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# **External Evaluation Report**

# (E-learning programme of study)

- Higher Education Institution: University of Limassol
- Town: Nicosia and Limassol
- School/Faculty (if applicable): Technology and Innovation School
- Department/ Sector: Department of Information Technology
- Programme of study- Name (Duration, ECTS, Cycle)

#### In Greek:

MSc Ανάλυση Επιχειρηματικών Δεδομένων

# In English:

**MSc Business Analytics** 

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

In Greek: Concentrations
In English: Concentrations

ΚΥΠΡΙΑΚΗ ΔΗΜΟΝΙΑΙΙΑ

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 site visit at the University of Limassol took place on the 26<sup>th</sup> of February 2024. During the site visit the committee members had the opportunity to meet with a full range of institutional and school leaders, teaching staff, administrative staff, and current and former students. The work of the committee was supported by extensive documentation provided to the committee in advance. Additional documents were provided at the request of the committee and the institution was responsive in doing so. The documentation was helpful in assessing the MSc Business Analytics programme according to the criteria set by the agency. The committee members benefited from a number of informative presentations on the institution and the plans for the MSc Business Analytics. The committee found that all participants were very thoughtful and open during the discussion across the site visit. The committee also had a site tour of the current premises. In this Report we detail our findings and offer some constructive suggestions for the further refinement of the programme.

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

Name	Position	University
Kevin Orr	(Chair) Professor	University of St Andrews, Scotland
Patrick Mikalef,	(Member) Professor	Norwegian University of Science and Technology, Norway
Periklis Gogas	(Member) Professor	Democritus University of Thrace, Greece
Stylianos Hatzipanagos	(Member-E-Learning expert) Professor	University of London
Maria Ilia	Student Member	Cyprus University of Technology

#### C. Guidelines on content and structure of the report

- The external evaluation report follows the structure of assessment areas.
- At the beginning of each assessment area there is a box presenting:
  - (a) sub-areas
  - (b) standards which are relevant to the European Standards and Guidelines (ESG)
  - (c) some questions that EEC may find useful.
- The questions aim at facilitating the understanding of each assessment area and at illustrating the range of topics covered by the standards.
- 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:
  - o 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
  - o ensures academic integrity and freedom and is vigilant against academic fraud
  - guards against intolerance of any kind or discrimination against the students or staff
  - o supports the involvement of external stakeholders

#### 1.2 Design, approval, on-going monitoring and review

#### **Standards**

- The programme of study:
  - o is designed with overall programme objectives that are in line with the institutional strategy and have explicit intended learning outcomes
  - o is designed by involving students and other stakeholders
  - o 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
  - o 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
- o is reviewed and revised regularly involving students and other stakeholders

#### 1.3 Public information

#### **Standards**

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

#### 1.4 Information management

#### <u>Standards</u>

- Information for the effective management of the programme of study is collected, monitored and analysed:
  - key performance indicators
  - o profile of the student population
  - student progression, success and drop-out rates
  - o students' satisfaction with their programmes
  - learning resources and student support available
  - o 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 Master's in Business Analytics is a 3 semester, full-time distance learning program and requires a total of 90 ECTS. Overall, the program is well structured and with a good portfolio of courses. Furthermore, the objectives and goals

are in accordance with the strategy of the school and the intended learning outcomes stem from and are consistent to the content of the program. The program builds on three main pillars; those of data science, decision making in the business, and data analytics. The structure of the program is also in alignment with other international universities and standards, and follows a coherent collection of covers that cover complementary aspects of business analytics. The purpose, objectives, and learning outcomes are communicated is a clear and concise way and are well-documented in the application. The expected learning outcomes of the program are known to the students and there is a good distinction between the knowledge, intellectual skills, practical skills, and key transferable skills. Overall, the program caters to students that are eager to specialize on the use of analytics in organizations for improving decision-making and optimizing operations. Students will learn about how to utilize data according to state-of-the-art practices for solving business-related problems.

The structure and content of the program include an appropriate number and variety of courses, however, there are currently no elective ones. Presently the Master's in Business Analytics program does not offer specializations but allows students to select a project in business analytics applications which they can focus on a case that interests them in particular. The Master's in Business Analytics requirements consists of 9 core courses, of 10 credits each (90 credits in total). Within this list of the nine core courses, there are ones that focus on technical facets of data analytics and ones that are more oriented towards managerial decision making and organizational applications of data science. All available courses and their content is communicated to students through the program's website and the course selection platform. Each course has a unique code, and there is a dedicated platform used to delivering the respective content.

The admission criteria are explained in sufficient detail to attract international students, and there is the ambition that the programme will be followed mostly by international students. Nevertheless, there is a bit of ambiguity concerning what are satisfactory quantitative skills from the prior quantitative courses that have been taken in their Bachelors studies. There is also limited explanation on what types of bachelor's degrees are appropriate and how they will be assessed in order to be eligible to the Master's in Business Analytics. The expected number of International Students in the program of study is realistic and appropriate given that it is a new programme. The required ECTS for entry to the study programme are not defined, nor the prior knowledge apart from the quantitative skills.

Quality assurance mechanisms are present and well-aligned with international standards. There is a number of quality assurance mechanisms and formal policies for the development and the management of the program of study. Moreover, the programme coordinator and the core team appear to be very dedicated and devoted, with a good expertise for the fulfilment of their corresponding roles.

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

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

- 1. The University of Limassol (Formerly CIIM) has prior experience in delivering educational programs in business analytics (e.g. Business Intelligence and Data analytics).
- 2. Most of the faculty has adequate practical experience which ensures a good balance between theory and practice. They also have experience in teaching similar courses.
- 3. Most of the full-time professors are Ph.D holders and well experienced teachers with practical knowledge. They are also up-to-date in terms of the latest approaches and methods of data analytics used in organizations.
- 4. The information related to the program of study is available and clear. In addition, there is a clear structure in the program with a coherent progression of subjects.

- 5. The assessment system and criteria regarding student course performance are clear, adequate and well-communicated to the students. In addition the meeting sessions are clearly visualized in the programme of the semester.
- 7. The structure of the program follows the European Credit Transfer System (ECTS) and there is a good correspondence between the effort required from the students in each course and the corresponding ECTS.
- 8. The course structure and the different types of projects ensures that students will gain experience with practical problems and how to solve 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.

- 1. The entry requirements should be updated and be more detailed in relation to the required backgrounds, completed bachelor studies, and ECTS. Also there should be mention of any prerequisite knowledge in more detail.
- 2. The details of the study guides is not written in a way that is informative to the students. The department should develop a brochure that is easily accessible to students, with the core information they need for the entire study programme as well as key information per course and the dependencies between courses.
- 3. It would be good to have a formal reference group of students for each course that can provide feedback during the course duration at important points in order to ensure that any problems are dealt with prior to course completion.
- 5. It would be also recommended to have visible information to students about distribution of grades in prior years of each course. Although this is a new study programme, providing transparent information to each course is necessary.
- 6. Allowing for some elective courses or a bit of more customization of the content by the students, particularly in the last semester may be good. Since applicants may be looking to apply their skills in different areas or domains, enabling a bit more flexibility in the study structure is deemed as important.

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

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



# ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ

CYQAA CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION



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

#### **Sub-areas**

- 2.1 Process of teaching and learning and student-centred teaching methodology
- 2.2 Practical training
- 2.3 Student assessment
- 2.4 Study guides structure, content and interactive activities

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

- The e-learning methodology is appropriate for the particular programme of study.
- Expected teleconferences for presentations, discussion and question-answer sessions, and guidance are set.
- A specific plan is developed to safeguard and assess the interaction:
  - among students
  - between students and teaching staff
  - between students and study guides/material of study
- Training, guidance and support are provided to the students focusing on interaction and the specificities of e-learning.
- The process of teaching and learning supports students' individual and social development.
- The process of teaching and learning is flexible, considers different modes of e-learning delivery, where appropriate, uses a variety of pedagogical methods and facilitates the achievement of planned learning outcomes.
- Students are encouraged to take an active role in creating the e-learning process.
- The implementation of student-centered learning and teaching encourages a sense of autonomy in the learner, while ensuring adequate guidance and support from the teacher.
- Teaching methods, tools and material used in teaching are modern, effective, support the use of modern educational technologies and are regularly updated.
- Mutual respect within the learner-teacher relationship is promoted.
- The implementation of student-centred learning and teaching respects and attends to the diversity of students and their needs, enabling flexible learning paths.
- Appropriate procedures for dealing with students' complaints regarding the process of teaching and learning are set.

#### 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)
  - o 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.

Suitability of the programme for online delivery.

The nature of the programme is compatible with e-learning delivery. The programme team have significant knowledge which will be helpful in successfully running a programme of this type using online delivery.

• All related initiatives are supported by the Distance Learning Unit, and approaches to pedagogy and implementation seem to be robust.

 Quality assurance mechanisms are in place, maintaining standards and providing a consistent approach to the design and delivery of online and distance learning programmes.

As the programme is new, we did not see any examples of interaction between students or evidence of how peer learning or group learning is supported in the distance learning context. We observed a conventional class and this provided satisfactory evidence on teaching approaches and adequacy of teaching staff. Significant work needs to be done to ensure successful translation into an e-learning environment.

We were also given access to two courses on the VLE where there was evidence of a consistent structure to support student learning. Clearer signposting and some further explanations on the purpose of VLE resources and where they fit exactly within the student journey is necessary.

The EEC had the opportunity to meet a group of students from the MSC in Business Intelligence and Data Analytics and the MBA conventional programme (both alumni and current students) and canvas for views and feedback from their student experience:

- Students seemed to be satisfied with the course and the level of support they received (administrative and academic) in the courses.
- They appreciated the timeliness and quality of feedback they received, both on annotated student work and generic feedback, including contact with the tutors to discuss their assessed work. This approach should be replicated in the distance learning Business Analytics programme, including one to one online interactions between tutors and students to close the feedback loop.
- Some of the students thought that the university should allow them further exposure to employment opportunities and placements. This is equally important if a considerable challenge for the distance learning students.
- The alumni received informal support from the programme team when they explored post study career opportunities and they found these helpful. However, they would have appreciated further support from the university careers service in terms of identifying employment opportunities. This provision should also be developed for the distance learning students on this programme.

#### Study guides

The EEC reviewed the programme documentation and study guides for all courses, inc. supplementary materials that related to weekly activities. The study guides, despite the fact that they had appropriate level of detail, were not fit for purpose, as the audience for which they were written did not to seem to be distance learning students. The template used was particularly confusing.

The learning outcomes were appropriate and corresponded to the postgraduate level of study. In some of the courses, there seemed to be too many of them. It was not always clear how they related/linked to specific activities and assessments.

We reviewed a guide for staff teaching on the conventional programme. There does not yet appear to be a similar guide for DL staff. This needs to be addressed. In our discussions, the EEC was informed that a guide in electronic format was still in preparation. There are instructor resources on Moodle, which need further development, as they seem to be focusing on the technical support rather than the pedagogic elements.

#### Assessment

- The EEC had the opportunity to review sample exam papers from another MSc (BiDA) which is not an elearning programme. The sample exams papers were well designed and offered clear guidance to the students in terms of online submission. We did not see any exam papers from the MSc under consideration.
- Exams are taking place online, using a proctoring system (Proctorio) which seems to be operating without any issues according to the team.
- The university does not seem to have a comprehensive policy or guidance for the use of AI for members of staff and students. This is a key area in the current context of the proliferation of generative AI technologies (inc. ChatGPT). The implications of students using generative AI applications can be severe for assessment practice. The programme team indicated they are using Turnitin to detect plagiarism offences. However, the current plugin developed by Turnitin to detect the use of AI generative technologies like ChatGPT can be erratic. Careful thinking and attention to sectoral best practices is important here.
- Regarding the assessment framework for distance learning, the EEC is told that distance learning special
  provisions (particularly in relation to enhanced assessment methodologies) and policies for distance learning are
  currently in the process of being finalised and will be approved shortly by the QA committee before being
  submitted to the Senate.

#### Strengths

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

- There is a robust pedagogical approach to the design of online delivery.
- Student satisfaction with similar (conventional) programmes in the same department receive positive evaluations from students. Participation in evaluation is 70% for the whole university which appears to be a very good evidence base.
- Support infrastructure for distance learning students, including those students with special needs, is in place to a significant degree. The adequacy of this provision needs to be monitored as the programme expands.
- Training and induction opportunities in e-learning for students and staff is being planned. Such activities should support learning and help students and staff to develop digital literacies and related skills.

### 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 study guides need to be rewritten keeping in mind that the target audience is the students on the Business Analytics programme.

- Students should receive clear guidance and recommendations on the use of AI in assessment, linked directly to university policy/guidance on the use of AI. This guidance needs to be fully developed.
- Staff should be supported dealing with academic offences originated by the use of generative AI technologies. Clear guidance, training on technologies and redesigning assessments is necessary.
- Building a student community among distance learning students would enhance the student experience. We
  highlight this as an issue, as it was raised by the students we met from the conventional programmes and
  could become be a more serious issue when dealing with distance learning students.
- There is scope to create incentives for students to use interactive tools, e.g. including simulations, serious games etc. Doing so will help student development and enhance the student experience during the distance learning Business Analytics programme.
- Training seminars should be timetabled (and potentially offered on a regular basis) to ensure that all staff should be able to attend. This is also needed in respect of distance learning student training and induction.

#### 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	Compliant
2.2	Practical training	Compliant
2.3	Student assessment	Partially compliant
2.4	Study guides structure, content and interactive activities	Partially compliant

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

#### Sub-areas

- 3.1 Teaching staff recruitment and development
- 3.2 Teaching staff number and status
- 3.3 Synergies of teaching and research

#### 3.1 Teaching staff recruitment and development

#### Standards

- Institutions ensure the competence of their teaching staff.
- Fair, transparent and clear processes for the recruitment and development of the teaching staff are set up.
- Teaching staff qualifications are adequate to achieve the objectives and planned learning outcomes of the study programme, and to ensure quality and sustainability of the teaching and learning.
- The teaching staff is regularly engaged in professional and teaching-skills training and development.
- Training, guidance and support are provided to the teaching staff focusing on interaction and the specificities of e-learning.
- Promotion of the teaching staff takes into account the quality of their teaching, their research activity, the development of their teaching skills and their mobility.
- Innovation in teaching methods and the use of new technologies is encouraged.
- Conditions of employment that recognise the importance of teaching are followed.
- Recognised visiting teaching staff participates in teaching the study programme.

#### 3.2 Teaching staff number and status

#### Standards

- The number of the teaching staff is adequate to support the programme of study.
- The teaching staff status (rank, full/part time) is appropriate to offer a quality programme of study.
- Visiting staff number does not exceed the number of the permanent staff.

#### 3.3 Synergies of teaching and research

#### Standards

- The teaching staff collaborate in the fields of teaching and research within the HEI and with partners outside (practitioners in their fields, employers, and staff members at other HEIs in Cyprus or abroad).
- Scholarly activity to strengthen the link between education and research is encouraged.
- The teaching staff publications are within the discipline.
- Teaching staff studies and publications are closely related to the programme's courses.
- The allocation of teaching hours compared to the time for research activity is appropriate.

#### You may also consider the following questions:

- Is the teaching staff qualified to teach in the e-learning programme of study?
- How are the members of the teaching staff supported with regard to the development of their teaching skills? How is feedback given to members of the teaching staff regarding their teaching results and teaching skills?
- How is the teaching performance assessed? How does their teaching performance affect their remuneration, evaluation and/or selection?
- Is teaching connected with research?
- Does the HEI involve visiting teaching staff from other HEIs in Cyprus and abroad?
- What is the number, workload, qualifications and status of the teaching staff (rank, full/part timers)?
- Is student evaluation conducted on the teaching staff? If yes, have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?

#### **Findings**

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

During our meeting with the teaching staff we interviewed some full time faculty and some faculty that are on a part-time basis. Full-time faculty has adequate qualifications and they show good balance between research output and teaching ability. Most of them hold Ph. D degrees from recognized foreign institutions and make solid efforts to be research active in good journals and conference venues. They also appear to be well aware of the most prestigious and important conference and events in their respective fields. The part-time faculty also have good and up-to date skills and complement the existing competencies of the full time faculty in the teaching areas of the programme. All faculty have excellent English language skills and a demonstrated competence in teaching in physical and virtual environments.

In addition, all teaching staff seem to be very happy with the working conditions and the overall balance of work and development. They recognize that they find teach rewarding and consider it an integral part of their work duties. Many of faculty members have been employed for a long time at the university which is a sign of satisfaction. The staff is categorized into the standard academic ranks and promotion is based on teaching performance, research performance and administrative work. The college is supportive to research and offers initiatives for faculty members in case of

research performance, as well as a good amount of funding for participation in conferences and other events. Nevertheless, there is currently no formalized support at the institutional level for training on distance learning and teaching for groups that

In addition, full-time staff appear to have good connections with faculty of other institutions abroad. Most have either studied or worked in foreign institutions, and they use these connections in the teaching and for visiting different institutions with students. This approach is seen as a positive sign of being externally oriented and being able to be up-to-date with the latest developments.

#### Strengths

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

- 1. There appears to be a good balance between younger and experienced faculty members, with many younger faculty. The young faculty appear to be very enthusiastic and motivated and appear to be open to suggestions about improving different aspects of teaching and evaluation.
- 2. The faculty seems to be well integrated and on good working terms. The experienced faculty have been with the university for a long time, which implies a good working environment that is beneficial to the program.
- 3. There seem to be several mechanisms so that the outcomes of teaching are monitored by the department and that any issues or problems are professionally and effectively taken care of.
- 4. There is also a good process of evaluation of the faculty by students during and after the courses have ended.
- 5. The faculty also appear to be up to date with international developments in the field and seems to be willing to revise the study program when and if the need arises. A strength is their international orientation and the fact that they all have education from different institutions and countries.

#### 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. The university could provide some further financial incentives so that academic staff can conduct quality research. There is an allocated amount per year, but this may need to be increased to allow for further research development. The budget offered for research activities could be increased to accommodate more than one conference per year.
- 2. It would also be a good practice to make teacher training mandatory and ensure that several important areas about how to develop high quality and accessible resources are met.
- 3. There should also be provision of equipment and learning resources on how to effectively conduct distance learning based on latest knowledge. Currently, the staff have an approach that is based on their own experiences and what they believe works best which may create variations in the quality of courses online.
- 4. It is not clear how the department develops synergies between research and education, and if teaching cases are considered in applications for promotion.

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

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

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

#### **Sub-areas**

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

#### 4.1 Student admission, processes and criteria

#### Standards

- Pre-defined and published regulations regarding student admission are in place.
- Access policies, admission processes and criteria are implemented consistently and in a transparent manner.

#### 4.2 Student progression

#### **Standards**

- Pre-defined and published regulations regarding student progression are in place.
- Processes and tools to collect, monitor and act on information on student progression, are in place.

#### 4.3 Student recognition

#### Standards

- Pre-defined and published regulations regarding student recognition are in place.
- Fair recognition of higher education qualifications, periods of study and prior learning, including the recognition of non-formal and informal learning, are essential components for ensuring the students' progress in their studies, while promoting mobility.
- Appropriate recognition procedures are in place that rely on:
  - institutional practice for recognition being in line with the principles of the Lisbon Recognition Convention
  - cooperation with other institutions, quality assurance agencies and the national ENIC/NARIC centre with a view to ensuring coherent recognition across the country

#### 4.4 Student certification

#### Standards

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

 Students receive certification explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed.

You may also consider the following questions:

- Are the admission requirements for the study programme appropriate? How is the students' prior preparation/education assessed (including the level of international students, for example)?
- How is the procedure of recognition for prior learning and work experience ensured, including recognition of study results acquired at foreign higher education institutions?
- Is the certification of the HEI accompanied by a diploma supplement, which is in line with European and international standards?

#### **Findings**

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

The evaluation committee met several students from at the campus who gave their input and their impressions. The students were from a combination of current students and alumni that had participated in the in-person MBA and Master of Science in business intelligence and data analytics. All students were pleased with their experience in the university and pointed towards the reputation of the institute and the excellent support they received in counselling. In addition, most highlighted the fact that they were attracted by the programmes due to their career advancing opportunities that they offered, and that all had jobs prior and after taking their respective degrees.

The students were positive about the courses they were taught and talked about their relevance in practice and their ability to develop theoretical knowledge and practical skills. They were also enthusiastic about the fact that the university had close ties with industry and had a good network of partners. The students suggested that learning requirements for courses and study programmes be clearer, as some of them experienced that there was a steep learning curve for some courses. Overall, the input was very positive of the staff, the programme and the support they received throughout their studies.

#### **Strengths**

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

- 1. The committee finds that the University of Limassol has a very student-oriented approach which pays attention to the student needs. The administrators and leadership seem to pay particular attention to this aspect. We find that bot administrative and teaching staff place weight on student satisfaction and on learning outcomes. This is also reflected by the student's appreciation of such actions.
- 2. The students also mentioned the good relationship with teaching staff, and the strong support they perceive in helping them find suitable jobs and developing the necessary skills to fulfil such roles.
- 3. In addition, the students praised the information they receive about their studies and getting onboarded early on in the necessary activities of their study programs.

4. The university also make sure that there are several measures to ensure that there is a good interaction between students and the international 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.

- While the university appears to cater to the student needs, there are some areas of improvement in relation
  to admission requirements that remain unclear, especially since the new programme will operate in an
  international environment, so students need to be given more information about what kinds of background
  are eligible and what prior skills are required. This also extends to the number of required ECTS and how they
  are calculated from non-European students.
- 2. It would be beneficial to have a diploma supplement that conforms with European standards so that graduates are eligible to apply for other European institutes or jobs based on this. In addition, providing the option for additional 30 ECTS in the form of extra courses or a project would be beneficial for those that are interested in pursuing a doctoral programme at other European universities as they need a total of 120 ECTS. We also understand that the university aims to establish a doctoral programme, so they may want to introduce more research-oriented electives.

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

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

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

#### Sub-areas

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

#### 5.1 Teaching and Learning resources

Standards



- 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
  - o Interactive weekly activities with image, sound and unlimited possibilities for reality reconstruction and further processing based on hypotheses
  - o 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

#### <u>Standards</u>

- 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 programme team provided a list of external software tools to be used for the distance learning MSc Business Analytics for the benefit of the students. These are:

- Python
- Jupyter Notebook
- F
- Orange Data Mining
- Microsoft Power BI

- Trello (Project Management)
- Microsoft SQL Server Developer Edition
- Microsoft SQL Server Management Studio (SSMS)
- MySQL Server
- Mongo DB (there are both desktop and cloud versions, both free of charge)
- STATA
- Excel
- SPSS

It is important to ensure that distance learning students have equal access to such resources.

#### **Strengths**

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

- Weekly interactive activities per each course have been set appropriate to MSc level.
- There is a Distance Learning Unit which supports the development and delivery of e-learning programmes in accordance with international standards.
- The University offers extensive online library resources which should be extremely useful for the MSc programme students.
- The University learning support teams are aware of the need to continue to develop processes and facilities to support students with special needs, including those in e-learning cohorts.
- A good set of external software tools is used for the MSc Business Analytics distance learning for the benefit
  of the students.

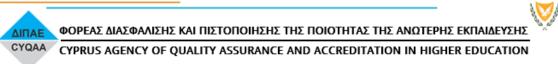
#### Areas of improvement and recommendations

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

- An additional facility to support students outside Cyprus who require access to printed copies of books should be available via a university network of collaborations, when there are no digital copies available.
- There is a need to develop training and induction for distance learning students on the external software tools to be used during their studies. At the time of completing this report it was not clear to us how this would be done.

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

	Non-compliant/
Sub-area	Partially Compliant/Compliant





5.1	Teaching and Learning resources	Compliant
5.2	Physical resources	Partially compliant
5.3	Human support resources	Compliant
5.4	Student support	Compliant

#### D. Conclusions and final remarks

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

Overall, the MSc programme in Business Analytics is well-placed in a market that requires knowledgeable graduates. The design of the programme is based on current academic standards and follows the typical set up of courses. In addition, there is good coverage within the courses concerning different types of work, so that students can engage in practice with problems, gain theoretical knowledge, as well as work independently and in teams. The programme coordinator is qualified as the leader of this study programme, and has good experience and research focus to ensure that the programme is a success.

The teaching staff also demonstrate a good mix of complementary knowledge within their respective domains. In terms of the set-up of the course structure and the distribution of work the programme shows great promise. One area that needs to be improved however is how students can customize their studies, and acquire specialized knowledge related to domain-specific applications of business analytics.

There could be more clarification of the profile of background, prior learning, and knowledge that are best suited to enrol in this MSc programme. If there is a willingness to attract students from other universities, these aspects should be explicitly defined in the selection criteria. Also, it would be good to include criteria that correspond to European and other international institutions. The programme should also provide a diploma supplement to graduates that highlights the courses taken, the number of ECTS they have received, and follow the Bologna conventions to allow for students to be better integrated in the European market and academia.

In relation to the facilities, the current plan for a new campus shows great promise and will be a state-of-the-art facility. However, it is necessary that there are dedicated rooms and corresponding infrastructure that can allow the development of high-quality distance learning materials. There should also be a plan for the staff in developing materials for such cases. Currently, it is unclear how content will be developed, with what equipment, and how the university will ensure that it is based on best practices.

In sum, the programme is well-suited and ambitious, and is likely to be a success given the invested resources and the experience of the core members. There are some areas of improvement that have been described in more detail in the corresponding sub-sections of this report.

# E. Signatures of the EEC

Name	Signature
(Chair) Professor Kevin Orr	
(Member) Professor Patrick Mikalef,	
(Member) Professor Periklis Gogas	
(Member-E-Learning expert) Professor Stylianos Hatzipanagos	
(Student Member) Ms. Maria Ilia	

Date: 28/02/2024