in Computer Science	Public University of Cyprus

C. Guidelines on content and structure of the report

- *The external evaluation report follows the structure of assessment areas.*

- *At the beginning of each assessment area there is a box presenting:*
    (a) *sub-areas*
    (b) *standards which are relevant to the European Standards and Guidelines (ESG)*
    (c) *some questions that EEC may find useful.*

- *The questions aim at facilitating the understanding of each assessment area and at illustrating the range of topics covered by the standards.*

- *Under each assessment area, it is important to provide information regarding the compliance with the requirements of each sub-area. In particular, the following must be included:*

Findings

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

Strengths

A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

- *The EEC should state the compliance for each sub-area (Non-compliant, Partially compliant, Compliant), which must be in agreement with everything stated in the report. It is pointed out that, in the case of standards that cannot be applied due to the status of the HEI and/or of the programme of study, N/A (= Not Applicable) should be noted.*

- *The EEC should state the conclusions and final remarks regarding the programme of study as a whole.*

- ***The report may also address other issues which the EEC finds relevant.***

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1. Study programme and study programme's design and development
(ESG 1.1, 1.2, 1.7, 1.8, 1.9)

The evaluation considered the following elements:

Sub-areas

1.1 Policy for quality assurance
1.2 Design, approval, on-going monitoring and review
1.3 Public information
1.4 Information management

1.1 Policy for quality assurance

Standards

- *Policy for quality assurance of the programme of study:*
    - *has a formal status and is publicly available*
    - *supports the organisation of the quality assurance system through appropriate structures, regulations and processes*
    - *supports teaching, administrative staff and students to take on their responsibilities in quality assurance*
    - *ensures academic integrity and freedom and is vigilant against academic fraud*
    - *guards against intolerance of any kind or discrimination against the students or staff*
    - *supports the involvement of external stakeholders*

1.2 Design, approval, on-going monitoring and review

Standards

- *The programme of study:*
    - *is designed with overall programme objectives that are in line with the institutional strategy and have explicit intended learning outcomes*
    - *is designed by involving students and other stakeholders*
    - *benefits from external expertise*
    - *reflects the four purposes of higher education of the Council of Europe (preparation for sustainable employment, personal development, preparation for life as active citizens in democratic societies, the development and maintenance, through teaching, learning and research, of a broad, advanced knowledge base)*
    - *is designed so that it enables smooth student progression*
    - *is designed so that the exams' and assignments' content corresponds to the level of the programme and the number of ECTS*
    - *defines the expected student workload in ECTS*

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- o *includes well-structured placement opportunities where appropriate*
- o *is subject to a formal institutional approval process*
- o *results in a qualification that is clearly specified and communicated, and refers to the correct level of the National Qualifications Framework for Higher Education and, consequently, to the Framework for Qualifications of the European Higher Education Area*
- o *is regularly monitored in the light of the latest research in the given discipline, thus ensuring that the programme is up-to-date*
- o *is periodically reviewed so that it takes into account the changing needs of society, the students' workload, progression and completion, the effectiveness of procedures for assessment of students, student expectations, needs and satisfaction in relation to the programme*
- o *is reviewed and revised regularly involving students and other stakeholders*

1.3 Public information

Standards

- *Regarding the programme of study, clear, accurate, up-to date and readily accessible information is published about:*
  - o *selection criteria*
  - o *intended learning outcomes*
  - o *qualification awarded*
  - o *teaching, learning and assessment procedures*
  - o *pass rates*
  - o *learning opportunities available to the students*
  - o *graduate employment information*

1.4 Information management

Standards

- *Information for the effective management of the programme of study is collected, monitored and analysed:*
  - o *key performance indicators*
  - o *profile of the student population*
  - o *student progression, success and drop-out rates*
  - o *students' satisfaction with their programmes*
  - o *learning resources and student support available*
  - o *career paths of graduates*

- *Students and staff are involved in providing and analysing information and planning follow-up activities.*

You may also consider the following questions:

- *What is the procedure for quality assurance of the programme and who is involved?*
- *Who is involved in the study programme's design and development (launching, changing, internal evaluation) and what is taken into account (strategies, the needs of society, etc.)?*
- *How/to what extent are students themselves involved in the development of the content of their studies?*
- *Please evaluate a) whether the study programme remains current and consistent with developments in society (labour market, digital technologies, etc.), and b) whether the content and objectives of the study programme are in accordance with each other?*
- *Do the content and the delivery of the programme correspond to the European Qualifications Framework (EQF)?*
- *How is coherence of the study programme ensured, i.e., logical sequence and coherence of courses? How are substantial overlaps between courses avoided? How is it ensured that the teaching staff is aware of the content and outputs of their colleagues' work within the same study programme?*
- *How does the study programme support development of the learners' general competencies (including digital literacy, foreign language skills, entrepreneurship, communication and teamwork skills)?*
- *What are the scope and objectives of the foundation courses in the study programme (where appropriate)? What are the pass rates?*
- *How long does it take a student on average to graduate? Is the graduation rate for the study programme analogous to other European programmes with similar content? What is the pass rate per course/semester?*
- ***How is it ensured that the actual student workload is in accordance with the workload expressed by ECTS?***
- *What are the opportunities for international students to participate in the study programme (courses/modules taught in a foreign language)?*
- *Is information related to the programme of study publicly available?*
- *How is the HEI evaluating the success of its graduates in the labor market? What is the feedback from graduates of the study programme on their employment and/or continuation of studies?*
- *Have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?*
- *What are the reasons for dropping out (voluntary withdrawal)? What has been done to reduce the number of such students?*

Findings

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

1. Program is designed based on the ACM guidelines for Information Systems in combination with needs identified in companies and government organizations. Program is a mix of basic computer science and business courses and information systems courses. The information system courses are the ones where the specifics of the program are mostly present as it is here that students learn to connect technology and business.
2. There is an advisory board which is composed of various companies, there is no advisory board to assure connection to the (international) scientific arena.
3. There has been a recent redesign of the program based on the fact that Microsoft which had a great stake in the program in recent years has moved its attention to startups. The old program on the website even has Microsoft in its name and is for 2021 advertised as Microsoft Information Systems/Web Technologies. The redesign has replaced a number of courses by new ones that are a much better fit to the overall scope of the program.
4. Research visibility has only recently come on the strategic agenda.
5. The general quality assurance adheres to the standards of the department / school and are followed for the program with a clear governance structure.
6. There is an internal quality monitoring program.
7. Admission criteria are not explicitly indicated in the website information, but this being a small program admission is currently easy to handle by individual guidance.
8. The program has clear goals and learning outcomes. They are focused on professional rather than academic skills.
9. As the program is small (currently 44 students) with a high staff to student ratio, students are individually followed and advised.
10. There is adequate information on the various indicators for the program.
11. There are policies for IP protection of work done by students, but not all lecturers are fully aware of them.

Strengths
A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

1. The program provides students with the skills they need to address information systems challenges in businesses and government organizations.
2. The program has a good connection to local companies (including branches of international firms) to assure that students learn the required skills and that they can do internships for their final project.
3. There is a high staff-to-student ratio assuring good individual guidance.
4. The revised program has a better fit to the overall scope of the program and Computer Information Systems is a more appropriate name for the program.

Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

The program is well positioned for giving professional education to students. To move forward, we recommend to make further steps in terms of academic quality:

1. Develop a strategy for the program which is less dependent on local circumstances like the presence of the Microsoft innovation center, but focused on international development of the field both in terms of what is happening in businesses as well as in the scientific arena.
2. Add specific learning outcomes that would be needed if students would aim for a master program and/or an academic career as well as in general leading to an academic mindset.
3. Extend the advisory board to include scientific stakeholders.
4. To move forward in delivering more research driven education the load on lecturers should decrease as the balance is now too much towards teaching only. An easy way to achieve this would be to assign teaching assistants to each course that can provide practical assistance in for example computer programming exercises or case studies. In general it can be made more clear what is expected from lecturers in terms of teaching load.

Please select what is appropriate for each of the following sub-areas:

Sub-area		_Non-compliant/ Partially Compliant/Compliant_
1.1	Policy for quality assurance	Compliant
1.2	Design, approval, on-going monitoring and review	Compliant
1.3	Public information	Partially compliant
1.4	Information management	Partially compliant

2. Student – centred learning, teaching and assessment *(ESG 1.3)*

The evaluation considered the following elements:

Sub-areas

2.1 Process of teaching and learning and student-centred teaching methodology
2.2 Practical training
2.3 Student assessment

2.1 Process of teaching and learning and student-centred teaching methodology

Standards

- *The process of teaching and learning supports students' individual and social development.*
- *The process of teaching and learning is flexible, considers different modes of delivery, where appropriate, uses a variety of pedagogical methods and facilitates the achievement of planned learning outcomes.*
- *Students are encouraged to take an active role in creating the learning process.*
- *The implementation of student-centered learning and teaching encourages a sense of autonomy in the learner, while ensuring adequate guidance and support from the teacher.*
- *Teaching methods, tools and material used in teaching are modern, effective, support the use of modern educational technologies and are regularly updated.*
- *Mutual respect within the learner-teacher relationship is promoted.*
- *The implementation of student-centred learning and teaching respects and attends to the diversity of students and their needs, enabling flexible learning paths.*
- *Appropriate procedures for dealing with students' complaints regarding the process of teaching and learning are set.*

2.2 Practical training

Standards

- *Practical and theoretical studies are interconnected.*
- *The organisation and the content of practical training, if applicable, support achievement of planned learning outcomes and meet the needs of the stakeholders.*

2.3 Student assessment

Standards

- *Assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures.*
- *Assessment is appropriate, transparent, objective and supports the development of the learner.*
- *The criteria for the method of assessment, as well as criteria for marking, are published in advance.*
- *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.*
- *Assessment, where possible, is carried out by more than one examiner.*
- *A formal procedure for student appeals is in place.*
- *Assessors are familiar with existing testing and examination methods and receive support in developing their own skills in this field.*
- *The regulations for assessment take into account mitigating circumstances.*

You may also consider the following questions:

- *How is it monitored that the teaching staff base their teaching and assessment methods on objectives and intended learning outcomes? Provide samples of examination papers (if available).*
- *How are students' different abilities, learning needs and learning opportunities taken into consideration when conducting educational activities?*
- *How is the development of students' general competencies (including digital skills) supported in educational activities?*
- *How is it ensured that innovative teaching methods, learning environments and learning aids that support learning are diverse and used in educational activities?*
- *Is the teaching staff using new technology in order to make the teaching process more effective?*
- *How is it ensured that theory and practice are interconnected in teaching and learning?*
- *How is practical training organised (finding practical training positions, guidelines for practical training, supervision, reporting, feedback, etc.)? What role does practical training have in achieving the objectives of the study programme? What is student feedback on the content and arrangement of practical training?*
- ***Are students actively involved in research? How is student involvement in research set up?***
- *How is supervision of student research papers (seminar papers, projects, theses, etc.) organised?*
- ***Do students' assessments correspond to the European Qualifications Framework (EQF)?***
- *How are the assessment methods chosen and to what extent do students get supportive feedback on their academic progress during their studies?*
- *How is the objectivity and relevance of student assessment ensured (assessment of the degree of achievement of the intended learning outcomes)?*

Findings

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

1. The Bachelor of Science degree in Computer Information Systems is offered over 8 semesters and awarded after completion of 240 ECTS credits.
2. This is an interdisciplinary course spanning instruction in Business Studies and Information Systems, covering courses in General Education (30 credits), Business Core (42 credits), Information Systems (42 credits), Computer Science (108 credits) and electives (18 credits).
3. The aim is to develop well-rounded graduates with skills in data analytics, decision-making, oral and verbal communications and entrepreneurship.
4. The students are given the opportunity for placement in industry and research projects in other (mainly) EU countries via the ERASMUS programme.
5. The students are introduced to "C" as the first programming language taught in the context of programming robots and Arduino boards attached to sensors, followed by C++, Java and Python over the years.
6. The culmination of the course is an independent Senior project undertaken in their final semester under the supervision of an academic staff member, where students apply the knowledge and programming skills gained during the degree programme which is submitted as a dissertation.
7. The courses have adopted a plurality of teaching methods: face-to-face lectures, practical work using robots and simulators, laboratory work, and different problem-based learning evaluation and assessment modes: mid-term and final exams, coursework, and quizzes.
8. The department used Respondus online testing application for ensuring the integrity of online examinations and the use of Turnitin to screen for plagiarism in coursework.

Strengths

A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

1. This Degree fills a niche by bridging between business process and computer technology and was unique in Cyprus when first introduced in 2007, although similar courses are being offered in other institutions, such as the BSc in Management Information Systems at the University of Nicosia.
2. The use of robots and Arduino for entry-level programming makes it accessible and engaging for students.
3. One of the strengths of the course is the low student-staff ratio (In 2020-21, 18 staff for 44 students for an SSR of 2.4), and the students have commented that the instructors are accessible and helpful. However, the challenge will be in maintaining this standard as student numbers scale up.
4. The on-campus Microsoft Innovation Center is a valuable asset to catalyse student and staff entrepreneurial activity. Examples of recent start-ups include Ascanio Entertainment (https://ascanioentertainment.com/).

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Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

1. The university should consider the appointment of an External Examiner for the Degree programme who ensures that examination and evaluation procedures are adhered to. The current approach for the Cyprus Ministry of Education to oversee the maintenance of quality and standards is impractical and goes against best practices in high-calibre universities.

2. The current Industrial Advisory Board for the degree programme should be augmented with international academic appointments to give balanced strategic advice on the content of degree programmes.

3. The courses should adopt a light-weight questionnaire mid-way to give lecturers immediate feedback which can be addressed in the latter half of the course. This will complement the more weighty end-of-course questionnaire for course evaluation.

4. The process of introducing new courses should be streamlined so that the University can respond at pace in a fast-moving computing and business landscape.

5. The Department should take advantage of English as the language of instruction, and its strategic geographical location within 2-3 hours flying distance of large potential student populations in Europe, Asia and Africa, to recruit premium fee paying international students, as the degree in Computer Information Systems is in great demand worldwide. The current breakdown on the course is 33 Cypriot (75%), 0 Greek and 11 International (25%) students, and there is scope for increasing the international students profile and raising additional revenue.

6. Students should be introduced early to computational thinking, such as the ideas of abstraction and recursion. The pedagogical underpinning for use of "C" as a first language is debatable, and the department should discuss a more appropriate first language (Java or C++) for students in a Computer Information Systems course.

Please select what is appropriate for each of the following sub-areas:

Sub-area		Non-compliant/ Partially Compliant/Compliant
2.1	Process of teaching and learning and student-centred teaching methodology	Compliant
2.2	Practical training	Compliant
2.3	Student assessment	Compliant

3. **Teaching staff** *(ESG 1.5)*

The evaluation considered the following elements*:*

Sub-areas

3.1 Teaching staff recruitment and development
3.2 Teaching staff number and status
3.3 Synergies of teaching and research

3.1 Teaching staff recruitment and development

Standards

- *Institutions ensure the competence of their teaching staff.*
- *Fair, transparent and clear processes for the recruitment and development of the teaching staff are set up.*
- *Teaching staff qualifications are adequate to achieve the objectives and planned learning outcomes of the study programme, and to ensure quality and sustainability of the teaching and learning.*
- *The teaching staff is regularly engaged in professional and teaching-skills training and development.*
- *Promotion of the teaching staff takes into account the quality of their teaching, their research activity, the development of their teaching skills and their mobility.*
- *Innovation in teaching methods and the use of new technologies is encouraged.*
- *Conditions of employment that recognise the importance of teaching are followed.*
- *Recognised visiting teaching staff participates in teaching the study programme.*

3.2 Teaching staff number and status

Standards

- *The number of the teaching staff is adequate to support the programme of study.*
- *The teaching staff status (rank, full/part time) is appropriate to offer a quality programme of study.*
- *Visiting staff number does not exceed the number of the permanent staff.*

3.3 Synergies of teaching and research

Standards

- *The teaching staff collaborate in the fields of teaching and research within the HEI and with partners outside (practitioners in their fields, employers, and staff members at other HEIs in Cyprus or abroad).*

- *Scholarly activity to strengthen the link between education and research is encouraged.*
- *The teaching staff publications are within the discipline.*
- *Teaching staff studies and publications are closely related to the programme's courses.*
- *The allocation of teaching hours compared to the time for research activity is appropriate.*

You may also consider the following questions:

- *How are the members of the teaching staff supported with regard to the development of their teaching skills? How is feedback given to members of the teaching staff regarding their teaching results and teaching skills?*
- *How is the teaching performance assessed? How does their teaching performance affect their remuneration, evaluation and/or selection?*
- *Is teaching connected with research?*
- *Does the HEI involve visiting teaching staff from other HEIs in Cyprus and abroad?*
- *What is the number, workload, qualifications and status of the teaching staff (rank, full/part timers)?*
- *Is student evaluation conducted on the teaching staff? If yes, have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?*

Findings

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

1. One of the main criteria for recruiting faculty staff is their research quality. In addition, faculty staff are offered a three-level program of professional development in didactics. The first level of this program is a compulsory 35-hour "induction course", spread over a year, which leads to an internal certificate. The second and third level of the professional development program are not compulsory. It is not clear how regular or well-attended this type of professional development is.

2. Faculty staff must have obtained a PhD in the area of their teaching or a closely related area. This is adequate for achieving the objectives and planned learning outcomes of the study programme and to ensure quality in teaching. A small number of part-time instructors without a PhD are also employed to teach in the programme. It is not clear if they must complete the 34-hour "induction course" on didactics. External guests, e.g. representatives of relevant companies or state bodies, are also invited to give lectures occasionally.

3. Promotion of faculty staff takes into account the quality of their teaching, research activity, and societal outreach.

4. The use of new technologies is encouraged in teaching.

5. The department has 13 members of faculty (according to https://euc.ac.cy/en/academics/faculty-profiles/faculty-school-of-sciences/, accessed on 1 April 2021). During the site visit, the head of the program

(Dr. Cheng) informed us that there are 18 teaching staff in the program, and that approximately 3 of them are part-time instructors without a PhD. This number of teaching staff is adequate to support the programme of study. The status (rank, full/part time) of the faculty staff is appropriate. The number of external and guest instructors is low and does not exceed the number of permanent staff.

6. Faculty staff collaborate in the fields of teaching and research within the university and with partners outside, e.g. Dr. Cheng's Google-funded Robotics work and Dr. Danidou's EU-funded research. Synergies between research and education are encouraged in the form of faculty-defined project themes that are offered to students. There is teaching staff with publications within the discipline and closely related to the programme's courses.

7. The allocation of teaching hours compared to the time for research activity is not balanced on the offset. The norm is 12 hours of teaching per week. This can be reduced on the basis of obtaining external funding, authoring publications, writing textbooks, etc. using a points-system. According to the Dean of the School of Science, approximately 50% of the school's faculty have 3 to 6 hours teaching reduction per week.

Strengths
A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

1. Dr. Cheng's Robotics lab connects his area of research with teaching introductory programming to students. The Robotics lab is used both for education and for research, exemplified by several participations of Dr. Cheng's team to international Robotics competitions.
2. Close links to domain experts in the area of the programme is a strength. Students seem to benefit from guest lectures, internship opportunities, and hands-on project work.

Areas of improvement and recommendations
A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

1. It is not clear if instructors without a PhD must complete the 34-hour "induction course" on didactics that is compulsory to faculty staff. Instructors without a PhD should not teach without having received any didactics training. In addition, it seems that instructors without a PhD are sometimes asked to teach and be responsible for a whole course (that has been previously designed by a faculty member). This compromises teaching quality.
2. Instructors without a PhD could contribute some lectures, but should not have full responsibility of a whole course.

Please select what is appropriate for each of the following sub-areas:

Sub-area		Non-compliant/ Partially Compliant/Compliant
3.1	Teaching staff recruitment and development	Partially Compliant
3.2	Teaching staff number and status	Compliant
3.3	Synergies of teaching and research	Compliant

4. **Student admission, progression, recognition and certification** *(ESG 1.4)*
   The evaluation considered the following elements:

Sub-areas

    4.1 Student admission, processes and criteria
    4.2 Student progression
    4.3 Student recognition
    4.4 Student certification

4.1 Student admission, processes and criteria

Standards

- *Pre-defined and published regulations regarding student admission are in place.*
- *Access policies, admission processes and criteria are implemented consistently and in a transparent manner.*

4.2 Student progression

Standards

- *Pre-defined and published regulations regarding student progression are in place.*
- *Processes and tools to collect, monitor and act on information on student progression, are in place.*

4.3 Student recognition

Standards

- *Pre-defined and published regulations regarding student recognition are in place.*
- *Fair recognition of higher education qualifications, periods of study and prior learning, including the recognition of non-formal and informal learning, are essential components for ensuring the students' progress in their studies, while promoting mobility.*
- *Appropriate recognition procedures are in place that rely on:*
  - *institutional practice for recognition being in line with the principles of the Lisbon Recognition Convention*
  - *cooperation with other institutions, quality assurance agencies and the national ENIC/NARIC centre with a view to ensuring coherent recognition across the country*

4.4 Student certification

Standards

- _Pre-defined and published regulations regarding student certification are in place._
- _Students receive certification explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed._

You may also consider the following questions:

- _Are the admission requirements for the study programme appropriate? How is the students' prior preparation/education assessed (including the level of international students, for example)?_
- _How is the procedure of recognition for prior learning and work experience ensured, including recognition of study results acquired at foreign higher education institutions?_
- _Is the certification of the HEI accompanied by a diploma supplement, which is in line with European and international standards?_

Findings
A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

1. The EEC saw evidence that students receive appropriate certificates and recognition upon completion of the program, as well as that the program has been accredited by various national and international bodies.
2. The EEC has also observed that student progress in the degree program is adequately tracked and assisted by exams and other forms of assessment so that students can progress in their studies from year to year. Academic advisors and tutors are available to support and monitor student progression and achievement.
3. The EEC has observed that there are clear policies and procedures supporting students' feedback. Although, feedback does not return to the students.
4. Although admission criteria and requirements can range to suit different educational backgrounds and access qualifications, they are limited because they focus only on the high school's leaving certificate, sufficient knowledge and a strong GPA, and also on the knowledge of the English language. The medium of instruction is English; therefore, a language placement test is required of all applicants whose native language is not English, unless these applicants have passed either the TOEFL examination with a minimum score of 550 or 'O' level with Grade 'C' or above or IELTS with a minimum score of 6.5.

Strengths
A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

1. The EEC has observed a high level of satisfaction among students about the program of study and the support they receive (e.g., employment opportunities after graduation) based on students' feedback during this evaluation process.

2. The EUC offers a lot of opportunities to its students to take part in competitions, and as the evidence shows, the EUC has gained a lot of awards through these competitions. As a result, through these competitions, students enhance their knowledge, progress with more flexibility in their studies, and develop their critical thinking.

Areas of improvement and recommendations
A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

1. To help the students' progression, procedures supporting students' feedback should take place on a continuous basis and throughout the semester, and not only in the last two weeks of each semester. Moreover, after the analysis of the feedback, the feedback should be returned to students and be discussed, otherwise the students do not directly benefit from the changes that might happen.

2. During this evaluation process, the EEC has observed that the EUC have some admission criteria and requirements before the students' selection. To make a better selection, the EUC suggests to consider the extra-curricular involvement of the student, its potential for personal growth, and whether the student has prior knowledge related to the desired program of study. The EEC believes that providing specific admission criteria and requirements to students, such as 'A' levels on subjects which are related to the desired program of study, will assure the admittance of students with the appropriate academic background, and hence reduce possible dropout cases.

3. It may be advantageous to actively promote and advertise the positive values and high potential of this program to prospective students (e.g., through secondary school promotion) and relevant stakeholders, in order to attract them.

Please select what is appropriate for each of the following sub-areas:

Sub-area		Non-compliant/ Partially Compliant/Compliant
4.1	Student admission, processes and criteria	Partially Compliant
4.2	Student progression	Compliant
4.3	Student recognition	Compliant
4.4	Student certification	Compliant

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5. **Learning resources and student support** *(ESG 1.6)*
   The evaluation considered the following elements:

Sub-areas
5.1 Teaching and Learning resources **5.2 Physical resources** **5.3 Human support resources** **5.4 Student support**

5.1 Teaching and Learning resources

Standards

- *Adequate and readily accessible teaching and learning resources (teaching and learning environments, materials, aids and equipment) are provided to students and support the achievement of objectives in the study programme.*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose.*
- *Student-centred learning and flexible modes of learning and teaching, are taken into account when allocating, planning and providing the learning resources.*

5.2 Physical resources

Standards

- *Physical resources, i.e. premises, libraries, study facilities, IT infrastructure, are adequate to support the study programme.*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose and students are informed about the services available to them.*

5.3 Human support resources

Standards

- *Human support resources, i.e. tutors/mentors, counsellors, other advisers, qualified administrative staff, are adequate to support the study programme.*

- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose and students are informed about the services available to them.*

5.4 Student support

Standards

- *Student support is provided covering the needs of a diverse student population, such as mature, part-time, employed and international students and students with special needs.*
- *Students are informed about the services available to them.*
- *Student-centred learning and flexible modes of learning and teaching, are taken into account when allocating, planning and providing student support.*
- *Students' mobility within and across higher education systems is encouraged and supported.*

You may also consider the following questions:

- *Evaluate the supply of teaching materials and equipment (including teaching labs, expendable materials, etc.), the condition of classrooms, adequacy of financial resources to conduct the study programme and achieve its objectives. What needs to be supplemented/ improved?*
- *What is the feedback from the teaching staff on the availability of teaching materials, classrooms, etc.?*
- *Are the resources in accordance with actual (changing) needs and contemporary requirements? How is the effectiveness of using resources ensured?*
- *What are the resource-related trends and future risks (risks arising from changing numbers of students, obsolescence of teaching equipment, etc.)? How are these trends taken into account and how are the risks mitigated?*
- *Evaluate student feedback on support services. Based on student feedback, which support services (including information flow, counselling) need further development?*
- *How is student learning within the standard period of study supported (student counselling, flexibility of the study programme, etc.)?*
- *How students' special needs are considered (different capabilities, different levels of academic preparation, special needs due to physical disabilities, etc.)?*
- *How is student mobility being supported?*

Findings

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

1. Students are offered adequate and readily accessible teaching and learning resources, physically and online. These resources support the study programme, and are scalable to changing circumstances and fit for purpose.
2. The modes of teaching and learning seem flexible and student-centred. Students seem to be informed about the above resources.
3. There is also sufficient evidence of human support, in the form of student advisors, student counselling, and student affairs, e.g. for recruitment, internships, student exchange, accommodation, finance, disability, psychological support, international students, full/part time students, and student complaints.
4. These human resources are adequate to support the study programme, fit for purpose, and scalable to changing circumstances. Mobility within and across higher education is supported.
5. Students are informed about the above resources.

Strengths

A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

1. There seems to be plenty of personal contact and support to the students.
2. Both administrative and teaching staff seem flexible, approachable and willing to help.

Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

1. It is not clear if students are always informed about their IPR when working on a project with a company. This is an important practice in any entrepreneurial endeavour. IPR options should be clearly communicated in advance to students, offering them different options of collaboration, but also training them to consider such issues in their future careers.

Please select what is appropriate for each of the following sub-areas:

Sub-area		Non-compliant/ Partially Compliant/Compliant
5.1	Teaching and Learning resources	Compliant
5.2	Physical resources	Compliant
5.3	Human support resources	Compliant
5.4	Student support	Partially compliant

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6. **Additional for doctoral programmes** *(ALL ESG)*

> ### Sub-areas
> **6.1 Selection criteria and requirements**
> **6.2 Proposal and dissertation**
> **6.3 Supervision and committees**

6.1 Selection criteria and requirements

Standards
- *Specific criteria that the potential students need to meet for admission in the programme, as well as how the selection procedures are made, are defined.*
- *The following requirements of the doctoral degree programme are analysed and published:*
    - *the stages of completion*
    - *the minimum and maximum time of completing the programme*
    - *the examinations*
    - *the procedures for supporting and accepting the student's proposal*
    - *the criteria for obtaining the Ph.D. degree*

6.2 Proposal and dissertation

Standards
- *Specific and clear guidelines for the writing of the proposal and the dissertation are set regarding:*
    - *the chapters that are contained*
    - *the system used for the presentation of each chapter, sub-chapters and bibliography*
    - *the minimum word limit*
    - *the binding, the cover page and the prologue pages, including the pages supporting the authenticity, originality and importance of the dissertation, as well as the reference to the committee for the final evaluation*
- *There is a plagiarism check system. Information is provided on the detection of plagiarism and the consequences in case of such misconduct.*
- *The process of submitting the dissertation to the university library is set.*

6.3 Supervision and committees

Standards
- *The composition, the procedure and the criteria for the formation of the advisory committee (to whom the doctoral student submits the research proposal) are determined.*
- *The composition, the procedure and the criteria for the formation of the examining committee (to whom the doctoral student defends his/her dissertation), are determined.*
- *The duties of the supervisor-chairperson and the other members of the advisory committee towards the student are determined and include:*
    - *regular meetings*

- o *reports per semester and feedback from supervisors*
  - o *support for writing research papers*
  - o *participation in conferences*
- *The number of doctoral students that each chairperson supervises at the same time are determined.*

You may also consider the following questions:

- *How is the scientific quality of the PhD thesis ensured?*
- *Is there a link between the doctoral programmes of study and the society? What is the value of the obtained degree outside academia and in the labour market?*
- *Can you please provide us with some dissertation samples?*

Findings

A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

Click or tap here to enter text.

Strengths

A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

Click or tap here to enter text.

Areas of improvement and recommendations

A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.

Click or tap here to enter text.

Please select what is appropriate for each of the following sub-areas:

Sub-area		Non-compliant/ Partially Compliant/Compliant
6.1	Selection criteria and requirements	Choose answer
6.2	Proposal and dissertation	Choose answer
6.3	Supervision and committees	Choose answer

D. Conclusions and final remarks

Please provide constructive conclusions and final remarks which may form the basis upon which improvements of the quality of the programme of study under review may be achieved, with emphasis on the correspondence with the EQF.

The overall conclusion of the EEC on the program under consideration is that the Computer Information Systems is a good program that has excellent prospects for students to find a position in the professional market. There is dedicated teaching and administrative staff and as the program is limited in size (currently 44 students) with a high staff to student ratio, guidance is quite personalized. The recent revision of the program with a corresponding name change to Computer Information Systems has been a good move and has strengthened the overall program.

In the above, in every section specific recommendations were given. Below we give the two main recommendations that would be good to take up in the coming years:

- The program is geared towards educating professionals. Being a university degree the program could be made more research and academic skills driven. This would not only give better opportunities for those students that aim for an academic career, it will also provide a more academic mindset for those who continue in the professional market. To that end, one of the major things to consider is a better balance between the teaching and research time the staff has.
- The current program has a limited number of students. With its focus on an important topic and being taught in English as well as the central location of Cyprus there are excellent opportunities for growth. Management, teaching and administrative staff should actively pursue this, but also start preparing for this as it would imply a lower staff to student ratio and hence less room for individual guidance.

E. Signatures of the EEC

Name	Signature
Prof. Marcel Worring (chair)	
Professor Christina Lioma	
Professor D.K.Arvind	
Michalis Michael	

Date: 8 April 2021