

Doc. 300.1.1/2

Date: 16th May 2024

External Evaluation Report

(E-learning programme of study)

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

In Greek:

“Ιατρική Απεικόνιση (18 Μηνες/ 90 ECTS, Μεταπτυχιακό)”
- Εξ Αποστάσεως

In English:

“Medical Imaging (18 months/ 90 ECTS, Master of Science)” –
e-Learning

- **Language(s) of instruction:** Greek / English
- **Programme’s status:** New
- **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 2021 [L.136(I)/2015 – L.132(I)/2021].

A. Introduction

This part includes basic information regarding the onsite visit.

The site visit at the European University of Cyprus took place on the 15th of May 2024. It was organised to cover all relevant aspects of the programme evaluation, according to this form. After a short presentation of the panel, the university was presented, then the main responsible department. This was followed by a presentation of the proposed programme, the e-learning concept and responsible staff. Then the proposed teaching staff answered questions regarding their courses and their background.

After a break, the panel had a Q&A session with current students and alumni from two other e-learning course programmes of EUC. This was followed by a meeting with administrative staff. Then, there was a discussion with two stakeholders.

After a short internal discussion of the panel, there was a first feedback round with the vice rector of the university, the head of the department as well as the programme coordinator.

There had been intensive and thorough discussions on many various topics. EUC provided some additional material like the SWOT analysis as well as the requested distribution of teaching staff in the department. Further information necessary for the report was requested to be sent for the next morning.

B. External Evaluation Committee (EEC)

<i>Name</i>	<i>Position</i>	<i>University</i>
Christoph Hoeschen	Professor	Otto-von-Guericke University Magdeburg, Germany
Anders Tingberg	Professor	Lund University, Malmö, Sweden
Tomaž Vrtovec	Professor	University of Ljubljana, Slovenia
Stylianos Hatzipanagos	Professor	University of London, United Kingdom
Pavlos Petrou	Student	University of Cyprus
<i>Name</i>	<i>Position</i>	<i>University</i>

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*
 - *is a part of the strategic management of the programme*
 - *focuses on the achievement of special goals related to the quality assurance of the study program.*
 - *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*
 - *is developed with input from industry leaders and other stakeholders (i.e. industry leaders, professional bodies/associations, social partners, NGO's, governmental agencies) to align with professional standards.*
 - *integrates employer surveys to adapt to evolving workplace demands.*
 - *regularly utilizes alumni feedback for long-term effectiveness assessment.*
 - *is published and implemented by all 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*
 - *Aligns course learning outcomes with student assessments using rubrics to ensure objectives are met.*

- *Connects each course's aims and objectives with the programme's overall aims and objectives through mapping, aligning with the institutional strategy*
- *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*
 - *collaborates with industry experts for curriculum development.*
 - *conducts joint reviews with external academic specialists to maintain academic rigor.*
 - *performs periodic assessments with external stakeholders to ensure continuous alignment with market needs.*
 - *establishes collaboration with international educational institutions or/& other relevant international bodies for a global perspective.*
 - *conducts regular feedback sessions with local community leaders for societal relevance.*

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*

In addition, the program has established mechanisms of transparency & communication to ensure that

- o Professional bodies validate program descriptions and outcomes.*
- o Community leaders actively participate in ensuring that the program's public information is relevant and resonates with the local and societal context.*
- o External auditors review public information for accuracy & consistency vis-à-vis the actual implementation of the program.*
- o Industry-specific & societal information is regularly updated with expert inputs.*
- o Alumni testimonials are included for a realistic portrayal of program outcomes.*

1.4 Information management

Standards

- *Information for the effective management of the programme of study is collected, monitored and analysed using specific indicators and data i.e:*
 - o key performance indicators*
 - o profile of the student population*
 - o student progression, success and drop-out rates*
 - o students' satisfaction with their programmes*
 - o learning resources and student support available*
 - o career paths of graduates*
 - o industry trend analysis.*
 - o feedback mechanisms from external partners/stakeholders*
 - o data exchanges with professional networks*
 - o employer insights concerning career readiness*

- *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?*
- *How and to what extent are external stakeholders involved in the quality assurance process of the program?*
- *How is external stakeholder feedback gathered, analyzed and implemented?*
- *In what ways do external stakeholders assist in making program information publicly available?*
- *How do external stakeholders contribute to evaluating graduate success in the labor market and obtaining feedback on employment outcomes?*

General findings include:

1.1 Policy for quality assurance

- Based on the presented documents as well as the presentations during the onsite visit it was agreed by the committee members that the QA procedures at EUC in general but especially those for the proposed programme are designed well and are in accordance with the above mentioned standards, allow overall assessment of existing and new programmes as well as continuous monitoring.

- The content of the proposed master programme will be subject to well established and continuously improved quality assurance processes at the university.

1.2 Design, approval, on-going monitoring and review

- The new master of science programme “Medical Imaging” is designed to provide insights for students with respect to the very much needed topic of medical imaging.
- The main areas to be dealt with in the programme are medical imaging based on ionising radiation (X-ray based imaging (including projectional imaging, CT and interventional imaging), as well as nuclear medical imaging (mainly PET and SPECT imaging), MRI imaging as well as microscopic imaging and image processing and data analysis. These are representing the major actual relevant areas of today’s medical imaging procedures.
- In terms of proposed content the programme is well-designed and coherent.
- The structure of the programme is well defined to cover the 18 months, that the programme is supposed to run for full time students. As it was stated the larger group of students are expected to be part time students. For this case, the workload distribution might be challenging in some semesters, but as courses are offered each semester this should work out for the students.
- Students are supposed to have four compulsory courses, each granting 10 ECTS and have to choose two elective courses, each granting 10 ECTS. 30 ECTS will correspond to the master thesis. Regarding further details of the programme including e-learning aspects see the relevant sections in this document.
- For the design of the programme the evaluation panel recommends that some topics need to be addressed. The first one is: The proposed target group of students is very, very broad. It ranges from medical professionals, radiologists, radiographers, (biomedical) engineers, physicists, dental surgery people etc. They will have completely different background and skills as well as prior practical knowledge about medical imaging. Therefore, the level and course content will either just fit one group or the programme team will have to make many compromises. Even the general structure of the programme would be affected as for someone who has never seen or touched modern medical imaging equipment, purely simulation based tasks would be not meaningful and probably would be misleading. On the other hand, some theoretical master level descriptions might be difficult to follow for more practically oriented students, not being trained in mathematics and physics.
- The given learning outcomes are at least in part not specific for each course. A statement made during the onsite visit that the learning outcomes will be adjusted according to the students’ possibilities and understanding, is not in-line with standards of academic study programmes and need to be clearly specified on a course by course basis. This is needed for a master degree to guarantee a certain quality in the programme content.
- Also, the intended goal of the course is not clearly defined. The graduates would not have a clear profile, at least not one that would be expected by potential employers.
- During the evaluation it did not become clear how stakeholders have been involved in the design of the study programme. The stakeholders that attended the evaluation event were not involved in the study programme design. They obviously had different ideas about the skills of the graduates of the programme and how they could be used. The committee was a bit unsure whether the ideas of the stakeholders about the potentially gained knowledge, expertise and skills fit the competences that can be achieved.

1.3 Public information

- The proposed master of science “Medical Imaging” is a new programme. This means the formal status needs to be established and then it can be made publicly available. The staff profiles and job descriptions we were given were very convincing.
- The programme appears to comply with the purposes of higher education of the Council of Europe with the limitations mentioned in section 1.2.

1.4 Information management

- The information about the programme looks to be well managed in general.
- International students might find some difficulties in certain aspects of the study material as some material seems to be just in Greek language. These are addressed in further detail in the corresponding sections of this report.

Strengths

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

- The documentation of the programme conforms to professional standards.
- Medical Imaging is an important and relevant topic. The programme is covering all relevant topics with respect to this field.
- The university is well organised and has established a solid quality assured approach for e-learning. They make use of well equipped online resources to engage students. The Blackboard ULTRA virtual learning environment provides an established technology to organise learning materials and interactive activities.
- The multi-disciplinary team of teachers really seems to be enthusiastic about the new programme and the potential implications for their own work. They are dedicated to teaching and implementing research objectives.

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.

- EUC should clearly define a target group of potential students. The EEC proposes to focus on radiographers as this seems to be the logical target group based on the already existing bachelor programme at EUC and the main interests of the stakeholders. Other target groups could be still allowed but after evaluation of application requirements, like practical experience with medical imaging technologies, especially in computed tomography, PET or SPECT systems and MRI machines.
- The aims of the programme has to be sharpened. It needs to be clearly stated that it is not a master of science in engineering or natural sciences. It would be a master of science regarding practical medical imaging on a master level. EUC might consider renaming the programme to “Master of Science on Medical Imaging for Radiographers” or similar. This

would still allow physicists or engineers intending to go e.g. to sales or follow a vocational career orientation.

- Clear learning outcomes (4-6) per course have to be articulated, as non-changeable mandatory requirements for the acquisition of the master certificate.
- In case the master programme is not renamed or at least the limitations have not clearly been stated, a master thesis with a literature review would not be appropriate; this would need to be eliminated as an option, if the master programme is kept in its current form. Practical hands-on activities on machines would be necessary in this case and collaborations with other institutions would need to be established for the hands-on activities and the master thesis.
- There is a need to integrate more stakeholders in the design and continuous optimisation of the programme and to explain to them what they can expect from graduates.

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	Partially 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

2.4 Study guides structure, content and interactive activities

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

Standards

- *The e-learning methodology is appropriate for the particular programme of study.*
- *Expected teleconferences for presentations, discussion and question-answer sessions, and guidance are set.*
- *A specific plan is developed to safeguard and assess the interaction:*
 - *among students*
 - *between students and teaching staff*
 - *between students and study guides/material of study*
- *Training, guidance and support are provided to the students focusing on interaction and the specificities of e-learning.*
- *The process of teaching and learning supports students' individual and social development.*
- *The process of teaching and learning is flexible, considers different modes of e-learning 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 e-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.*
- *Detailed schedules in course materials are included, explicitly stating the expected hours for lectures, self-study, and group projects, ensuring transparency in time allocation.*
- *A system is integrated where each learning activity is assigned a weight proportional to its importance and time requirement, aiding in balanced curriculum design.*

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.*
- *The expected hours for different components of practical training, such as lab work, fieldwork, and internships are clearly documented in the training manuals*
- *A weighting system is applied to various practical training elements, reflecting their significance in the overall learning outcomes and student workload.*

2.3 Student assessment

Standards

- *A complete assessment framework is designed, focusing on e-learning methodology, including clearly defined evaluation criteria for student assignments and the final examination.*
- *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 e-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.*
- *The time allocation for each assessment task is explicitly stated in course outlines, ensuring students are aware of the expected workload.*
- *A balanced assessment weighting strategy is implemented, considering the complexity and learning objectives of each task, to ensure fair evaluation of student performance.*

2.4 Study guides structure, content and interactive activities

Standards

- *A study guide for each course, fully aligned with e-learning philosophy and methodology and the need for student interaction with the material is developed. The study guide should include, for each course week / module, the following:*

- *Clearly defined objectives and expected learning outcomes of the programme, of the modules and activities in an organised and coherent manner*
- *Presentation of course material, and students' activities on a weekly basis, in a variety of ways and means (e.g. printed material, electronic material, teleconferencing, multimedia)*
- ***Weekly schedule of interactive activities and exercises (i.e. simulations, problem solving, scenarios, argumentation)***
- *Clear instructions for creating posts, discussion, and feedback*
- *Self-assessment exercises and self-correction guide*
- *Bibliographic references and suggestions for further study*
- *Number of assignments/papers and their topics, along with instructions and additional study material*
- *Synopsis*
- *Study guides, material and activities are appropriate for the level of the programme according to the EQF.*

You may also consider the following questions:

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

- *How is the objectivity and relevance of student assessment ensured (assessment of the degree of achievement of the intended learning outcomes)?*

Findings

Process of teaching and learning and student-centred teaching methodology

Suitability of the programme for online delivery.

The nature of the programme is compatible with e-learning delivery, and the methodology employed is appropriate for the particular programme of study. Quality assurance mechanisms are in place to maintain standards and provide a consistent approach to the design and delivery of e-learning programmes.

The EUC infrastructure that supports e-learning programme delivery comprises:

- (1) the VLE (Blackboard) to provide both synchronous and asynchronous tools supporting interactive activities. The VLE discussion forums are a key component for this interaction.
- (2) Blackboard Collaborate, a video conferencing tool to support online synchronous communication between students and tutors. This is suitable and creates opportunities for student to student interaction and supports the group activities the programme team has developed.
- (3) A set of interactive tools, inc. simulations that will allow the students to apply their knowledge in a practical context. The EEC received documentation describing a set of tools, inc. simulators (some of the simulators do not seem to represent 'state of the art' tools) that will be used in the programme but did not have the opportunity to see how these are applied in practice.

Assessment

- The VLE platform provides formative self-assessment opportunities in the form of weekly self-assessment and interactive exercises and activities. The interactive activities document that the EEC reviewed provided a comprehensive list of activities corresponding to all weeks of the courses. The final examinations for every course employs a proctoring system (Proctorio) to support academic integrity. Some of the exams are using an open book format. The EEC thought that both approaches (adoption of online exams and open book exam format) provided excellent opportunities to embed authentic assessment activities into the programme from which students should benefit. We have also discussed the implications of the proliferation of Generative AI and how this affects assessment practice. The programme team and the support teams seemed to be knowledgeable about these issues and associated threats.
- The EEC had the opportunity to review some sample game-based assignments which were not at the right (Masters) level and not fully reflecting the learning tasks they were written for.

Study guides content, programme online environment and interactive activities

The programme study guides demonstrate the significant amount of work the program team has put in their development, including a week by week sequencing, employing a range of methods of engagement and assessment formats. The EEC has not seen the fully developed online environment as at the time of the visit the VLE of the programme had not been developed. The programme team has been using VLE learning analytics tools to monitor student attendance and progression.

Student feedback

- The EEC had the opportunity to meet 4 students (3 alumni from the MSc in Public Health programme and 1 current student from the MSc in Speech & Language Pathology) and ask them about their student experience, while being registered in an e-learning programme. All students seemed to be happy with the course and satisfied with the level of support they received (administrative and academic). However, the students brought to our attention a few points that we strongly recommend that are looked at by the programme team:
 - (1) One of the students mentioned that they would like to see more exercises that develop critical thinking.
 - (2) One of the students felt that feedback could be enhanced in e-learning programmes by providing regular updates to the students on progress and clearly identify areas for improvement.
 - (3) One of the students highlighted a discrepancy between lectures and how these prepared the students for the exams and the content of the exam papers.
- The alumni were aware of the career services at the university but did not contact the unit to receive support when they explored post study career options. The university should allow students further exposure to employment opportunities.

Strengths

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

- The learning technologies in use reflect current developments in e-learning provision in the higher education sector.
- Organisation and quality of the programme documentation: we thought there is an appropriate level of detail, in the study guides and related descriptions, particularly of the interactive activities.
- Student satisfaction with the programme both from current students and alumni.
- Solid support infrastructure for distance learning students in the programme and via the university support services in the context of distance learning
- Adequate induction and training in e-learning opportunities for staff and students.
- The EEC reviewed the programme documentation and study guides for all courses. The study guides were well written and had the appropriate level of detail (though there were some discrepancies re: the percentages that corresponded to weekly activities and number of self-assessment activities the students need to complete), providing a week-by-week

description of content, weekly self-assessment and interactive exercises- activities and assessments.

- A compulsory thesis component which allows the student to undertake project work that fully supports their professional development.

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.

Assessment

- The EEC has not seen key assessment documents, including grading criteria, marking guides and rubrics. The programme team should develop these.
- Establishing and maintaining an online learning environment on the VLE. This was not ready for the programme under scrutiny.

Interaction

- The EEC requested to see examples of recordings from interactive online sessions with the students. We reviewed a tutor led interactive lecture in an online environment. The Q&A aspect of the online session was important but it included a significant transmissive component which undermined interaction. We would recommend that the interactive non-transmissive nature of these online events is enhanced further by using the affordances of Blackboard collaborate (e.g. breakout rooms, ability of the students to use a whiteboard and other tools to communicate ideas, demo of simulations and other online tools).
- Since the interactive software is an important aspect of the programme, we think it is necessary for the students to know what would be simulated and how. This was not clear in the programme documentation and we recommend that the issues are looked at by the programme team.

Learning outcomes

- The learning outcomes were appropriate and corresponded to the postgraduate level of study. At programme level an improvement would be to review their number (there seemed to be too many of them) and organise them under themes.

Artificial Intelligence (AI)

- The university provided a statement on the use of AI. This is in the right direction of developing a related policy. We would recommend that the programme team articulates how any generic AI guidance is applied to the context of this particular programme both from a disciplinary and pedagogical point of view (certifying if and how AI should be used in student work and how). This is fundamental as it affects most assessments and there is an urgent need to establish a clear framework for the use of generative AI technologies in the programme, with specific student-oriented guidance.

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	Not applicable
2.3	Student assessment	Partially compliant
2.4	Study guides structure, content and interactive activities	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**

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.*
- *Training, guidance and support are provided to the teaching staff focusing on interaction and the specificities of e-learning.*
- *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:

- *Is the teaching staff qualified to teach in the e-learning programme of study?*
- *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 number of teaching staff involved in the Medical Imaging programme is sufficient as the Department appoints external lecturers in addition to the core faculty members. However, it seems like the workload for the teaching staff is higher compared to other programmes at EUC.

All faculty members involved in the programme are active in research. Furthermore, most of them have PhDs (and some their Post Docs) and research experience abroad.

Among the teaching staff there are one professor, one associate professor, and two assistant professors. The rest are PhD level.

The teaching staff are highly motivated about setting up and starting the Medical Imaging programme.

The programme will be able to combine recent research findings and insights with state-of-the-art teaching methods.

EUC has employed a member of staff whose main job is to follow the development of novel or updated teaching tools for e-learning.

Strengths

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

- Highly motivated teaching staff.
- All members of the teaching staff have a doctorate and are active in research.
- The skills and clinical experience of the teaching staff is relevant with respect to the contents of the Medical Imaging programme.
- The teaching staff are experienced in e-learning.
- There is continuous professional development of teaching staff in e-learning at the start of every semester.
- EUC is monitoring the use of digital tools for e-learning, in order to choose and integrate the best available technologies for teaching and learning. The relevant members of staff are a resource for teaching staff to optimise approaches to each particular teaching scenario.

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.

- Workloads for teaching staff seem to be higher compared to other programmes at EUC. The Department should employ more faculty members to handle this issue.
- The faculty should increase collaboration with other research groups outside the university to strengthen their research activities.

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	Compliant
3.2	Teaching staff number and status	Partially 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.

Regarding 4.1.:

EUC employs the following criteria for student admission to the programme:

- The students must have successfully completed an undergraduate degree in various relevant subjects such as:
 - Radiography,
 - Radiology,
 - Biomedical Engineering,
 - Biomedical Sciences, Physics,
 - Biology and any other related topic,
 - Doctor of Medicine (M.D.) or Doctor of Veterinary Medicine (DVM)
 - Bachelor of Dental Surgery (BDS)
- Students must have Level II proficiency degree in English for both Greek and English programmes to be able to use all the programme documentation and learning materials.
- One recommendation letter.

- Official copy of academic transcript
- Official copy of High School Leaving Certificate and grade marksheet
- VISA Requirements (for non-EU students)
- Copy of valid passport (for international students)
- Curriculum Vitae (CV)

All the documents must be in English.

Upon receipting an acceptance letter from EUC students are required to submit a down payment.

These criteria are applicable to international students.

EUC has the right to interview applicants if considered necessary.

In order for students to get exempted from prior completed courses they must provide the Office of Admissions with a copy of official transcripts and course descriptions.

All the applications are being processed by the Admissions Office of EUC.

Regarding 4.2:

The programme team employs a methodology to ensure the continuous and sufficient monitoring of the students' performance such as:

- Collection of data and analytics for every student from their assessments and exams. This is accomplished with Blackboard analytics
- Evaluation of assessments by the instructor
- Communication with the teaching staff
- Personal student advisors
- Monitoring from weekly interactive exercises and simulations
- Self-assessment exercises and feedback from the instructor
- Discussion forum in Blackboard

The Department and School responsible for the programme can act on the student's progression with student support given from the teaching staff and the personal advisor as well as the application of EUC "low GPA policy" in cases of GPA under 2.5.

Regarding 4.3.:

- This programme will be accredited by the Cyprus Council of Registered Technologists of Radiology and Technologists of Radiation Therapy.
- The programme recognizes prior knowledge and students may be exempted from courses that they have successfully completed previously at an accredited university. For the evaluation of transferred courses, candidates must submit a copy of their transcripts to the Office of Admissions.
- The programme provides the opportunity for Erasmus+ placements and supports full academic recognition for the study periods abroad. This is secured prior to departure by concluding a Learning Agreement.

- The programme team has established many collaborations with other universities and research institutions. EUC is a part of the Utrecht Network and European University Association.
- The University was evaluated by a number of quality assurance agencies such as: QS stars, The Impact Rankings and SCImago institutions Rankings.

Regarding 4.4.:

Students that complete the programme successfully are awarded with the qualification of 'Master of Science in Medical Imaging'. The Office of the Registrar Support is responsible for issuing the degrees and ensuring that students applying for graduation meet the degree requirements. Moreover, the Office of the Registrar Support issues diploma supplements to graduates, including e-learning students.

In summary:

EUC sets clear admission criteria for its medical imaging programme, requiring applicants to hold undergraduate degrees in relevant fields like radiography, radiology, biomedical engineering, and others. Proficiency in English, a recommendation letter, and adherence to visa requirements (for non-EU students) are also necessary for admission. EUC reserves the right to interview applicants if necessary and offers exemptions from prior learning upon submission of official transcripts and course descriptions.

EUC employs various methods to monitor student progression, including data collection and analytics through Blackboard, assessment evaluations by instructors, personal student advisors, interactive exercises, and forums. The programme is accredited by the Cyprus Council of Registered Technologists of Radiology and Technologists of Radiation Therapy and fosters collaborations with other universities and research institutions. Upon completion, students receive a "Master of Science in Medical Imaging" and diploma supplements from the Office of the Registrar Support.

Strengths

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

- The programme uses transparent and consistent admission criteria applicable to all students, ensuring fairness and clarity.
- The programme can cultivate a diverse academic environment as it has the potential to attract international students.
- Through the e-learning platforms, students are given the opportunity to engage in interactive exercises, fostering interaction between students and teachers, ensuring progression.
- The Student Advising Office assigns personal advisors to each student, offering tailored support and guidance.

- EUC acknowledges courses completed at accredited institutions and study periods abroad via Erasmus+ opportunities, promoting students' academic mobility.

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 team intends to accept students from different backgrounds and subjects, making the target audience broad. This can lead to potential problems such as:

- Not being able to progress and benefit from the programme content.
- Not having an adaptive approach in place to help students that do not have the required background knowledge and skills which may lead to the need to put in place additional learning resources and student support.
- Negative impact on the value of the award because the lack of focus undermines an in-depth coverage of the subject.
- Loss of programme identity – This is the most serious issue because the programme fails to establish a clear purpose that can lead to making it less attractive for candidates who look for specialised programmes that match their career goals and leaves potential employers uncertain about the skills of the programme's graduates.

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	Partially compliant
4.2	Student progression	Compliant
4.3	Student recognition	Compliant
4.4	Student certification	Partially 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

- *Weekly interactive activities per each course are set.*
- *The e-learning material and activities take advantage of the capabilities offered by the virtual and audio-visual environment and the following are applied:*
 - *Simulations in virtual environments*
 - *Problem solving scenarios*
 - *Interactive learning and formative assessment games*
 - *Interactive weekly activities with image, sound and unlimited possibilities for reality reconstruction and further processing based on hypotheses*
 - *They have the ability to transfer students to real-life situations, make decisions, and study the consequences of their decisions*
 - *They help in building skills both in experiences and attitudes like in real life and also in experiencing - not just memorizing knowledge*
- *A pedagogical planning unit for e-learning, which is responsible for the support of the e-learning unit and addresses the requirements for study materials, interactive activities and formative assessment in accordance to international standards, is established.*
- *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 e-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.*
- *Students receive support in research-led teaching through engagement in research projects, mentorship from research-active faculty, and access to resources that enhance their research skills and critical engagement with current studies.*

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.

From the submitted application, the meeting with the coordinators responsible for the e-learning unit, the meeting with the administrative staff, and the meeting with students and graduates (of other master programs at the same university) we obtained information regarding teaching and learning resources, including the e-learning resources, physical infrastructure, human support and student support.

Overall, EUC provides adequate resources for students from the point of admission, during each course and towards the completion of their master programme. The teaching and learning resources, as well as student support are well-developed, well-implemented and apparently well-functioning.

Strengths

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

- The e-learning resources include but are not limited to the e-learning platform “Blackboard Learn Ultra”, “Turnitin” application for checking the similarity of documents (student assignments, i.e. to prevent plagiarism), and “Proctorio” application for monitoring student behaviour in online exams, as well as other useful applications (e.g. “Padlet”, “Flashcards”, etc.). The e-learning unit at EUC is well-organised and up to date with the new developments in the field of e-learning technology, providing support in the design and generation of the materials for the e-learning courses.
- Student mobility is promoted through Erasmus+, EU projects and numerous collaborations with foreign universities and institutions.
- EUC offers student advising (each student is assigned an advisor, and they have to meet at least once per semester), tutoring, psychological and counselling services, and has also established a committee for students with special needs as well as an office for student support (registration, immigration, etc.). They also implemented procedures to support students with low grade point average. The administrative staff provided a good overview of their tasks and activities, and they seemed to be aware of the responsibility that they hold towards student well-being.
- The library offers free open access to over 130 online publication databases for faculty members as well for students (through the OpenAthens platform).

- Every communication (e.g. letter, e-mail) originating from EUC is by default bilingual, i.e. in Greek and in English, which is appropriate from the perspective of inclusion of foreign students, e.g. the ones with Greek speaking background.

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.

- EUC implements a student welfare mechanism for monitoring student support in the form of anonymous online questionnaires for each course. However, these questionnaires are not mandatory for students to fill in, which may become problematic because often only students that are strongly positively or strongly negatively biased (i.e. have either a strongly positive or strongly negative experience) with a specific course decide to fill in the questionnaire. This may result in weak and biased statistics that may not reflect actual attitudes. The university should consider to make this mandatory, or to promote this regularly among students. Another issue is that the results of the questionnaires are evaluated by the university staff that makes recommendations where needed, however, the aggregate feedback is not sent back to students. There is need to ‘close the loop’ as far as student feedback is concerned.
- For students with special needs, EUC requires certificates (e.g. medical reports, assessment reports, etc.) to be submitted to the committee. Although this is regulated by an adherence to students’ rights and privacy, as well as GDPR, it would need to be explicitly specified who has the access to these certificates that disclose the actual condition of the student.

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	Compliant
5.4	Student support	Compliant



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 programme is covering an important area especially in terms of societal needs. The university is well prepared to support the programme and teaching staff that is involved in the programme are keen and enthusiastic. However, the programme currently still lacks a clear target audience as well as a clear career goal for students graduating from that programme. Also, content wise, the level is not always at what is expected to be a master's level when taking into account the learning materials the EEC reviewed. This means, that a clear focus as well as a sufficient level of the course content has to be developed before accreditation.



E. Signatures of the EEC

Name	Signature
Christoph Hoeschen	
Anders Tingberg	
Tomaž Vrtovec	
Stylianos Hatzipanagos	
Pavlos Petrou	
Click to enter Name	

Date: 16th of May 2024