

Doc. 300.1.1/2

Date: 15/02/2023

External Evaluation Report (E-learning programme of study)

- **Higher Education Institution:**
University of Nicosia
- **Town:** Nicosia
- **School/Faculty (if applicable):** School of Business
- **Department/ Sector:** Department of Digital Innovation
- **Programme of study- Name (Duration, ECTS, Cycle)**
In Greek:
Συστήματα Μετασύμπαντος (1*-1.5 έτος, 90 ECTS, Μάστερ, Εξ Αποστάσεως) [* = Επιλογή μεταπτυχιακής διατριβής]
In English:
Metaverse Systems(1*-1.5 years, 90 ECTS, Master of Science, E-Learning) [*=Thesis option]
- **Language(s) of instruction:** English
- **Programme's status:** New
- **Concentrations (if any):**

In Greek: N/A

In English: N/A



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 External Evaluation Committee (EEC) had a preliminary remote meeting on 24.01.2023 to discuss the program evaluation process. On 14.2.2023, the EEC visited the University of Nicosia and met faculty members, staff and students remotely with an online video conferencing tool in order to evaluate the MSc in Metaverse Systems. The visit was arranged and facilitated by Natasa Kazakaïou, representing the Agency of Quality Assurance and Accreditation in Higher Education. Before the online visit, the EEC members were provided with relevant program documents and videos to review.

The External Evaluation Committee (EEC) had a preliminary remote meeting on 24.01.2023 to discuss the program evaluation process. On 14.02.2023, the EEC visited the University of Nicosia in Cyprus and met faculty members, staff and students in order to evaluate the MSc in Metaverse Systems (1* - 1.5 years, 90 ECTS, Master of Science (MSc)). The visit was arranged and facilitated by Natasa Kazakaïou, representing the Agency of Quality Assurance and Accreditation in Higher Education. Prior to the site visit, and in a timely manner, the EEC members were provided with relevant programme documents. A final meeting to aggregate the EEC members' contributions to this report and to agree on its final form was held on 15.02.2023. The EEC was presented with detailed information about the university, the department, and the MSc programme. During the visit the EEC requested and received additional material including regulations, policies, and presentations. During the site visit, the EEC met university, school and department leadership peers and professors, teachers, and administrators. The EEC also met current MSc students in Blockchain and Digital Currency and PhD students.

The agenda included several meetings with different stakeholder groups as outlined below:

09.00 – 09.10	Brief introduction of the members of the EEC
09.10 – 09.45	Meeting of the committee with the Rector/Head of the Institution and/or the Vice Rector of Academic Affairs & meeting with the members of the Internal Evaluation Committee.
09.45 – 10.20	Meeting with the Head of the relevant departments, and the programs Coordinators of the programme and short presentation of the School's/Department's structure
	Coffee break
10.35 – 11.45	Meeting with the Head of the relevant department, and the Coordination Committee of the programme
11.45 – 12.30	A meeting with the Head/Coordinator and members for the E-Learning unit for a brief presentation and a Q&A Session
12.30 – 13.30	Meeting ONLY with members of the teaching staff on each course for the duration of the year(s) of study (Q&A session).
13.30 - 14.30	Lunch break offered by the institution to all EEC panel and CYQAA officer

14.30 – 15.10	Meeting ONLY with students and graduates
15.10 – 15.30	Live attending of a course
15.30 - 15.45	Coffee break
15.45 – 16.15	Meeting with members of the administrative staff ONLY.
16.15 – 16.45	A visit to the premises of the institution
16.45 – 17.00	Coffee break
17.00 – 17.15	Meeting ONLY between the EEC members, to sum up and discuss for any additional clarifications needed, before EXIT discussion
17.15 – 17.45	Meeting with the Head of the relevant department and the programme's Coordinator - exit discussion (questions, clarifications).

Based on the examination and evaluation of the accreditation materials and the site visit, the EEC concludes that some required standards are fully compliant apart from one exception of non-compliance in relation to the programme structure. The present assessment report describes how the standards are met and provides recommendations and suggestions for improving the programme under evaluation.

B. External Evaluation Committee (EEC)

<i>Name</i>	<i>Position</i>	<i>University</i>
Eleni Mangina	Professor	University College Dublin
Jorge Cardoso	Professor	University of Coimbra
Stylianios Hatzipanagos	Professor	University of London Worldwide
Stavrinou Kyriakou	Student	Open University of Cyprus

C. Guidelines on content and structure of the report

- *The external evaluation report follows the structure of assessment areas.*
- *At the beginning of each assessment area there is a box presenting:*
 - (a) *sub-areas*
 - (b) *standards which are relevant to the European Standards and Guidelines (ESG)*
 - (c) *some questions that EEC may find useful.*
- *The questions aim at facilitating the understanding of each assessment area and at illustrating the range of topics covered by the standards.*
- *Under each assessment area, it is important to provide information regarding the compliance with the requirements of each sub-area. In particular, the following must be included:*

Findings

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

Strengths

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

Areas of improvement and recommendations

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

- *The EEC should state the compliance for each sub-area (Non-compliant, Partially compliant, Compliant), which must be in agreement with everything stated in the report. It is pointed out that, in the case of standards that cannot be applied due to the status of the HEI and/or of the programme of study, N/A (= Not Applicable) should be noted.*
- *The EEC should state the conclusions and final remarks regarding the programme of study as a whole.*
- **The report may also address other issues which the EEC finds relevant.**

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

Sub-areas

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

1.1 Policy for quality assurance

Standards

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

1.2 Design, approval, on-going monitoring and review

Standards

- *The programme of study:*
 - *is designed with overall programme objectives that are in line with the institutional strategy and have explicit intended learning outcomes*
 - *is designed by involving students and other stakeholders*
 - *benefits from external expertise*
 - *reflects the four purposes of higher education of the Council of Europe (preparation for sustainable employment, personal development, preparation*

for life as active citizens in democratic societies, the development and maintenance, through teaching, learning and research, of a broad, advanced knowledge base)

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

1.3 Public information

Standards

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

1.4 Information management

Standards

- *Information for the effective management of the programme of study is collected, monitored and analysed:*
 - *key performance indicators*
 - *profile of the student population*

- *student progression, success and drop-out rates*
 - *students' satisfaction with their programmes*
 - *learning resources and student support available*
 - *career paths of graduates*
-
- *Students and staff are involved in providing and analysing information and planning follow-up activities.*

You may also consider the following questions:

- *What is the procedure for quality assurance of the programme and who is involved?*
- *Who is involved in the study programme's design and development (launching, changing, internal evaluation) and what is taken into account (strategies, the needs of society, etc.)?*
- *How/to what extent are students themselves involved in the development of the content of their studies?*
- *Please evaluate a) whether the study programme remains current and consistent with developments in society (labour market, digital technologies, etc.), and b) whether the content and objectives of the study programme are in accordance with each other?*
- *Do the content and the delivery of the programme correspond to the European Qualifications Framework (EQF)?*
- *How is coherence of the study programme ensured, i.e., logical sequence and coherence of courses? How are substantial overlaps between courses avoided? How is it ensured that the teaching staff is aware of the content and outputs of their colleagues' work within the same study programme?*
- *How does the study programme support development of the learners' general competencies (including digital literacy, foreign language skills, entrepreneurship, communication and teamwork skills)?*
- *What are the scope and objectives of the foundation courses in the study programme (where appropriate)? What are the pass rates?*
- *How long does it take a student on average to graduate? Is the graduation rate for the study programme analogous to other European programmes with similar content? What is the pass rate per course/semester?*
- ***How is it ensured that the actual student workload is in accordance with the workload expressed by ECTS?***

- *What are the opportunities for international students to participate in the study programme (courses/modules taught in a foreign language)?*
- *Is information related to the programme of study publicly available?*
- *How is the HEI evaluating the success of its graduates in the labor market? What is the feedback from graduates of the study programme on their employment and/or continuation of studies?*
- *Have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?*
- *What are the reasons for dropping out (voluntary withdrawal)? What has been done to reduce the number of such students?*

Findings

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

The programme under evaluation is a 1-1.5-years (90 ECTS) MSc in Metaverse Systems. It is a new programme and has never been in operation. The programme is subject to quality assurance procedures by the University of Nicosia. These procedures have a formal status, operationalised by an Internal Quality Assurance Committee. This committee has clearly defined tasks and procedures. The MSc programme under evaluation is designed with overall objectives that have explicit learning outcomes. Students did not have the opportunity to be involved in the design of the programme. Overall, the programme is subject to a formal institutional approval process.

The Department of Digital Innovation together with the Institute for the Future seem to have a clear commitment to the furtherment of the Metaverse, through its Open Metaverse Initiative which can already be seen in specific actions such as the introduction of a MOOC on NFTs and the Metaverse. The plans to introduce a track on Metaverse on the Decentralised conference are also a good way of ensuring continued dynamics around the Metaverse and related areas and to engage the community, including industry partners. The initial developments of a Metaverse space in the context of the MOOC are another example of this commitment and of the capacity to engage with reference people in the industry.

The programme is designed based on the feedback and experience of the department through the existing MOOC available on Metaverse, which has proven that there is an interest in the market on this subject.

The expected student workload is defined in ECTS, however the EEC finds that the learning outcomes, assessment and workload are not clearly defined in the course descriptors. This point is discussed further down in this section. The programme has strong links with industries (list was provided to the EEC). Although the guidelines are included in the study guide, the monitoring process is not clear (this point is discussed further down in this section). Successful completion of the programme results in a qualification that is clearly specified and communicated, although the title of the programme can be misleading in terms of industry and student expectations on the depth of the curriculum in metaverse. This point is discussed further down in this section.

The content and the learning outcomes of the MSc in Metaverse Systems are difficult to evaluate since the sector does not have any other similar programs and the curriculum standards are not defined in the sector, although there are courses that the program could benefit from. During the site visit it was clearly stated that compulsory credits are involved with Blockchain which is not in line with the expectation of an MSc in Metaverse Systems. The programme structure and course distribution in semesters are not clearly identified with a list of courses in Metaverse Systems, and the programme title and the course descriptions could benefit from a detailed review process.

The "Metaverse" is interpreted differently by different communities and is a broad term that can encompass many technologies, user experiences, purposes, and features. Diverse aspects as "social interaction", "digital twins", "virtual and augmented reality", "embodied interaction", "immersive interaction", and others, are part of the "Metaverse", in addition to "digital economies",

"blockchain", "non-fungible tokens", "web3". Although not apparent from the title, the Metaverse Systems program seems to adopt a narrowed view of the Metaverse, focused on the later aspects only. Important areas for the Metaverse experience, such as HCI, user experience, social interactions, are not touched upon by the proposed program. Other areas such as accessibility could also be explored within the context of the Metaverse.

The academic staff teaching the courses have specialisation mainly in Blockchain, with appropriate qualifications which are consistent with the programme level but not with the content of the course. Their teaching load is consistent with common workload distributions in the sector. The programme team has invested in staff with the potential for career development and enthusiasm to teach in the programme, while they are also active in research (the School has a rich research portfolio).

The programme aims to attract non-EU students which is positive for the growth of the programme in registration numbers. Further investigation should take place for the recruitment of international students in the programme and how the current MOOC available can be leveraged as a progression towards an MSc program and the EEC advice to the recruitment team of the University of Nicosia to take into account the diversity of the programme.

Students currently are mainly from National and non-EU markets and support services are in place. The assessment system and criteria regarding student course performance are clear, adequate and well-communicated to the students. Quality assurance mechanisms are present and fairly well-aligned with international standards, although there is no formal inclusion of industry and student representation at the internal programme review meetings. There are a number of quality assurance mechanisms and formal policies for the development and management of the programme of study.

Quality assurance of the courses is mainly based on questionnaires filled in by students. Based on the feedback, teachers improve materials continuously. However, the process as described lacks transparency. Feedback from quality assurance questionnaires is centrally collected and analysed.

Currently, there is an optional project thesis, which potentially could be a problem for students given that the MSc requires for the students to experience a component that brings together all the components of courses taken. There is an expectation in Higher Education for an MSc thesis to incorporate a thesis project that has as a whole or part of it a thesis writing component.

The programme was developed without specific market analysis in terms of the market expectations of the local employment conditions in Cyprus and EU. The employability statistics are encouraging although misleading based on the time period the data are collected (92% 18 months post-graduation).

Strengths

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

In summary, the strengths of the programme are as follows:

1. The small class size of this program will allow personal interactions between faculty and students, and efficient monitoring of student progress by faculty members. It is a positive result for the department to see the high employability rate of the students.
2. The faculty members are PhD holders. This ensures high academic standards, and their involvement in research projects portfolio will offer the students involvement with collaborative research projects. Academic staff are already cooperating in different projects and thus well connected.
3. The academic staff are active researchers and appear to be capable of integrating research and teaching in the regular courses.
4. The information related to the program of study will be publicly available. The course syllabuses and course outlines clearly define the expected learning outcomes, the content, the teaching and learning approaches and the method of assessing student performance.
5. The study program is in English, encouraging international applications. .
6. Institute representatives, study program leaders and teaching staff expressed their explicit willingness to revise the program according to recommendations by the EEC, and further improve a well-standing study programme.

A reaction that is highly appreciated from the EEC, and depicts institutes' willingness to devise a high quality study programme.

7. Regarding the students' intake expectations the department has a clear vision, according to the extra material supplied to the EEC by the institution and complying with the minimum English Language entry Requirements (IELTS 6.0).
8. Regarding student dropout and suspension of studies, according to the extra material supplied to the EEC by the university, in recent years there have been very low numbers of dropouts from students, which is a positive indication of strong student support, student commitment and studies satisfaction.
9. Regarding the gender-based data, the department is investing on EDI, since the department is not gender balanced. Further recommendations are provided from the EEC

Areas of improvement and recommendations

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

1. Currently there is no specific policy of review process of the programme to include the external stakeholders' input in a formal context. It is recommended to specify a policy with a target to have the programme review panel and aim on reviewing the curriculum. The industry external advisors (given the innovative area of Metaverse applications) should have an active role in the reviews since the role of the courses needs to be more strategic in the context of Metaverse in consideration of the current expectations of employers in the sector.
2. It is not clear how the actual student workload is in accordance with the workload expressed by ECTS. There is no clear plan for incorporating students into faculty research activities.
3. The link between learning outcomes and assessment could be further enhanced.
4. The programme is not clearly designed with an application focus and an intention to integrate theory and practice.
5. The university is encouraged to keep applying for recognised external accreditations to evaluate the quality assurance of its programmes.
6. The EEC recommends that student representation is formally placed in the internal quality review process (including meetings) at all times. The scope of this review should include an analysis of the learning outcomes of the program to identify who are the exact intake of prospective applicants and the content of each course regarding the market needs in Metaverse Systems. If an industry and/or student representative is not present, the meeting should not take place.
7. The thesis component should be compulsory as it is unclear with the current curriculum, if a student opts to not take the thesis component, how the Learning Outcome No8 will be achieved.
8. The alignment of some courses with the Metaverse theme is not clear. For example, the topics covered by the META525DL Interactive Design seem geared towards artistic interactive installations with unclear connections to how these physical installations could be experienced through the Metaverse. Similarly, COMP523DL Game Programming seems a classical game development unit and does not seem to establish a clear connection with games for the Metaverse.
9. In general program focus within the list of compulsory courses is on Blockchain and only some courses are on Metaverse development skills. For clarification purposes Blockchain technology is used to establish the decentralized network of virtual worlds and 3D spaces known as Metaverse. Anyone can utilize the user-friendly Metaverse platform to build their own virtual world or 3D environment. It is a place where people can connect in all facets of their lives. NFTs are digital assets on a blockchain, while Metaverse is an online virtual world where users can explore and interact with each other. Each has its own set of benefits and drawbacks, but they both provide an opportunity for people to express themselves digitally in unique ways. The EEC recommends for the institution to consider the two different routes in terms of the title of the program and the content of the curriculum

depending on what the learning outcomes are and what the targeted markets the graduates will be employed upon graduation. The following changes are recommended based on the choice of title of the MSc program:

- **Option 1: MSc in Metaverse Applications:** The curriculum currently with the choices of compulsory and elective courses is an MSc for Blockchain specialization. EEC recommends to make sure that the design of the program addresses the basic knowledge and processes needed for the Metaverse applications. Hence, depending on the background of the student intake there can be two different streams under this MSc title, with compulsory courses on Metaverse and 3D development skill set, which can then lead to one of the two following streams, depending on the choice of specialisation the student selects:
 - **Stream 1: Metaverse development** (specialised elective courses should reflect this specialisation)
 - **Stream 2: Blockchain application in Metaverse** (specialised elective courses should reflect this specialisation)
 -
- **Option 2: MSc in Blockchain for Metaverse Applications.** The curriculum currently with the choices of compulsory and elective courses is an MSc for Blockchain specialization and several courses should be included on UX Design and a skillset for the development of Metaverse applications. The academics have a strong background and included an adequate number of courses in terms of the Blockchain curriculum in the current courses offerings.

EEC completely understands that adding heavy programming skills requirements might frustrate some of the students who want to focus on the applications of the Metaverse . At the same time it is important to add some essential competence on Metaverse development, such competence will not frustrate students who want to focus on the usability part and at the same time will allow some students to gain an essential metaverse-development knowledge..

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	Non-Compliant
1.3	Public information	Compliant
1.4	Information management	Partially compliant

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

Sub-areas

- 2.2 Process of teaching and learning and student-centred teaching methodology**
- 2.3 Practical training**
- 2.4 Student assessment**
- 2.5 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.*

2.2 Practical training

Standards

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

2.3 Student assessment

Standards

- *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.*

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

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

The EEC had the opportunity to discuss with students and canvas for views about the student experience. Most of the students that the EEC met were PhD candidates, and there were two DL students in the group. Overall, all students were happy with the support they received (administrative and academic). The DL students discussed (a) some of the challenges of studying in an DL environment, highlighting the difficulties of benefiting from an online student community, and finding time to study as busy professionals, while studying (b) the opportunities this could provide by meeting and collaborating with other students online and using effectively the tools provided by the University, e.g. asynchronous and synchronous tools such as the VLE fora and Discourse. However, there was no evidence, based on this discussion, that these students had been inducted in or received training on the Metaverse tools.

The EEC reviewed the course syllabus for all modules of the program. These were adequate in all respects except for 'bringing together' and linking learning activities and teaching methods and assessment. In contrast, the study guides for every module were well written and detailed, providing a week by week comprehensive description of content and activities, including formative and summative assessments. The learning outcomes were appropriately written at a program level. However, some of the verb descriptors at module level were confusing, not distinguishing between objectives and learning outcomes (e.g. the use of the verb 'understand' should be avoided as non specific and vague) and not aligned to good practice in writing learning outcomes, eg. following Bloom's taxonomy paradigm.

Individual courses use a variety of assessments, e.g. essay-type assignments, projects and the final exams. The ones that are particularly effective (e.g. projects, assessed classroom (digital or on campus) participation can engage the students in independent and student centered learning. Exams are taking place online with the use of a proctoring tool, i.e., Proctorio to address academic integrity issues. MSc dissertation is optional and not a mandatory requirement of the program. It is not completely clear how practical or "hands-on" some of the courses are. It is also not clear whether the assessment by 60% weight on the final exam is the most appropriate for all courses.

There is a well organized infrastructure that is used for induction of students and training in e-learning environments. There is evidence of this in the program documentation, including student guides. There was no evidence though in the documentation on approaches to training students on how to use the Metaverse tools. and Engageli. The EEC observed an online session that utilized Engageli and ZOOM to support this program.

Strengths

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

- Robust e-learning platforms and related methodologies and valid rationale of use of technologies are in place.
- The availability of synchronous and asynchronous communication tools provides the canvas for student engagement with the program.
- Student satisfaction and positive evaluation of the student experience
- Quality of the course guides – there is appropriate level of detail and good emphasis on range of activities and assessment opportunities
- Support infrastructure for students with special needs (e.g. dyslexia), with emphasis on success in an online environment.

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.

- An improvement would direct a larger percentage of students, if not all, towards writing a Master's thesis and bring together the knowledge gained from the modules taken.
- Placement and internship were not available when discussed with the program team. These are crucial and students can take advantage of the rich research and professional networks that the University participates in. A challenge might be to support DL students to benefit from such opportunities.
- A week-by-week structure of the curriculum to be made visible in the VLE and to be available to the students before the program starts.

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	Partially Compliant
2.3	Student assessment	Compliant
2.4	Study guides structure, content and interactive activities	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 department has 7 full time staff members and 12 adjunct and visiting staff with adequate academic qualifications. There is no gender balance, which indicates that further efforts are needed from the department and the University to attract female applicants to academic positions advertised.

The faculty staff members involved in the programme are adequately qualified, in terms of teaching status and rank, and their CVs are of very good standard, ensuring a high expertise, which is appropriate to deliver a high-quality teaching experience to students. Faculty members actively conduct research, participate in international research projects (Erasmus+, Horizon 2020 and Horizon Europe), and increasingly publish research papers.

The research background of the teaching staff informed both the design of the programme and the content of the courses, although it is focused on Blockchain.

The Institution does not provide regular training opportunities for teaching staff both about emerging teaching methods and new technologies and tools for teaching, as well as peer observation of lecturing and class activities.

The Institution adopts a balanced workload among research, teaching, and service load. This results in an appropriate allocation of the teaching load. Moreover, a reduction of the teaching load is possible for those staff members who are responsible for relevant research grants or have specific responsibilities.

Student evaluation is regularly conducted on teaching staff and on the courses, both during courses and at their end. Results of the evaluation are appropriately analyzed and taken into account by the Internal Quality Committee, also involving students.

The rules and procedures for career progression are available to the teaching staff and clear to them. For the recruitment of new staff there is a well-defined procedure involving staff responsible for the programme, staff responsible for the school and the governance of the University. While the procedure is clear and well defined, the EEC has not been provided with a 3 (or 5) years plan for staff recruitment in the area of Metaverse, thus anticipating strategic needs.

Strengths

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

- Permanent staff are adequately qualified for conducting research and teaching in the disciplinary area
- Motivation and cohesion of the teaching staff towards the objectives of the programme and delivering a high quality learning experience
 - There is adequate training in terms of formal certificate in e-learning program provision

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 panel recommends in terms of the new area of the Metaverse a formal induction of all staff involved needs to be provided. The EEC recommends for the department to establish a 3-5 recruitment plan to anticipate needs of increased student intake, to have the resources for the programme to achieve the strategic objectives.

Although the department has a rich portfolio of research projects, the EEC did not observe a clear synergy between the research and the teaching within the new program offered.

In terms of gender balance, the EEC recommends the self assessment process through the Athena SWAN award (<https://www.advance-he.ac.uk/equality-charters/athena-swan-charter>).

The University has good incentives in place for increasing the output of high-quality research publications. A balance needs to be achieved however, in order to make sure that faculty continues to have incentives, motivation and time to innovate also on the pedagogical/teaching side.



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	Compliant
3.3	Synergies of teaching and research	Non-compliant

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

Sub-areas

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

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.

The institution has appropriate and clear admission requirements. The minimum English competence admission requirement is 6.0 IELTS. Academic advisors and tutors are available to support and monitor student progression. The grading and degree classification systems are comparable to other national and international HEIs. The program is new and the ECC recommends a data collection on the conversion of the participants from the online free MOOC offered to the MSc intake. There is no good gender balance in the faculty study programme, which might create wrong assumptions for students' role models. The institution has very good mechanisms for monitoring student application and performance, and supportive services (such as IT support, library, and student support) are in place.

The strategy to recruit international students can increase the applicants and create pressure on the capacity of the H/W & S/W facilities of the department. The study program does not clearly define the workload required to support the courses.

The program seems to have a broad set of admission requirements, accepting students with a very diverse background. Some courses however, seem to require specific background knowledge or experience to be successfully completed (e.g., programming knowledge, or 3D modeling - Virtual World Architectures, Data Science for the Metaverse, Game

Programming, Virtual and Augmented Reality Development). During the meeting with students that completed other programs (e.g., Blockchain and Digital Currency), students did not identify any difficulties in achieving the necessary level of competency to successfully complete the various courses.

Strengths

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

Based on student feedback from the MSc in Blockchain, there is a very good student-teacher interaction and ratio (given the relatively low number of students each year). This contributes to a positive atmosphere of trust, focused teaching and room for dialogue and support for students.

There is a very clear description of the procedures, allowing for transparency and planning of program management and resource allocation.

The number of scholarships provided to the students in the different programmes and the inclusivity are commendable.

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.

To attract larger numbers of students, it may be helpful to actively promote and advertise the positive outcomes and high potential of the existing MOOC, although a clear definition of the new program title and its objectives need to be presented for the applicants to have clear expectations on the subject of study (please refer to Section 1).

Moreover, it is recommended for the students to have access to the results of the course and program evaluation, including actions taken in response to the program evaluation results.

The institutional strategy needs to define the position of the department and institution within the educational market for a program in Metaverse and the program's place internationally to attract EU and non-EU students, which is likely to increase students' intake.

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

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

5. Learning resources and student support (ESG 1.6)

Sub-areas

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

5.1 Teaching and Learning resources

Standards

- 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.*

You may also consider the following questions:

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

Findings

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

The University of Nicosia offers a multitude of learning resources and support services to enable students to succeed academically but also to have a good personal experience. During the onsite visit the University staff has demonstrated access to those systems (for example Engageli and the student library). Also students have confirmed their positive experience while using University's systems and available resources.

Among others the University offers library resources (including adequate online resources, ebooks, journals etc.), online learning and collaboration tools like Moodle and Engageli..

Staff have explained their procedures and infrastructure supporting students with special needs. The students have confirmed that they get support in academic advising, counselling, and tailored accessibility accommodations. The University of Nicosia seems to have a well-placed, efficient, and reliable infrastructure when it comes to providing learning tools and support services to the students.

UNIC has an effective and dynamic DL unit that continually monitors program quality and student progression and provides assistance to students and faculty..

Although the University of Nicosia is well-equipped with physical and virtual resources for delivering the Metaverse Systems program, it is not clear that the DL experience in subjects related to interactivity in VR/AR will be on a par with the face-to-face experience. This may disadvantage students that do not have access to related technologies, e.g. a state of the art VR/AR headset. The current recommended set of resources for the distance learning students is not comparable to the access of on campus resources the students in the conventional MSc have. This creates an imbalance that needs to be addressed.

Strengths

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

Student welfare mechanisms for monitoring the sufficiency of student support are in place. Library services are available online and provide adequate access to online resources for the DL students.

Latest technology systems like Engageli, Whisper and inhouse developed technologies support DL students. Dedicated personnel monitor and support students (for example follow up students that frequently miss classes). Innovative use of technology enriches the student experience (i.e. metaverse campus, Discord servers, Telegram messaging and Proctorio)

Industry experts as guest speakers are engaged to enhance learning experience, particularly useful when DL students have access to these events.

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 range of technologies available to DL students needs to be revisited and reviewed to ensure that it is on a par with the technologies and setup offered to on campus students. The DL experience should be broadly similar including equivalent tools and online learning environments in Metaverse. Given the remote delivery of the program, the EEC recommends the provision of the appropriate hardware for students' access to Metaverse.

Even though support services for students with special needs and mental services do exist, it seems that students are not entirely aware of what is available and how they can utilize it. There needs to be better communication from this perspective and make sure that all students are aware of how they can get support.

The School needs a rigorous process of data collection in terms of reviewing the pipeline and year on year alumni of the students and not to rely on the alumni services with data 18 months post graduation.

Furthermore, a formal induction on Metaverse is required for both students and staff involved in the MSc.

The Department should continue to periodically assess (every year) the adequacy and suitability of resources and inform the responsible services of the University for their actions given the target of steady increase of the student intake year on year for this program.

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

Sub-area		Non-compliant/ Partially Compliant/Compliant
5.1	Teaching and Learning resources	Partially Compliant
5.2	Physical resources	Non-Compliant
5.3	Human support resources	Partially 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 EEC reviewed and examined the materials provided by the University of Nicosia pertaining to its new MSc in Metaverse Systems conventional program. The External Evaluation Committee (EEC) had a site visit meeting on 14.02.2023 to discuss the programme evaluation process.

The EEC was presented with detailed information about the program. During the site visit, the EEC met with university leadership peers, professors, teachers, administrators, and students from other programs.

Based on the examination and evaluation of the accreditation materials and the on site visit, the EEC concludes that some of the standards are met, while some are partially compliant and others non-compliant

The EEC identified the following key strengths:

1. The faculty members are adequately qualified and active researchers, which enables them to integrate research and teaching in the regular courses.
2. The study program is in English, encouraging international applications.
3. Institute representatives, study program leaders and teaching staff expressed their explicit willingness to revise the program according to recommendations by the EEC, and further improve a well-standing study programme. A reaction that is highly appreciated from the EEC, and depicts institutes' willingness to devise a high quality study programme.
4. Regarding the students' intake expectations the department has a clear vision, according to the extra material supplied to the EEC by the institution and complying with the minimum English Language entry Requirements (IELTS 6.0).
5. Regarding student dropout and suspension of studies, according to the extra material supplied to the EEC by the university, in recent years there have been very low numbers of dropouts from students, which is a positive indication of strong student support, student commitment and studies satisfaction.
6. Regarding the gender-based data, the department is investing on EDI, since the department is not gender balanced. Further recommendations are provided from the EEC
7. Robust e-learning platforms and related methodologies and valid rationale of use of technologies are in place.
8. The availability of synchronous and asynchronous communication tools provides the canvas for student engagement with the program.
9. Student satisfaction and positive evaluation of the student experience
10. Quality of the course guides – there is appropriate level of detail and good emphasis on range of activities and assessment opportunities
11. Support infrastructure for students with special needs (e.g. dyslexia), with emphasis on success in an online environment.
12. There is adequate training in terms of formal certificate in e-learning program provision
13. Based on student feedback from the MSc in Blockchain, there is a very good student-teacher interaction and ratio (given the relatively low number of students each year). This contributes to a positive atmosphere of trust, focused teaching and room for dialogue and support for students.

14. Student welfare mechanisms for monitoring the sufficiency of student support are in place. Library services are available online and provide adequate access to online resources for the DL students.
15. There is a very clear description of the procedures, allowing for transparency and planning of program management and resource allocation.
16. The number of scholarships provided to the students in the different programmes and the inclusivity are commendable.
17. Latest technology systems like Engageli, Whisper and inhouse developed technologies support DL students. Dedicated personnel monitor and support students (for example follow up students that frequently miss classes). Innovative use of technology enriches the student experience (i.e. metaverse campus, Discord servers, Telegram messaging and Proctorio).
18. Industry experts as guest speakers are engaged to enhance learning experience, particularly useful when DL students have access to these events.

The EEC also identified a number of key areas for improvement and therefore, the following recommendations are made:

1. Currently there is no specific policy of review process of the programme to include the external stakeholders' input in a formal context. It is recommended to specify a policy with a target to have the programme review panel and aim on reviewing the curriculum. The industry external advisors (given the innovative area of Metaverse applications) should have an active role in the reviews since the role of the courses needs to be more strategic in the context of Metaverse in consideration of the current expectations of employers in the sector.
2. It is not clear how the actual student workload is in accordance with the workload expressed by ECTS. There is no clear plan for incorporating students into faculty research activities.
3. The link between learning outcomes and assessment could be further enhanced.
4. The programme is not clearly designed with an application focus and an intention to integrate theory and practice.
5. The university is encouraged to keep applying for recognised external accreditations to evaluate the quality assurance of its programmes.
6. The EEC recommends that student representation is formally placed in the internal quality review process (including meetings) at all times. The scope of this review should include an analysis of the learning outcomes of the program to identify who are the exact intake of prospective applicants and the content of each course regarding the market needs in Metaverse Systems. If an industry and/or student representative is not present, the meeting should not take place.
7. The thesis component should be compulsory as it is unclear with the current curriculum, if a student opts to not take the thesis component, how the Learning Outcome No8 will be achieved.
8. The alignment of some courses with the Metaverse theme is not clear. For example, the topics covered by the META525DL Interactive Design seem geared towards artistic interactive installations with unclear connections to how these physical installations could be experienced through the Metaverse. Similarly, COMP523DL Game Programming seems a classical game development unit and does not seem to establish a clear connection with games for the Metaverse.
9. In general program focus within the list of compulsory courses is on Blockchain and only some courses are on Metaverse development skills. For clarification purposes Blockchain technology is used to establish the decentralized network of virtual worlds and 3D spaces known as Metaverse. Anyone can utilize the user-friendly Metaverse platform to build their own virtual world or 3D environment. It is a place where people can connect in all facets of their lives. NFTs are digital assets on a blockchain, while Metaverse is an online virtual world where users can explore and interact with each other. Each has its own set of benefits and drawbacks, but they both provide an opportunity for people to express themselves digitally in unique ways. The EEC recommends for the institution to consider the two different routes in terms of the title of the program and the content of the curriculum depending on what the learning outcomes are and what the targeted markets the graduates will be employed upon graduation. The following changes are recommended based on the choice of title of the MSc program:
 - **Option 1: MSc in Metaverse Applications:** The curriculum currently with the choices of compulsory and elective courses is an MSc for Blockchain specialization. EEC recommends to make sure that

the design of the program addresses the basic knowledge and processes needed for the Metaverse applications. Hence, depending on the background of the student intake there can be two different streams under this MSc title, with compulsory courses on Metaverse and 3D development skill set, which can then lead to one of the two following streams, depending on the choice of specialisation the student selects:

- **Stream 1: Metaverse development** (specialised elective courses should reflect this specialisation)
 - **Stream 2: Blockchain application in Metaverse** (specialised elective courses should reflect this specialisation)
 -
 - **Option 2: MSc in Blockchain for Metaverse Applications.** The curriculum currently with the choices of compulsory and elective courses is an MSc for Blockchain specialization and several courses should be included on UX Design and a skillset for the development of Metaverse applications. The academics have a strong background and included an adequate number of courses in terms of the Blockchain curriculum in the current courses offerings.
10. EEC completely understands that adding heavy programming skills requirements might frustrate some of the students who want to focus on the applications of the Metaverse. At the same time it is important to add some essential competence on Metaverse development, such competence will not frustrate students who want to focus on the usability part and at the same time will allow some students to gain an essential metaverse-development knowledge..
 11. An improvement would direct a larger percentage of students, if not all, towards writing a Master's thesis and bring together the knowledge gained from the modules taken.
 12. Placement and internship were not available when discussed with the program team. These are crucial and students can take advantage of the rich research and professional networks that the University participates in. A challenge might be to support DL students to benefit from such opportunities.
 13. A week-by-week structure of the curriculum to be made visible in the VLE and to be available to the students before the program starts.
 14. The panel recommends in terms of the new area of the Metaverse a formal induction of all staff involved needs to be provided. The EEC recommends for the department to establish a 3-5 recruitment plan to anticipate needs of increased student intake, to have the resources for the programme to achieve the strategic objectives.
 15. Although the department has a rich portfolio of research projects, the EEC did not observe a clear synergy between the research and the teaching within the new program offered.
 16. In terms of gender balance, the EEC recommends the self assessment process through the Athena SWAN award (<https://www.advance-he.ac.uk/equality-charters/athena-swan-charter>).
 17. The University has good incentives in place for increasing the output of high-quality research publications. A balance needs to be achieved however, in order to make sure that faculty continues to have incentives, motivation and time to innovate also on the pedagogical/teaching side.
 18. To attract larger numbers of students, it may be helpful to actively promote and advertise the positive outcomes and high potential of the existing MOOC, although a clear definition of the new program title and its objectives need to be presented for the applicants to have clear expectations on the subject of study (please refer to Section 1).
 19. Moreover, it is recommended for the students to have access to the results of the course and program evaluation, including actions taken in response to the program evaluation results.
 20. The institutional strategy needs to define the position of the department and institution within the educational market for a program in Metaverse and the program's place internationally to attract EU and non-EU students, which is likely to increase students' intake.



21. The range of technologies available to DL students needs to be revisited and reviewed to ensure that it is on a par with the technologies and setup offered to on campus students. The DL experience should be broadly similar including equivalent tools and online learning environments in Metaverse. Given the remote delivery of the program, the EEC recommends the provision of the appropriate hardware for students' access to Metaverse.
22. Even though support services for students with special needs and mental services do exist, it seems that students are not entirely aware of what is available and how they can utilize it. There needs to be better communication from this perspective and make sure that all students are aware of how they can get support.
23. The School needs a rigorous process of data collection in terms of reviewing the pipeline and year on year alumni of the students and not to rely on the alumni services with data 18 months post graduation.
24. A formal induction on Metaverse is required for both students and staff involved in the MSc.
25. The Department should continue to periodically assess (every year) the adequacy and suitability of resources and inform the responsible services of the University for their actions given the target of steady increase of the student intake year on year for this program.

