Doc. 300.1.1

Date: 16 November 2022

External Evaluation Report

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

- **Higher Education Institution:**
Ctl Eurocollege

- **Town:** Limassol

- **School/Faculty (if applicable):**
n/a

- **Department/ Sector:**
Computer Science

- **Programme of study- Name (Duration, ECTS, Cycle)**

In Greek:

Πληροφορική (4 ακαδημαϊκά έτη, 240 ECTS, Πτυχίο(BSc))

In English:

Computing (4 academic years, 240 ECTS, Bachelor (BSc))

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

- **Programme's status:**

Registered but not evaluated

- **Concentrations (if any):**

In Greek: Concentrations
In English: Concentrations

A. Introduction

This part includes basic information regarding the onsite visit.

Following an invitation by the Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA), the External Evaluation Committee (EEC) had the opportunity to evaluate the BSc Programme in Computing offered by Ctl Eurocollege in Limassol (Cyprus). The evaluation of the programme took place physically on site on 15 November 2022. Prior to the visit, the EEC was supplied with relevant documentation. On the day of the visit, the EEC met with the senior management team and academic faculty responsible for delivering the BSc programme, as well as with administrative and other support staff, students and graduates from this programme. The EEC had the opportunity to ask questions and request further information, which was provided one day after the visit.

The meetings and provision of the extra material requested by the EEC were facilitated by Natasa Kazakaiou from CYQAA. The EEC wrote this report on 16 November 2022.

This report contains the findings of the visit and the resultant evaluation of the EEC. Based on the examination and evaluation of the accreditation material and the visit, the EEC concludes that some required standards are met, others are partially met, and others are not met. This report elaborates on this and makes recommendations for improving the programme under evaluation.

B. External Evaluation Committee (EEC)

Name	Position	University
Christina Lioma	Professor	University of Copenhagen
D. K. Arvind	Professor	University of Edinburgh
Xianghua Xie	Professor	Swansea University
Ioannis Zapitis	Professional body representative	ETEK
Krinos Vasileiou	Undergraduate Student Computer Engineering and Informatics (BSc)	Cyprus University of Technology

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.*

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*

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*

> - *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?*

Strengths

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

The programme has a clear and strong focus on real world application and practical experience. This is reflected in the industrial placement opportunity that the college intended to provide to their students in Software Engineering courses and the final year degree project.

There is a clear effort from staff to enhance the current 4-year programme in order to meet the accreditation standards. The curriculum changes that the staff shared with the panel during the site visit are encouraging and are in the right direction.

There is a clear attempt by the college to ensure a uniform teaching experience. For instance, all modules follow the same design template in setting up course delivery and assessment.

From the conversation with the student representatives, the feedback from students is generally positive and practical elements of the teaching are appreciated by the students.

It seems that the students are very well aware of the student wellbeing support in the college and the wellbeing officer seems very clear on the procedures and process.

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 programme under review was developed by modifying the existing four year uncredited programme. Although there are encouraging developments in enhancing the structure and contents, the overall thinking is not clear. As a consequence, during the site visit, the staff struggled to provide a clear view of year-to-year progression. From the conversation with all teaching staff involved in the delivery of the current programme, it is clear that there is a lack of participation from part-time teaching staff, who are the majority of the lecturing delivery, in designing the new degree programme. It is also essential that the sector standards are followed, e.g. ACM Curricula Recommendations, to avoid questionable categorisations of courses. It seems that staff are not aware of such resources that are publicly available. It is further recommended that comparisons be made with established HE institutions that offer similar degree programmes.

A clear overall thinking on this degree programme and a shared teaching ethos can provide a good foundation for the design of the programme and its courses. Teaching of Computer Science ethical and professional issues probably should be included in the programme. This is not sufficiently covered by the ethical hacking course that is currently included in the programme. Certain elective (or optional) courses do not seem to be tailored for this computing degree, e.g. MGT121 Management (presented during site visit).

The committee also recommends stronger participation from industry in designing the degree programme and in periodic reviews of the programme structure and courses. This has not been done so far. The committee also suggests that the policy for quality assurance of the programme of study actively supports the involvement of external stakeholders.

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 programme of study under consideration is a 4-year BSc in Computing (240 ECTS / Bachelor of Science) plus an optional foundation year, with the learning objectives including programming skills, analytical thinking, problem solving, and dealing with real-world applications.

The programme of study spans over eight semesters and is based on a current uncredited 4-year BSc programme. The content of the programme covers a range of topics that are appropriate to the subject area. However, there are several design issues. There is a lack of clear structure, progressing from one year to the next. The programme design needs to be benchmarked against widely accepted sector standards, e.g. ACM Curricula Recommendations. Student learning outcomes are not always clear or consistent. Information for students regarding learning and teaching is generally clear and accessible.

There is a policy of quality assurance in place for this programme of study. This policy has a formal status and is publicly available. This policy is supported by the following procedures:

- annual programme review
- faculty and course evaluation
- student satisfaction survey
- suggestion/complaint box
- support for students with poor academic performance
- counselling
- assessment and staff performance
- faculty staff self-appraisal
- staff and development support.

There is representation from teaching staff, administrative staff and the student body in the above procedures.

It is recommended that meeting minutes, such as exam boards, should be kept and made readily available to staff, external and students where appropriate.

Information on the expected amount of hours work for each course should be made publicly available.

Student numbers currently are small and hence it is difficult to assess the progression rates. Nonetheless, it is noted that last year's progression from year one to year was poor. The underlying issues should be examined and mitigating measures should be put in place where appropriate.

KPI information was not provided to the EEC.

Data collection seems to be generally carried out effectively. However, follow-up activities, in some areas, seem weak. For example, there is no initiative in attracting more female students to the programme. No such strategy was presented to the EEC, nor included as a weakness in the discussions with the EEC.

Student feedback is collected but the scope of the feedback should be looked at. The EEC was shocked to learn from the students that they have little or no peer contact outside the classroom. This kind of feedback should be collected and follow-up actions should have taken place.

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	Partially compliant
1.2	Design, approval, on-going monitoring and review	Partially compliant
1.3	Public information	Compliant
1.4	Information management	Partially compliant

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

There is clear evidence that the college has a formal process to ensure teaching quality and maintain assessment standards. However, there is no independent external oversight in any form. The committee strongly recommends the adoption of independent external examiners to check curriculum design, course assessment, and degree classification. These are essential to ensure good practices are followed.

From the conversations with key members of staff during the site visit, there are worrying signs that students may not be offered the same learning opportunities. Whilst there is strong and perhaps welcomed drive to engage with industry in Software Engineering courses and the final year degree projects, it is evident from the discussions that staff intend to provide rather different learning opportunities to students according to their academic performance. It is one thing to differentiate students based on academic ability in order to bring them to a level playing field, but entirely a different one if the perceived weaker ones do not have an equal opportunity in learning (whether it is practical skills or theoretical ones).

The supervision of the degree projects is a concern in that the required engagement between students and their supervisor are on a monthly basis. Although this is a minimum requirement set by the College and in practice it may well be more frequent than monthly meetings, the expected contact time is too low. The norm in established institutions for a Bachelor degree is close to a weekly basis.

For courses and projects that involve industrial placement, there are procedures and requirements in place to ensure sufficient student oversight. However, this may need to be strengthened to ensure student welfare and learning outcomes. For example, remedial measures should be made clear to both students and staff in the event that project or work is not progressing satisfactorily.

The college seems to be applying rather rigid rules when it comes to course design and assessment. Almost all courses are assessed with the same weightings between practical and written exam, that is 35% coursework, 5% attendance and participation, and 60% written exam. There is no differentiation between more practical focused courses and more theory focused courses. Changes are necessary in order to more effectively assess learning outcomes.

Currently there are three permanent core computer science staff. The dedication from the staff is encouraging and commendable. However, the delivery of the programme is heavily reliant on part time staff. This raises the question of consistency in teaching delivery. The sample lecture the committee attended during the site visit seems to be not entirely well organized. The committee appreciates that the staff might have been distracted by the EEC site visit and that this particular lecture may not be representative. Nevertheless, from the conversation with current students and staff, for example, the different arrangement of office hours for permanent and part-time staff causes confusion to students. The level of involvement from part time staff in enhancing teaching practices and teaching material is also less clear. It is critical that the college has the critical mass of in-house expertise in delivering specialized courses.

The student numbers are currently small, i.e. 22 students across four years. It is hence even more important to ensure that students have a rich environment to socialise and support each other. From the conversation with current students and recent graduates, this is a particularly weak area. Students do not know each other from the same year, even after several years into the study. More work and measures must be put in place to improve student life in the college.

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.*

Sub-areas

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

    2.2 Practical training

    2.3 Student assessment

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 curriculum of the proposed BSc in Computing has been influenced by the current Diploma programme and by the existing unaccredited BSc in Computer Science degree programme. The development of the curriculum was carried out by a core of 3 permanent faculty members who presented the points of departure from the existing BSc in Computer Science degree to the proposed BSc in Computing degree. However, the committee had the following concerns:

1. Content and depth of the Degree programme: the Degree programme lacks coherence and gives the impression of having been patched together from the existing Diploma programme. The developers would do well to conform with the widely-accepted ACM taxonomy of topics for taught Computer Science and Artificial Intelligence courses.

2. Once accredited, the quality of the BSc in Computing degree programme should be assured regularly: given the small size of the Computer Science faculty an independent oversight of the degree programme is difficult, and it is imperative that a system of External Examiners is put in place to ensure that quality of teaching, examination and action on student feedback is maintained.

3. The College should appoint an External Advisory Board comprising of alumni, industry representatives and academics who can be a sounding board and provide advice on the course curriculum content and formalise existing personal industrial contacts for industrial placements during student internships and final year project.

Regarding student assessment, exam marking is not anonymous, and it is performed by the teacher of the module in question and one more member of faculty. There are processes in place for resolving grade disputes. A formal procedure for student appeals is in place. No external censors are involved. The regulations for assessment take into account mitigating circumstances.

Some opportunities for industrial projects are included in the programme. There are also opportunities for summer internships with local industry, such as KPMG, Technologos and Neocleous. However, the opportunities appear late in the programme. The two 4th year students of the programme that the EEC interviewed had not been exposed to any industrial project in the first three years of their studies. The EEC recommends that industrial exposure is included earlier on in the programme of study.

· 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)?

overall poor in terms of planning, delivery and level of engagement. The teacher did not even know that the module that he was teaching was offered to both Diploma and BSc students (he informed the EEC that this was only a Diploma module). We found neither evidence of truly student-centered approaches to teaching or learning, nor any effort on developing and supporting autonomous learners. Core pedagogical elements were missing from the lectures, such as communicating the planned learning objectives of the lecture at the start and also wrapping up with them, pacing the lecture to keep student attention, and facilitating active engagement. Based on the video lectures, the physical lecture and on interviews with students, the EEC concludes that teaching methods are outdated. This is linked to the point we make further down in the report about the lack of didactic and pedagogical training for teaching staff at the college.

The students interviewed by the EEC pointed out that the academic level of the lectures was not advanced enough. This remark is aligned with what the EEC observed after reviewing the academic curricula of the programme modules and also after discussions with the programme coordinator and teaching staff.

The students interviewed by the EEC also pointed out that more activities were needed for students in class. They did not know who the other students in their year were. They did not have a way to contact other fellow students from the same class via the online platform. They did not have social or athletic activities to bring them together. The college administration informed us that they do not allow students to interact via the online platform for GDPR issues. This is easily solved by asking students to give their permission for their name and photo to be displayed within the group of people enrolled in a class. This point is important because it promotes student interaction, collaboration, and their social development, which is currently substandard, despite the very small class sizes (on average, between 2 and 15 students). Overall the EEC concludes that the present process of teaching and learning does not adequately support students' individual and social development.

The organisation and the content of practical training for some modules appears to vary according to the teacher's perception of student performance. Specifically, for the Software Engineering modules, the teacher informed the EEC that only good students are invited to work in industrial projects. The remaining students work in non-industrial projects. This is an alarming practice. All students should be offered the same level of learning opportunities. There should be no discrimination or hindrance in the teaching and learning material and experiences that students are exposed to.

When grading student work, written feedback is not always given alongside the grade. This point should be remedied. Written feedback should always accompany graded work to support the development of the learner. This feedback should be in written form, should be given to all students for all submitted work, and it should clearly demonstrate the extent to which the intended learning outcomes have been achieved. Communicating feedback on an ad hoc basis if and when students request an explanation of their grade does not support the learning process adequately enough.

Overall, the EEC recommends the following improvements:

Strengths

The faculty members, both full-time and part-time, appeared dedicated, experienced and motivated to deliver the course.

An existing BSc in Computer Science is being delivered successfully albeit to a small cohort of less than 10 students each year.

The processes for running a BSc in Computing course are in place with the provision that the recommendations for improvement are carried out.

Student assessment is carried out in accordance with the stated procedures. An Examination Board scrutinises the question papers each semester ahead of the examinations, which is a good practice. The Examination Board also performs random checks on examination grades to ensure grading is consistent and fair.

The marking of final year projects follows accepted norms of good practice in which two markers (the supervisor and another faculty member) evaluate independently based on a common rubric and then discuss to arrive at a final mark.

It is positive that visiting lecturers are also involved occasionally to provide guest lectures.

The fact that class sizes are quite small provides a base for a more personalised learning experience.

Students are encouraged to take an active role in creating the learning process and also to register complaints regarding the process of teaching and learning, indirectly via questionnaires as part of the quality assurance process.

The teaching process is overall respectful and attentive to the diversity of students and their needs, enabling flexible learning paths. The EEC saw evidence of this flexibility in the form of extra assistance and personalized guidance for students, when needed.

Practical and theoretical components are interconnected in this programme.

Areas of improvement and recommendations

The teaching methods are rather traditional, with no evidence of innovative, more interactive, methods. Specifically, the two video lectures that the EEC watched displayed familiarity by the instructors with the relevant material, but had no student interaction, and no opportunity for interaction. The single lecture that the EEC physically watched (on network installation) was

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

1. Student feedback seems to be the way that quality of teaching is assessed and the Director of the programme reviews and discusses with the lecturers. Teaching mentors should be assigned to junior lecturers who should be active in attending at least one lecture each semester and give feedback on improvement.

2. The coherence and depth of the programme should reflect a Bachelor's degree and align with the ACM taxonomy of taught courses.

3. The part-time Computer Science faculty should be involved more actively in the development of the curriculum of the programme, especially for the courses they will be teaching.

4. There was no evidence that the students, either past or present, or representatives from trade bodies or industry were involved in the curriculum development process.

5. It is intended that some of the courses such as Software Engineering 1 and especially Software Engineering 2 will be delivered in collaboration with industry through the lecturers' personal contacts. The College should ensure that all students have equal opportunity to work with industry and that this opportunity is not restricted to selected students. Offering the opportunity to all students to work on industry projects or internships can further enhance the connection of theory and practice, and industry related skills. Visits to large scale data centers could also be quite useful to better prepare students for what to expect in their field.

6. From the limited exposure to teaching that the EEC had in terms of a live class and recordings, the lecturers should engage more with the students in the class. The lecturers should receive as a matter of course training in pedagogical methods for teaching at the Bachelor's degree level.

7. The College is investing to encourage research at least for the full-time Faculty members, however at present there is limited opportunity for students to be involved in collaborative research projects during their undergraduate programme.

8. The grades for the assignments and examinations are returned within the stipulated period, however the students have to contact the lecturers to receive feedback. It should be a matter of routine that all assignments receive written feedback along with their grades.

9. It is intended that the students meet their project supervisors three times a semester. This is inadequate and supervisor-student meetings should be weekly.

10. Independent oversight of the degree course could be improved with the appointment of an External Examiner for a maximum of 3 years who will scrutinise the examination papers, have access to special circumstances decisions, and attend the Examination Board as an ex-officio member.

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

· 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 teaching staff involved in this programme consists of:
- three full time teachers within computer science, two of whom also have managerial duties as Academic Dean (currently pursuing a PhD in Multimedia and Graphic Arts at Cyprus University of Technology) and Programme Coordinator
- four part time teachers within computer science
- three full time teachers of subjects outside computer science (but included in this programme, such as Greek or management)
- one part time teacher of business and statistics.

The number of teaching staff (11 teachers) is adequate to support the programme of study (22 students enrolled across the four years of study currently). The college plans to double student intake in the next 3-4 years, and is aware of the need to also increase the number of teaching staff. It is not clear how concrete these plans are (they were communicated only orally and only upon probing by the EEC.)

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 qualifications of the teaching staff with respect to their knowledge of the topic they are teaching are adequate to achieve the objectives and learning outcomes of the programme. However, their pedagogical and didactic qualifications are not always adequate, as witnessed in the video lectures and the physical lecture (see section 2). The teaching staff is not regularly engaged in professional and teaching-skills training and development. Out of the nine members of teaching staff that the EEC interviewed, only one had attended a seminar of the use of educational technologies at the college. This activity appeared to be a one-off event.

The teaching staff status (full/part time) is not entirely appropriate to offer a quality programme of study. The part time staff is not engaged in research as part of their employment at the college. It was not entirely clear to what extent part time staff practically offers office hours to students (the EEC received confusing information on office hours, pointing to a possible miscommunication between teachers and students). Part time staff, when interviewed, did not appear engaged in further developing their teaching skills, but rather saw this as a part time job alongside their other employment elsewhere. The EEC recommends that more full time staff is hired, so that the programme can be better supported on the teaching, research and managerial level.

Overall the EEC recommends the following improvements:

1. Currently there is no concrete staffing planning. Presently, there are 3 FT plus 5 PT teachers. The senior management does not have a clear idea on the full time equivalent number, but it is estimated to be around 5 FTEs. The management did indicate 6FT staff as an inspiration, but no concrete/written business planning.This point needs to be addressed.
2. From the conversation with current staff, it seems that part-time staff are working for the college as contractors rather than employees. This perhaps can be clarified; however, the loose affiliation between part-time staff and the College is clear. This point needs to be remedied, so that part time staff are actively engage in all facets of running the programme and supporting the college as an institution.
3. Lack of critical mass; this has a dramatic impact on all aspects of the academic environment, including teaching delivery, student engagement, research activity, and collective long term vision. The College also relies on visiting professors/scholars to deliver teaching. Efforts should be intensified to achieve a sufficient critical mass.
4. Related to point 2: imbalance between permanent and part time staff. After 10 years of running the current programme, there are only 3 full time core CS staff. This indicates a lack of commitment. Efforts should be made to remedy this.
5. It is worrying that the senior management does not see it is necessary to invest in staff first before taking on more students. The reverse is necessary for the healthy and sustainable operation of this programme.
6. There is no incentive for part-time staff to engage in research that could be counted towards the College. For instance, there are part-time staff that are officially affiliated to other institutions that their research contribution cannot be included in this College. This point should be addressed.

Recognised visiting teaching staff participate in teaching the study programme. Visiting staff number does not exceed the number of the permanent staff.

The teaching staff stated that there are opportunities for students to be involved in research projects. The EEC recommends that this practice applies to all students unequivocally, to strengthen the link between education and research.

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

There is a low teacher to student ratio, which promotes healthy, direct and personalised relationships between teachers and students.

The college management is willing to increase the number of full time staff, in particular in line with the plans to increase student intake in the near future.

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 institution does not support adequately the competence of their teaching staff. There is no compulsory didactic and pedagogical training for teaching staff. As a result, the students' teaching and learning experience is substandard (see section 2).

Some procedures for staff development are in place, such as support for conducting research as part of the Research Centre. The EEC has however noticed some alarming practices, such as the position that staff should work on research applications for external funding during their holidays, or the complete lack of administrative support in submitting and running externally funded projects. It is not clear how teaching staff can conduct research on an adequate level when they are expected by default to teach four out of five days per week and spend only one day per week on research (20% of their time allocated to research and 80% allocated to teaching). The part time staff within computer science informed the EEC that they do not conduct research as part of their work at the college. The remaining three full time members of staff within computer science did not appear to be overall very active in research. Two of them had an average of 1,5 publications per year and an average of 0,5 participation in an application for external funding. This is understandable given their managerial duties and the poor research to teaching ratio. There is a procedure for teaching relief to support research, but this requires the staff to have already conducted a piece of research significant enough to earn the teaching reduction. Doing so is not trivial under the present circumstances. Overall, The allocation of teaching hours compared to the time for research activity is not appropriate.

Structured procedures for didactic and pedagogical training of staff development are non-existent.

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

7. Although the student to staff ratio is low, the course to staff ratio is very high. Each member of staff needs to deliver a high number of courses. This can be very problematic in teaching specialised subjects.
8. Promotion route for part-time staff is not clear. Again this removes the incentive to perform high quality teaching and research. This point should be addressed.
9. Staff training needs to be more comprehensive, regular, structured and compulsory.

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	Non compliant
3.2	Teaching staff number and status	Non compliant
3.3	Synergies of teaching and research	Non 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

The committee has observed a high level of satisfaction among students, regarding the program and the support they receive.

To attract students, it may be helpful to enrich courses with hot topics in the field, and to actively promote and advertise the positive values and high potential of this program to prospective students and relevant stakeholders.

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	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)*

- *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.

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.

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 and aligned with the quality assurance strategy. Academic advisors and tutors are available to support and monitor student progression.

Pre-defined and published regulations regarding student recognition are in place. These include the fair recognition of higher education qualifications, periods of study and prior learning.

Student mobility is promoted through exchange initiatives. This has resulted in two recent student exchange opportunities to Italy and Latvia.

Pre-defined and published regulations regarding student certification are in place.

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.

Sub-areas

      5.1 Teaching and Learning resources

      5.2 Physical resources

      5.3 Human support resources

      5.4 Student support

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.

This programme has an overall sufficient attention to detail in terms of learning and teaching, but there's room for improvement in terms of equipment and services provided to students. The human support resources are not observed to be adequate in case of future growth, but the staff seems to be doing their best to support the student needs for the current state of the institution.

Overall the EEC has observed that although the number of students in the program is relatively small, it is supported adequately, and has available all necessary facilities.

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

The College has in place the basic physical infrastructure for delivering the BSc in Computing course such as classrooms (a selection had Smartboards), 2 laboratories with around 15 computers each, a library with a mezzanine floor for meetings, and cafeteria with a table tennis table.

All the students have access to a counselor who helps with their pastoral care, but it is less clear who takes care of academic issues should they have difficulties.

Students seemed to be generally happy about the overall programme of study.

Learning resources seemed to be adequate and could be directly accessed through an online platform.

The library offers hard and electronic copies of academic texts.

Students can have access to the labs in extracurricular hours.

The facilities are readily accessible by students with special needs and proper care is given for supporting such cases and also students with low academic performance.

The administrative staff is properly qualified and they are doing a very good job supporting the students. They approach them through calls, emails and scheduled meetings.

There is a low student to teacher ratio, which contributes to a positive atmosphere of trust, focused teaching and room for dialogue and support for students.

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.

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

There are cases where the equipment provided to the students for learning purposes is adequate but does not fulfill the purpose of the class. For example, there are no physical FPGA boards available, only simulators on the computer labs.

Even though the administrative staff has been observed to do a really good job, the institution still lacks the presence of counselors assigned for each student. This is understandable due to the small scale of the institution and the lack of faculty personnel, but there's still room for improvement.

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	Partially Compliant
5.2	Physical resources	Partially Compliant
5.3	Human support resources	Partially Compliant
5.4	Student support	Partially 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

From the site visit, accessibility is generally fine, but there are places with accessibility issues that are shared by current staff. For instance, it is impossible or impractical for wheelchair users to navigate in the library. Library computers are on a different floor which can only be accessed through a different entrance which is used by a different department.

IT equipment for students seems generally adequate. However, students do need to share computing devices in certain classes. Equipment upgrade and maintenance are on a needs basis. From the conversation with the management, it seems there is no forward looking planning, e.g. an annual defined budget for teaching hardware. Investment is reactive according to student intake, which may be practical with a small cohort of students, but this is not a good practice in the long term, particularly since the ambition of the college is to dramatically increase the student numbers.

The students have access to around 18 Windows PCs in two laboratories which are open from 9am to 6pm and when the rooms are not being used for any class. The College should ensure that students have access to PCs at least at all times.

Some but not all of the teaching rooms have Smartboards. The College is situated on a busy thoroughfare and the traffic noise carries through to the classrooms. The College should consider better sound-proofing of the classrooms.

The library is shared with other courses in Tourism, Business Management and Law. The three sections devoted to computer science books could be improved with newer editions of standard textbooks and expanded for the anticipated increase in student numbers.

Although the access to the teaching areas of the building such as classrooms and laboratories were adequate for wheelchair-bound students, the aisles within the library were too narrow for maneuvering.

The students should have a private space that can be their own where they can work between lectures.

Active effort should be made for students in each year cohort to know each other with social engagements at the start and during the academic year.

There seems to be a lot of ignorance from the students about the services available to them. Even though everything indicated that they are provided with access to the labs and to the computers at the library, the interviewed students were not just unaware of this; they didn't even know there were computers in the library. This was also observed with the case of a student who would have wished to have had access to a Linux operating system through the institution, being unaware of the fact that there are computers running Linux virtual environments in the labs.

The online platform only provides communication services between the students and the institution staff. There is no other service provided to the students to communicate with each other. This can become an inconvenience in the case of group projects. A solution would be to provide each student with an email address that is registered in the institution's domain.

- 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:
  - o 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.

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.*

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 EEC recommends that:
- the program is re-designed in line with internationally recognised curricula and standards, and also in collaboration with external independent stakeholders, so that the Computer Science component is strengthened for instance;
- a clear business plan in order to build a team of permanent Computer Science lecturing staff so that core Computer Science teaching activities can be carried out by the permanent members of staff and thus to significantly reduce the reliance on part-time and visiting lecturing staff;
- a careful consideration and planning should be in place to increase support staff before expansion in student numbers so that student experience and learning outcome can be ensured;
- learning resources and facilities need to be enhanced and investment needs to be better planned, instead of on a needs basis;
- teaching staff is formally trained in didactics and pedagogics;
- student interaction and social life is actively supported;
- the teaching to research ratio (currently at 80% to 20% by default) becomes more balanced, to promote research;
- the college develops an action plan leading to an increasing number of students, something that would be beneficial in many ways, especially for the long-term sustainability of this program;

- general housekeeping processes are established to ensure that information vital to the programme, such as intake, drop-out, pass-rate, employability, gender balance, transfer to other programmes, gender diversity, and so on, is collected, analysed and acted upon;
- detailed student information regarding rules of progression and certification in the program, such as industrial projects, is formalised and made readily and publicly accessible to students (for instance in their handbook);
- student instruction is updated with more modern methods of teaching that are centered around student learning.

The above are some of the main points of improvement, recommended by the EEC. More points are included in the above sections and should be addressed. The previous sections elaborate on each of these points, with specific details.

E. Signatures of the EEC

Name	*Signature*
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D. K. Arvind	
Xinaghua Xie	
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Krinos Vasileiou	

Date: 16 November 2022