

ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ

CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION

eqar/// enga.

#### Doc. 300.1.1/2

#### Date: Date.

# **External Evaluation**

### Report

# (E-learning programme of study)

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

#### In Greek:

Programme Name

In English:

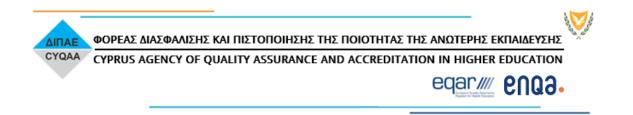
Medical Physics and Diagnostic Imaging, 18 months,

90 ECTS; MSc

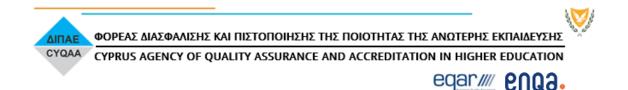
- Language(s) of instruction: English
- Programme's status: New
- Concentrations (if any):

In Greek: Concentrations In English: Concentrations

KYΠPIAKH ΔΗΜΟΚΡΑΤΙΑ REPUBLIC OF CYPRUS



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

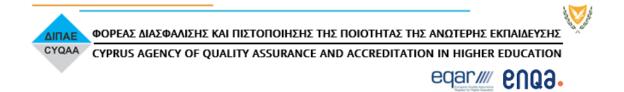
#### This part includes basic information regarding the onsite visit.

The on-site visit for the program of study "M.Sc. in Medical Physics and Diagnostic Imaging" took place on March 1, 2023. It was embedded in an on-site visit for institutional accreditation on February 28, 2023.

The onsite visit included the introduction to a large host of individuals who demonstrated their strong support for this new proposed university. Over two days we also met with leaders of the proposed university and program leads, teaching staff, and professional support staff. Although our meetings clarified some gaps in the written material, substantively most of these gaps in our understanding of the institution, strengths and weakness remain. However, what became clear is a heartfelt enthusiasm for Cosmos and the two programs that we are evaluating. Also, the basic micro foundations for the weaknesses identified in the written submission became clearer. From our onsite visit it was evident that there was a willingness by most participants to modify areas of significant identified weaknesses so that the institution and the two proposed programmes meet the standards specified for accreditation. The visit also helped the panel to better understand the mission of the proposed university to fill important gaps in the Cypriot market.

The on-site visit for the study program "M.Sc. in Medical Physics and Diagnostic Imaging" consisted of a 90-minute session in which the program of study was presented and discussed and of a 45-minute session in which the External Evaluation Committee (EEC) met members of the teaching staff of the course for questions and answers.

The program of study was represented by the coordinator, Prof. Peter Adzic, and the faculty members (in alphabetical order) Dr. Evangelia Dimovasili, Dr. Paul Doolan, Dr. Jehad Mousa, Dr. Yiannis Roussakis, Dr.Sofoklis Sofokleous, Prof. Haralambos Tsertos, Prof. Spyros Tzamarias. Also present was the President of the Governing Board, Prof. Panos Razis.



#### **B. External Evaluation Committee (EEC)**

Name	Position	University
Morris Altman	Member: Committee Chair & Dean and Chaired Professor	University of Dundee, School of Business
Rob Koper	Member: Professor & Dean of the Centre for Learning Sciences and Technologies	Open University, the Netherlands
Iuliana Toma-Dasu	Member: Professor & Head of the Medical Radiation Physics Division	Stockholm University
Timo Goeschl	Member: Professor & Director of the Research Center for Environmental Economics	Heidelberg University
Kyriacos Andreou	Student member	Open University of Cyprus
Matthew Kitching	Student Welfare Expert	Buckinghamshire New University and Lancaster University
Erato Stylianou Markidou	Member: Representative of the Medical Physicist Registration Board	Bank of Cyprus Oncology Centre



#### 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.

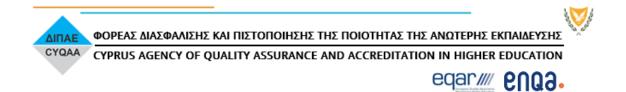
#### <u>Strengths</u>

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)* 

#### <u>Findings</u>

# 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 written application includes a description of the quality assurance policy, as well as information on the design of the programme of study. The information intended for the public is provided under the description of the programme and the study guides for the students, but it is not currently publicly available as the webpage of the institution is not yet available. The information management regarding the learning resources and student support is provided. The presentations and the discussions that took place during the onsite visit confirmed the information provided in the application.

#### **Strengths**

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

The internal regulations for Quality Assurance of the programme of study cover a broad range of activities and processes in a harmonised manner with the programme of the institution allowing thus efficient cross-checking between programmes.

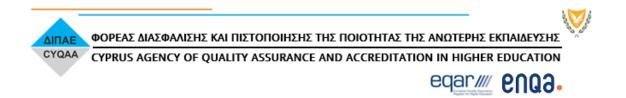
#### Areas of improvement and recommendations

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

The internal regulations for Quality Assurance of the program are not tailored to meet the requirements of the specific programme on Medical Physics and Diagnostic Imaging. They are formulated in generic terms that would apply to both institutions and programs without any particular reference to the current program under evaluation. The issues specific to the program on Medical Physics and Diagnostic Imaging is of key importance for running a program that is supposed to include theoretical knowledge on the medical applications of ionising and non-ionising radiation as well as practical activities that should be partially provided and fully supported by clinical partners should have been included in the policy of quality assurance.

It is, therefore, strongly recommended that a dedicated quality assurance and quality control program is developed and implemented for teaching and practical activities at the different clinical partners are expected to participate in the education and training of the students.

Regarding the programme design, the input of the national and international authorities regulating the professional education of the medical physicists is missing and it must be considered. The level of qualification provided at the end the MSc programme to the graduates relative to the qualifications required in Cyprus and/or internationally for being employed as medical physicists in training towards becoming medical physics experts must be clearly specified at the design phase of the programme with input from the representatives of the authorities regulating the qualifications of the medical physicists. Also missing is input of the representative of the national authority for radiation protection. The student input on the programme design is not evident.



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

Sub-a	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	Compliant

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

#### <u>Findings</u>

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 application includes information about the teaching and learning methodology including key elements for Open and Distance Education for interactive sessions and efficient communication. The onsite visit and discussions confirmed the information provided in the application.

#### <u>Strengths</u>

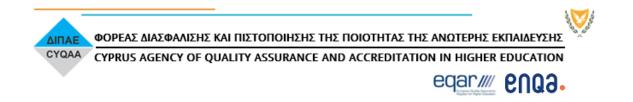
A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

The administrative personnel and some of the teachers planned to be involved in the programme enthusiastically expressed their willingness and availability to assist the students in a timely, effective, and attentive manner.

#### 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 distance methodology is not particularly suited for the topics included in this specific programme of study. Thus, the self-study with help of e-learning tools and resources must be complemented by a thoroughly designed plan for the interaction with the teaching staff. This plan is currently presented in broad terms such as including regular teleconferences. A program specific plan to safeguard and assess the interactions among students, and between students and teaching staff is not presented/developed. There is also no evidence on a plan for training, guidance and support provided to the students focusing on interaction and the specificities of e-learning except for the



schedule of a three days seminar on Open and Distance Education provided upon request of the EEC. While the former might be addressed at institutional level, there would still be lacking documentation on the plans for ensuring the student-centred learning process considering the intrinsic applied character of the education in medical physics that would involve the interaction with many external tutors working only part-time for the university.

Regarding the practical training, the current description of the programme does not allow for a full assessment of the possibility to meet the learning outcomes as the description of the degree of involvement of the clinical partners is insufficient. Each of the course descriptions for the courses in the programme includes real-life training among the teaching methods but fails to provide information regarding the extent of this training, the form in which it would be conducted or the personnel to be allocated for supervising the students during the clinical practice. This is a critical failure in the submission for this programme.

The study guides include the presentation of course material, part of the formative assessment on weekly bases, but the information regarding other students' activities concerning the practical part is scarce if not entirely missing. The number of teleconferences and the time when they will take place is indicated per course, but the other interactive activities such as simulations, problem solving exercises, etc, are insufficiently described. There are also no indications about the self-assessment exercises and self-correction guide.

The issues above mentioned must be addressed.

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

Sub-	area	Non-compliant/ Partially Compliant/Compliant
2.1	Process of teaching and learning and student- centred teaching methodology	Partially compliant
2.2	Practical training	Non-compliant
2.3	Student assessment	Partially compliant
2.4	Study guides structure, content and interactive activities	Partially compliant

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

#### <u>Findings</u>

# 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 application included a description in generic terms of the policy for recruitment and it has provided a list of the CV's of the teaching staff considered by the applicants to be relevant. The list contains the ten CVs of the key persons in the program. The application also includes two tables (Table 3 and Table 4) listing the teaching staff,



courses and teaching periods and the teaching staff, qualifications and total teaching periods, respectively. There are some inconsistencies to be pointed out:

- 1. Table 3 indicates Prof. Peter Adzic as teacher in the MPD501 course, while Annex 2 containing the course descriptions indicates Prof. Panos Razis as teacher in that course.
- 2. Table 3 indicates Dr. Panayiotis Hadjitheodorou as teacher in the MPD506 course, while Annex 2 containing the course descriptions indicates Prof. Demetris Andreopoulos as teacher in that course. The CV of Prof. Demetris Andreopoulos is not provided.
- 3. Table 3 indicates Dr. Jehad Mousa as teacher in the MPD508 course, while Annex 2 containing the course descriptions indicates Prof. Spyros Tzamarias as teacher in that course.

The onsite visit and the dialog with the potential teachers revealed that the part-time teachers will be able to dedicate rather limited time to the program. An estimation of the average amount of time each of them plans to allocate for teaching, tutoring, supervising, grading and being involved in other activities in the program was requested as additional information but at the time of writing this evaluation this information is still pending.

The teaching staff for the Medical Physics and Diagnostic Imaging programme is planned to consist of nine people, 3 employed full time and the rest of 6 employed part time, as described in Table 4 in the application, which is insufficient given the complexity of the subject and the amount of work required for tutoring the students.

The amount of part time employment is not specified. Annex 8 presenting the feasibility study specifies the number of academic professors as 2 (for period 2023-2026) and the number of visiting professors as 18 for 2023-2024 and 24 for 2025-2026. It is not clear how should this potential inconsistency between the number of teaching staff given in the application and in Annex 8 should be interpreted.

#### Strengths

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

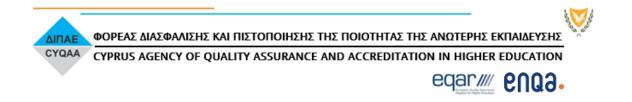
The enthusiasm of the Programme Coordinator and the engagement of the Head of the Programme are overwhelming. Some of the academics involved in the programme are highly experienced in teaching and research as they have a long track record across a full career.

Given that the expressed commitment of the teachers currently employed at other universities and medical centres will materialise, the programme could provide an environment ensuring good synergy between research and education.

#### 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 teaching staff for the Medical Physics and Diagnostic Imaging programme is planned to consist of nine people, 3 employed full time and the rest of 6 employed part time, as described in Table 4 in the application. The amount of part time employment is not specified. Annex 8 presenting the feasibility study specifies the number of academic professors as 2 (for period 2023-2026) and the number of visiting professors as 18 for 2023-2024 and 24 for 2025-



2026. As stated above, it is not clear how should this inconsistency should be interpreted and therefore the issue must be clarified.

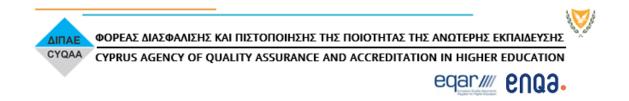
The application and the onsite visit did not reveal how does the institution plans to ensure the competence of the teaching staff. Currently, it appears as the teaching staff was recruited based on individually expressed availability to be involved in teaching in this programme. Furthermore, for the teachers planned to be involved in the courses with clinically applied character, the recruitment appears to be based on the proximity of their current place of employment, namely the clinics planned to support the programme to Nicosia. Considering the fact that the programme is planned to be run within an open university, the proximity should not be regarded as a decisive factor for the selection of teachers, although it might facilitate the control and the assurance of the quality of the teaching activities to take place at the clinics.

There is limited information, if any, regarding the pedagogical qualifications of the teaching staff recruited from outside academia. Thus, it is not possible to assess the qualifications in relation to the possibility to achieve the objectives and planned learning outcomes of the study programme, and to ensure quality and sustainability of teaching and learning. No plan for their pedagogical training and development is included either. The description of the training, guidance and support planned to be provided to the teaching staff focusing on interaction and the specificities of e-learning is also missing.

Based on the information provided in the programme description, it is not possible to fully assess if the number of the teaching staff and their status with respect to rank as well as full vs. part time is appropriate because the teaching activities, in particular the practical ones, are not adequately described. Relatedly no gap analysis is presented on teaching hours and staff required and what's currently available and how any identified gaps might be filled.

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

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



#### 4. Student admission, progression, recognition and certification (ESG 1.4)

#### <u>Findings</u>

# 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 application gives a brief description of the student admission requirements including the recognition of prior learning. In addition, the application presents the main target of the programme as BSc and MSc graduates in Physics, or equivalent, listing graduates of pure and applied sciences, engineering, medicine and information technology. It is not evident how a degree in medicine could be considered equivalent to a degree in physics. During the onsite visit and the discussions with the teaching staff, the Head of the Program expressed his confidence on being able to tutor students prior the start of the program and helping them acquire the necessary knowledge to follow the program. But this is vague and not related to a workload model.

The regulations regarding student admission are described. One of the steps before the admission is a personal online interview with the Admission Committee. Not all the candidates, however, will be called for this interview. There is no mention of the conditions that would qualify the candidates for the interview, nor of those that would ensure the direct admission without the interview. The assessment criteria of the student eligibility based on the interview are not specified either.

#### Strengths

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

The willingness of the Head of the Program and his commitment to give the necessary background knowledge to students that are lacking this knowledge before the start of the program is to be commended.

The program would offer the opportunity to students from different countries to get access to an educational program otherwise not accessible to them.

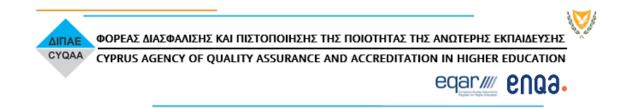
#### Areas of improvement and recommendations

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

The admission requirements for the study programme are formulated in rather vague terms as "equivalent to a BSc or MSc degree in physics". While a BSc or MSc degree in physics would indeed enable the students to follow the programme, it is not clear what should be considered as equivalent to that. The listed examples for equivalent educational backgrounds are debatable. A clear formulation of the minimum requirements should therefore be included. In addition, the selection criteria for the interview for students not directly fulfilling the eligibility standards as well as the conditions for passing the interview should also be clearly described.

As the program is addressed to students from any country, with different educational systems but also different systems for qualifying professional in the medical radiation physics and diagnostic radiology fields, there should be a procedure in place for recognising not only prior formal learning but also informal learning through work experience.

It is not clear what the certificates received by the students reflect. They are supposed to reflect and explain the qualification gained by the students, including achieved learning outcomes. The learning outcomes, however, are not



realistic given the duration, the content, and the learning methodology to be employed in the programme. The certificate/degree proposed will not reflect the context, level, content and status of studies that are pursued in a conventional MSc degree in Medical Physics and Diagnostic Imaging. The latter involves the completion of a programme at a high academic level complemented by practical activities and training. This will not be provided in the proposed programme. Hence, the degree title of the proposed programme will be sending misleading signals to prospective students and employers. We suggest a change in the title of this proposed degree to better reflect what is actually offered in the programme proposed by Cosmos, which is not equivalent to the level of a medical radiation physics degree.

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

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

#### 5. Learning resources and student support (ESG 1.6)

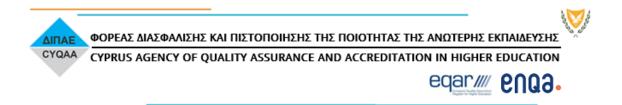
#### <u>Findings</u>

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.

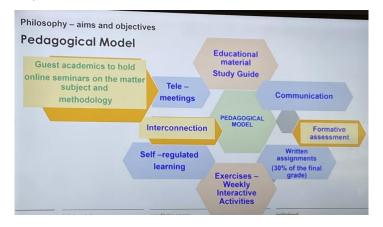
First of all, it should be mentioned that the university and its programmes are in a planning stage, so we did not have the opportunity to speak to students, nor to study the actual implemented e-learning courses within the e-learning systems.

The planned teaching and learning resources must fit the teaching and learning model of the university. Briefly described they are as follows. The university:

- Provides a 90 ECTS master programme in English to international and national students through distance education.
- For the support of the primary teaching and learning processes a mix of platforms will be used, the entry point for students is the learning management system (Moodle), also synchronous communications systems (BigBlueButton) will be used besides the regular communication systems (telephone and email).
- For secondary teaching/learning purposes Office 365 facilities are made available, including Teams, Calendar, OneDrive, email and a booking/planning system.
- For tertiary processes, like the student administration, they are currently evaluating three SIS systems at the moment. Also ER<P services will be available in the backoffice, e.g. for admission and CRM.
- The actors in the teaching-learning process will be supported by the Distance Education Unit, supported by the Pedagogical Planning Unit of Cosmos U, that acts under the umbrella of the Internal Evaluation Committee.



• The pedagogical model presented is as follows:



- In this programme they have planned the following interactive activities and assessments: online meetings and discussions, reporting on assignments and problem solving via MOODLE.
- It is not possible to assess if there are enough human support resources, i.e. tutors/mentors, counsellors and other advisers, and if they are adequately prepared to support the study programme because the appropriate information is lacking. It is expected that the qualified administrative staff is adequate for supporting the theoretical education planned to take place in the programme.
- The standards concerning student support will be provided, covering the needs of a diverse international student population.
- Students will be informed about the services available to them through their website and learning management system.
- The university plans for student-centred learning, mainly by making the education time and place independent, with some exceptions like the two planned face to face meetings per course.
- The university seems robust with respect to changes in resources and student numbers, given the flexibility of the organizational setup. This, however, does not necessarily apply for the practical activities planned to take place at clinical partner institutions.
- For a distance teaching university, it is not appropriate to have a physical library. Cosmos U. will provide students access to the necessary library resources, mainly digital, we can expect that all scientific sources can be accessed online at home/work by every DL student.
- The university has provided plans for the implementation of student support facilities.

#### Strengths

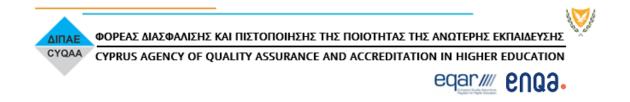
#### A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.

• According to the documents provided at the institutional level, the right facilities are planned for, including the different support units.

• Because of the distance teaching nature of the programme, everything must be made very explicit to students through their learning management systems and websites.

#### 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.



Note: all remarks made in the institutional evaluation have also to be taken into account in the courses.

• The e-learning facilities are still in development and should be ready and tested before October 2023: the intended launch date of the programme. According to the information provided during the meetings, this seems not feasible. The programme can only start when the ICT facilities are well established, secured, and have run through comprehensive technical and functional testing. The latter with actual users.

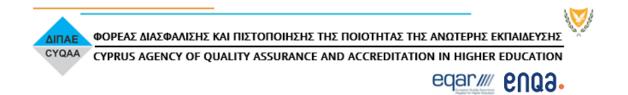
• The pedagogical model as presented is underdeveloped and actually not a pedagogical model. The green box in the middle is where the model should be described. This has been discussed during the meetings. In its current state it does not give any guidance to course developers how to use digital means to attain certain categories of learning outcomes for specific learners/groups. The advice would be to put an effort in developing this into much more detail and use it as the base for teacher training and course development/test and evaluation. Also important is the alignment of the model with the technical facilities.

• With respect to the previous point made, a choice whether the university will work with one uniform model (creates efficiency and increased transparency for the students and teachers), or whether this is more inspirational for the course developers. The latter creates the risk that it becomes unmanageable for the support staff and infrastructure, and it decreases the efficiency in the process and the transparency for users.

• An additional point with respect to the pedagogical model is that it is not sufficiently explicit what is meant by 'student centred': what does this mean, can students get everything that they want? Probably not. What are their freedoms and where are the restrictions. The same is true for the use of the term Open University, which implies that the university provides Open education. There are many dimensions of 'openness', like open access to the bachelors. Which dimensions are actually open? Given the information provided, the committee concludes that this university is not 'open', rather it is distance learning university.

# Non-compliant/<br/>Partially Compliant/Compliant/Sub-areaPartially Compliant/Compliant5.1Teaching and Learning resourcesNon-compliant5.2Physical resourcesNon-compliant5.3Human support resourcesNon-compliant5.4Student supportCompliant

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



#### D. Conclusions and final remarks

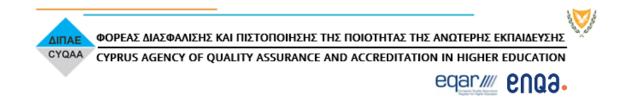
Please provide constructive conclusions and final remarks which may form the basis upon which improvements of the quality of the programme of study under review may be achieved, with emphasis on the correspondence with the EQF.

The subject of this programme is not well-suited for distance learning. However, the applicants should be commended for attempting to build up a programme focused on medical physics. The initiative has potential, although it is in a rather immature phase.

There are major shortcomings that must be addressed.

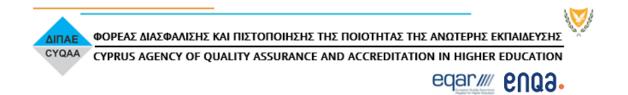
The following amendments are strongly recommended:

- Clearly formulate the aim of the programme.
- The suggestion of the EEC is the following: <u>"This programme aims at providing the basic education to</u> <u>students for becoming eligible to enrol on further professional education programmes towards becoming</u> <u>medical physicists."</u>
- The admission requirements for the study programme are formulated in rather vague terms as "equivalent to a BSc or MSc degree in physics". While a BSc or MSc degree in physics would indeed enable the students to follow the programme, it is not clear what should be considered as equivalent to that. The listed examples for equivalent educational backgrounds are debatable. A clear formulation of the minimum requirements should therefore be included. In addition, the selection criteria for the interview for students not directly fulfilling the eligibility standards as well as the conditions for passing the interview should also be clearly described.
- As the program is addressed to students from any country, with different educational systems but also different systems for qualifying professional in the medical radiation physics and diagnostic radiology fields, there should be a procedure in place for recognising not only prior formal learning but also informal learning through work experience.
- It is not clear what the certificates received by the students reflect. They are supposed to reflect and explain the qualification gained by the students, including achieved learning outcomes. The learning outcomes, however, are not realistic given the duration, the content, and the learning methodology to be employed in the programme. The certificate/degree proposed will not reflect the context, level, content and status of studies that are pursued in a conventional MSc degree in Medical Physics and Diagnostic Imaging. The latter involves the completion of a programme at a high academic level complemented by practical activities and training. This will not be provided in the proposed programme. Hence, the degree title of the proposed programme will be sending misleading signals to prospective students and employers. We suggest a change in the title of this proposed degree to better reflect what is actually offered in the programme proposed by Cosmos, which is not equivalent to the level of a medical radiation physics degree.
- Revise the intended learning outcomes to a large degree in order to become feasible and reflect the actual content and extent of this programme. Please note that in the opinion of the EEC, the current intended learning outcomes numbered 3, 4, 5 and 6 are overambitious and unrealistic even if the programme will be revised as suggested by the EEC given its character involving distance learning and duration.
- Revise the admission criteria for the students in order to ensure the minimum required background knowledge for following the program. Narrow the admission criteria to students holding a BSc or a MSc in Physics. Design an institutional program to bridge the knowledge gap in case of students with potential for



being eligible by having a BSc or a MSc in technical physics or engineering within the frame of the open concept for the university.

- Improve the design of the program by refining the content of the courses, extending to a full course the part
  dedicated to radiobiology and including topics that are currently missing such as the study of the basics of
  anatomy and physiology. Involve the national and international professional associations of medical
  physicists in the design of the program and the representatives of the national and international professional
  regulatory bodies for radiation protection.
- Separate the activities aiming at making the students familiar with the clinical activities of the medical
  physicist planned to be carried on at medical facilities from the theoretical courses. Design a portfolio of
  activities each student should perform at the clinics and specify their character, extent, form of supervision
  and examination, as well as the qualification of the teaching staff involved. It is recommended that one week
  of activities in radiotherapy, diagnostic imaging with ionising and non-ionising radiation and nuclear
  medicine, summing up to four weeks, should be included in the portfolio.
- Develop a program for the quality assurance that is specific for the programme. Emphasis should be put on measures and activities to ensure and monitor the quality of the teaching at the medical facilities and other partner institutions assisting and enabling the practical activities. Keep in mind the international dimension of the programme.
- Provide clear description of the competence and experience of the associated teachers in the program, both in terms of the subject they should teach but also the pedagogical merits and education. Ensure the appropriate level of competence. Provide also a description the time needed to be dedicated to educational activities and show how this matches the allocated resources for teaching in the budget of the programme. Develop a plan for the continuous evaluation and education of the teachers in the programme.
- Consider engaging in the coordination of the programme personnel with experience in teaching and research specific to the subject and not only partially related.



#### E. Signatures of the EEC

Name	Signature
Morris Altman	
Rob Koper	
Iuliana Toma-Dasu	
Timo Goeschl	
Kyriacos Andreou	
Matthew Kitching	
Erato Stylianou Markidou	

Date: March 4, 2023