

Doc. 300.1.1

Date: Date.

External Evaluation Report

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

- **Higher Education Institution:**
Name
- **Town:** Town
- **School/Faculty (if applicable):** School/Faculty
- **Department/ Sector:** Department/Sector
- **Programme of study- Name (Duration, ECTS, Cycle)**

In Greek:

Programme Name

In English:

Programme Name

- **Language(s) of instruction:** Language(s)
- **Programme's status:** Choose status
- **Concentrations (if any):**

In Greek: Concentrations

In English: Concentrations



The present document has been prepared within the framework of the authority and competencies of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, according to the provisions of the “Quality Assurance and Accreditation of Higher Education and the Establishment and Operation of an Agency on Related Matters Laws of 2015 to 2019” [N. 136 (I)/2015 to N. 35(I)/2019].

A. Introduction

This part includes basic information regarding the onsite visit.

Members of the External Evaluation Committee (EEC) evaluated the accreditation of the following programme: Computer Engineering (4 academic years, 240 ECTS, BSc) offered by the Department of Electrical Engineering, Computer Engineering and Informatics of Frederick University. Because of the Covid-19 pandemic, the evaluation took place in an online manner. In particular, at May 17, 2021, the members of the EEC held a preliminary meeting via Zoom prior to the remote visit day. During this pre-remote-visit meeting, the EEC members discussed the evaluation process, the preparation of the remote visit, and also obtained the required documentations as well as information for the evaluation. The remote visit happened at May 21, 2021. During the remote visit day, the EEC first met the Rector and Vice Rector of Frederick University and was provided with a short presentation of the university. Then, the EEC had a constructive discussion with the members of the internal evaluation committee, and was provided with a presentation about the structure of the Department of Electrical Engineering, Computer Engineering and Informatics which offered the programme to be evaluated. After that, three important and detailed meetings were held, one to discuss the programme's standards, admission criteria, learning outcomes, the content and the design of the programme, one to discuss the academic qualifications of the teaching staff and the implementation of the courses of the programme, and one to discuss with the students and graduates for their feedback about the learning outcome and assessments of the programme. The EEC has also offered the chance to meet the members from the administrative team and the students enrolled on the programme, before the exit discussion with the department, which concluded the remote visit.

During the whole evaluation process, the EEC has obtained substantial and insightful information regarding the operation, structure and future plans of the Computer Engineering Programme offered by Department of Electrical Engineering, Computer Engineering and Informatics at Frederick University. In particular, the department has provided a comprehensive documentation. Based on these information collected from the submitted documentation and the remote visit, the EEC can conclude that the Department and the BSC program in Computer Engineering being evaluated have high standards and meet the quality expectations. This evaluation report describes how the standards are met and provides additional suggestions for improving the program.

At last, the EEC would like to take the opportunity and acknowledge the arrangements made by Frederick University which facilitate the evaluation of the program and the writing of this evaluation report.

B. External Evaluation Committee (EEC)

| <i>Name</i> | <i>Position</i> | <i>University</i> |
|-------------------------------------|---|--------------------------------------|
| Zhiguo Ding (Chair) | Head of the Communication Research Cluster | University of Manchester |
| Christina Lioma | Head of the Machine Learning section, Head of the Information Retrieval Lab | University of Copenhagen |
| George K. Karagiannidis | Head of Wireless Communications & Information Processing (WCIP) Group | Aristotle University of Thessaloniki |
| Chrysovalantis Christodoulou | Student | Public University of Cyprus |
| Name | Position | University |
| Name | Position | University |

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.**

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

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*

- *includes well-structured placement opportunities where appropriate*
- *is subject to a formal institutional approval process*
- *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*
- *is regularly monitored in the light of the latest research in the given discipline, thus ensuring that the programme is up-to-date*
- *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*
- *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:*
 - *selection criteria*
 - *intended learning outcomes*
 - *qualification awarded*
 - *teaching, learning and assessment procedures*
 - *pass rates*
 - *learning opportunities available to the students*
 - *graduate employment information*

1.4 Information management

Standards

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

The ECC has found that Programme of Computer Engineering has been well structured, follows well-established principles, and reflects best practice. It meets the standard expected at international universities. There is a sufficiently efficient mechanism for feedback, where for each course, students provide their feedback via formal questionnaires and faculty members can adjust their teaching according to these feedback. The students have also been offered good opportunities for industry placements and internships. In addition, the faculty members have tried to bridge the gap between teaching and research, by feeding their research to their teaching. The department has a well organized administrative team, which support students and staff well. The student-to-staff ratio is 1:5, which is good. The dropout rate is 6.4% and the failure rate is 17%, which are a bit high.

Strengths

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

The ECC has found that Programme of Computer Engineering has been well maintained by the Department of Electrical Engineering, Computer Engineering and Informatics. In particular, the programme has been bi-yearly reviewed by the department. As a result, this programme has been offered to students at international standards for topics, quality of teaching, resources and infrastructures. The faculty members and the administrative staff have spent a great amount of efforts to build a supportive and friendly culture, which takes student feedback into account, and well support students for their studies. This has been particularly important during the Covid-19 pandemic, where the department has provided various good practices to avoid too much disruptions to the students' learning. The student-to-staff ratio is low, which means that students are provided with sufficient support.

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.

While the department has provided a formal channel for students to feed back their opinions and suggestions for individual courses, it is not clear to students how the department has taken these feedback into consideration. The department may want to build a regular staff-student meeting, which not only helps the students to understand the actions taken by the department towards the student feedback, but also helps the department to detect any potential issues at a very early stage, instead of waiting until the end of each term. Furthermore, such a staff-student meeting can ensure that students are involved in the development of the programme and the update of the curriculum.

Another recommendation is that the department may want to introduce a procedure which ensures that students can provide their suggestions to the whole programme, instead of just to individual courses. As a result, the curriculum of the programme can be effectively updated and tailored to students' needs.

Regarding the regularly carried course review, the department may want to introduce a more formal procedure, where a formal course review report can be generated periodically, potentially problems can be identified earlier, and it is useful to involve external examiners for such course review activities.

The progression rate of the students on this programme is a bit low, and the department may want to provide extra support to those students and avoid too much dropout/failure. In addition, more effective actions to improve gender and ethnic equality among students as well as staff are recommended.

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

| Sub-area | | <i>Non-compliant/ Partially Compliant/Compliant</i> |
|----------|--|---|
| 1.1 | Policy for quality assurance | Compliant |
| 1.2 | Design, approval, on-going monitoring and review | Compliant |
| 1.3 | Public information | Compliant |
| 1.4 | Information management | Compliant |

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

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 moderation 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 covid in order to make the teaching process more effective?*
- *How is it ensured that theory and practice are interconnected in teaching and learning industrial speaker?*
- *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.

The Department provides a supportive and encouraging learning environment to students, where students are not only supported by faculty members but also by the well organized administrative team. In addition, the department has also provided an encouraging environment to the teaching faculty members. The structure of the program reflects well the student needs for both what concerns education and personal wellbeing. The department implements a flexible process of teaching and learning which ensures the quality of the provided programme. The carried out teaching methods are appropriate. The department also integrates the applications and industry relevance into the programme teaching by providing more practical knowledge and experience to students.

Strengths

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

The processes are well structured and clear. There is an overall understanding of the requirements for delivering of the programmes at international standards. The students on the programme have been well looked after, particularly during the Covid-19 pandemic. In particular, during the pandemic, the students were offered well organized blended teaching, where interactive online lectures were combined with small-group face-to-face lab activities. These good practices have been well acknowledged and appreciated by the students on the programme. The teaching staff has been offered clear guidance, and there is a tutoring programme available to junior staff for their teaching. The department provides a good support to students for finding industrial placement and interships.

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.

More actions for the moderation of assessments and marking are recommended. Currently, the main moderation mechanism for assessments is to ask unit leaders for checking the assessments. It is important to involve external examiners for such assessment moderations, where external examiners can check not only the formality of the assessments, but also the appropriateness of the content, given the fact that they are experts in the relevant fields. Furthermore, it is also important to introduce a formal procedure for marking moderation, which can ensure that the mistakes during the marking procedure can be detected at an early stage.

The department has a good practice to help junior staff for the preparation of their first teaching. It will be necessary to introduce a formal procedure for the education of academic teaching practice, similar to the training programmes offered in many international universities for academic practice and higher education.

The programme covers very well fundamental areas of computer science as well as some more applied domains. However, a stronger connection with industry could offer the students useful insights on industry practices and industry needs making them better prepared for their job seeking at the end of the programme. Actions to introduce formal procedure to involve students into the research activities carried out by the department are also recommended.



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

| Sub-area | | <i>Non-compliant/ Partially Compliant/Compliant</i> |
|----------|---|---|
| 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)

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.

The EEC considered the submitted documentation and met with staff to understand the clarity and fairness of the approach on how the university recruits, appoints, inducts and supports academic staff in delivering high quality teaching, research and student experience. Based on these, the recruitment and selection procedure seems to be fair and clear, with a bit of room for improvement, as explained below.

There are currently 14 tenured or tenure-track academic staff involved in the program delivery. All faculty staff have a PhD. There are 70 students enrolled in the program. The teacher to student ratio is 1 teacher for every 5 students. This is much lower than the teacher to student ratio of the whole university (1 teacher for every 15 students, approximately).

The workload of faculty staff is approximately 40%-60% teaching and 40%-60% research. On average, faculty staff has had approximately three research publications published per staff per year, in the last five years.

The university is supporting its academic staff to undertake research and publish their research findings. Support is in both financial and time allowance terms, and includes for instance:

- Compulsory training program for newly-hired staff, with an option to reduce their teaching load for an initial period;
- Research support schemes on how to write research applications;

- Internal faculty scheme for funding based on points, so that new faculty or faculty without a lab are eligible for points assessment.

Rules for teaching buy-out and for sabbaticals are predefined and published.

The promotion procedure is the rector's responsibility. The procedure is clearly communicated to faculty staff. Faculty can apply for promotion maximum twice. If they fail the second time too, then they have no more chances.

The CVs of existing staff demonstrate very good evidence of appointed academic staff having prior and relevant teaching and research experience in other higher education institutions. Research expertise and publication records are relevant and consistent to the program of study.

As a whole the teaching staff is highly commended by the students.

Strengths

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

The staffing base and the low number of students have contributed to an excellent Student-Staff Ratio (SSR) that is five to one. Staff expertise is overall consistent with the program of study and it seems that they receive appropriate support to undertake research (flexible points-based scheme to support faculty in their research development).

Newly appointed staff have to undergo a probation process, while all other staff have to undergo an annual performance evaluation review.

There are clear criteria for different teaching ranks (professor, associate professor etc) and clear guidelines for progression and promotion.

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) There is a lack of organised, structured and compulsory training support for faculty staff. This should be integrated into the newly established centre for personal and professional development for staff, which is about to begin operating. 2) There are no procedures for staff peer review during teaching. 3) Student aggregated feedback following the course evaluation survey should be used in the program review procedures. There is a student survey which gathers student feedback which is being used for staff evaluation purposes but not used as part of the annual program of study review and self-assessment. 4) New academic staff are not always assigned a mentor. 5) Teaching assistants or lab assistants receive no formal didactic training. This should be amended. 6) Even though there is a sabbatical scheme, no faculty staff has ever made use of it. The reasons behind this should be investigated and the scheme should be revised accordingly.



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

| Sub-area | | <i>Non-compliant/ Partially Compliant/Compliant</i> |
|----------|--|---|
| 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)

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.

Appropriate admission requirements are in place and clearly communicated. The minimum requirements for being accepted to the program are decided by the department, and they are currently 75% or equivalent across all subjects. All applicants must take a test in Mathematics and English before their enrolment. Failing the test requires an enrolment with a probation status with the requirement to attend foundation courses. The medium of instruction is English and a proficiency certificate is the minimum language requirement.

There are appropriate plans to support student progression and attainment. Academic advisors and tutors are available to support and monitor student progression. The grading and degree classification systems are comparable to other national and international Higher Education Institutions.

Students' progress given the learning outcomes is continuously monitored with exams, tests, projects, practical assignments. Students receive constructive feedback on their progress in both courses and practical project work.

There is no limit on re-examinations for students. Student may complain about their exam grade up to two weeks after the grade announcement. They have the right to ask for a re-assessment. Overall, the procedure for examinations and related complaints is appropriate, predefined and clearly communicated to students.

The program operates on a credit accumulation basis. If a student has not passed a course, he/she can only proceed taking courses whose prerequisites he/she has passed. Overall, if the GPA of a student is less than 5, he/she enters

academic probation. An academic advisor discusses this academic path with the student. Twice per semester there is consultation week for students.

Teaching and facilities are offered on both campuses, so students do not have to travel away from their campus. Each campus is assigned a campus coordinator.

About 15% of the students extend the duration of their study, but the reasons behind this have been investigated and have to do mainly with absorption of graduate by the industry before the program is completed.

Strengths

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

Computer storage is offered to students.

There are initiatives to retain and attract more students, for instance distance learning, joining this program with other programs.

Students are offered counselling and support on academic, financial, career, internship/exchange, legal & IPR, psychological, disability, and other issues.

Students do not have to travel to another campus for lectures or services.

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.

A formal feedback on assessed coursework and assignments should be consistently provided in all modules.

The number of students is too low, and this compromises the long term sustainability of this program. The EEC recommends the development of an action plan to help increase the number of applicants and of enrolled students over the next years.

There are very few female students and there seems to be no structured and long-term plan for turning this around.

Some students reported that they had to travel to another campus for an elective course, or that an elective course was cancelled when there were not enough students enrolled. Action should be taken so that this does not happen regularly.

Some projects are sometimes assessed by the supervisor and by an external examiner. It is not guaranteed that the external examiner has a PhD. This compromises the quality of the program.



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

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

5. Learning resources and student support (ESG 1.6)

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.

The students confirmed in the meeting with EEC that they are very satisfied from the department's policies and mechanisms for communication with the faculty and admin staff. Furthermore, they are also satisfied with the study programme as well as with its flexibility. The department offers to the students free of charge software packages as Matlab, etc. They have access through the VPN of the university. Also, it offers free of charge to the students cloud computing application, as the one drive.

The offered facilities and learning resources are of high level. Also, the university provides access to major databases, as ACM, Science Direct, etc, through the participation in the Cyprus Academic Libraries Consortium (CALC).

The Department supports and encourage students' mobility, through several relevant programs as Erasmus, etc. Also, the Department has a very active participation in different mobility programs with third countries, as Erasmus Mundus, INDACT, etc.

It is very positive that the University provides scholarships and financial support for the students through several programs, as the Freshman Scholarships, Academic Performance Scholarships, etc.

There are other assessment methods in addition to the the end-of-semester final exams. Also, the department gives special attention to the project, which in most of the times is research oriented.

Strengths

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

The learning resources and student support services are in a very good level. This was confirmed from both students and staff members during the face-to-face evaluation. This is very critical, since it allowed the smooth and efficient teaching during the pandemic.

A specific process exists for students with learning difficulties or hidden disabilities.

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.

Although there is ongoing development of new teaching Labs, it is very critical the department to develop a 5-years plan for refreshment of the teaching Labs' facilities, due to the dramatic change of the technology in the last years. Especially, the new facilities should include modern methods of lab education as virtual and augmented reality, artificial intelligence, etc.

It is not clear if there are adequate facilities for students with moving disabilities, which allow them to attend teaching and labs, with minimum assistance. The department should give special attention on this issue.

The program chair should ensure that the offered free of charge software packages should be available to all students for their courses, homework, etc.

The department should find a way to provide free access to the students to IEEE Xplore. This is the most important database for computer engineering.

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

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

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*

- reports per semester and feedback from supervisors
- support for writing research papers
- 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 | | <i>Non-compliant/ Partially Compliant/Compliant</i> |
|----------|-------------------------------------|---|
| 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 EEC evaluated the BSC program of Computer Engineering offered by the Department of Electrical Engineering, Computer Engineering and Informatics at Frederica University. The EEC members have been provided with the detailed accreditation report and also a remote site visit which offered the EEC to have direct discussions with the staff and the students in the department. Based on these provided information, the EEC concludes that the program being evaluated have high standards and meet the quality expectations. The Covid-19 pandemic has caused an unprecedented situation, and the ECC is particularly impressed by the efforts of the department to provide proper and fast efforts to adjust the teaching and support students. In particular, blended teaching was carried out, where online lectures were combined with face-to-face lab activities. Students enrolled in the programme confirmed that they appreciate the interactive online lectures and the extra help from the department. Overall, the ECC is convinced that the program has been delivered at an international standard, and the Department offers an excellent learning environment for students.

There are a few areas of improvements which have been identified by the EEC, as listed in the following.

1. Actions for more interactive student feedback mechanisms are recommended.
2. More effective moderation mechanisms for assessments and marking should be introduced.
3. Formal training programmes for academic teaching and practice can be particularly helpful to the faculty members.
4. Actions to increase the cohort size and improve the sustainability of the programme are needed.
5. Actions to improve gender diversity among students and staff are recommended.
6. Actions to have a carefully planned timetable and ensure that the use of two campuses will not cause disruption to students' learning are needed.
7. More efforts to update the teaching facilities in order to accommodate the updated teaching are recommended.
8. Actions for disability and learner support are recommended.



E. Signatures of the EEC

| <i>Name</i> | <i>Signature</i> |
|---------------------|------------------|
| Click to enter Name | |
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Date: Click to enter date