

**Cyprus Agency of Quality Assurance and Accreditation in
Higher Education**

Republic of Cyprus

**External Evaluation Report
Program of Study**

Institution: CIIM

Program of Study:

MSc in Business Intelligence and Data Analytics

TABLE OF CONTENTS

Instructions.....	3
External Evaluation Committee (EEC).....	4
Introduction.....	5
Findings.....	6
Conclusions and Suggestions of the External Evaluation Committee.....	12
Document Number: 300.1.....	13

INSTRUCTIONS:

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 2016” [N. 136 (I)/2015].

The document is duly completed by the External Evaluation Committee for each program of study. The ANNEX (Doc. Number 300.1) constitutes an integral part of the external evaluation report for the external evaluation accreditation of a program of study.

EXTERNAL EVALUATION COMMITTEE:

NAME	TITLE	UNIVERSITY / INSTITUTION
David Allen	Professor	University of Leeds
Andreas Nearchou	Associate Professor	University of Patras
Savvas Papagiannidis	Professor	Newcastle University
Nicolas Poyiadjis	Student	University of Cyprus

INTRODUCTION:

I. The External Evaluation procedure

First of all the committee members would like to thank the Agency of Quality Assurance and Accreditation in Higher Education, as well as colleagues at CIIM for efficiently and effectively responding to our queries. Everyone has been very helpful and supportive when it came to facilitating the program evaluation.

The committee consisted of 3 senior academics who are research active and teach in areas related to the core part of the program under evaluation. The committee also included a student who offered valuable insights related to the national context.

The agenda included a number of meetings with different stakeholder groups as outlined below:

8.30-9.00	Meeting of the committee with the representative of the Agency of Quality Assurance and Accreditation in Higher Education.
9.00-10.30	Meeting of the committee to share initial views and organize the rest of the agenda for the evaluation.
10.30-12.00	Meeting with the senior management team
12.00-13.45	Meeting with the program director and program team
13.45-.14.45	Break for lunch and committee discussions related to the evaluations progress.
14.45-16.00	Meeting with members of the Quality Assurance Committee
16.00-17:00	Tour of the facilities (library, teaching spaces, ICT labs, administrative offices, canteen)
17.00-18:00	Reviewed feedback of various types of assessments for a number of different modules

The following information was provided and used as part of the evaluation:

- Application for Evaluation – Accreditation - New Program of Study: MSc in Business Intelligence and Data Analytics CIIM Document 200.1
- CIIM Organization Chart
- CIMM Program Review Procedure Diagram
- CIMM Quality Assurance Process Diagram
- Sample Student Course Evaluation Form
- Introduction and Institutional Presentation (power-point presentation slides)

- MSc in Business Intelligence and Data Analytics (power-point presentation slides)

The following information was provided on request during the site visit:

- Material from three courses. The committee was able to review submitted coursework, assessors' comments, one assessment brief, and grade profiles.
- Research Plans for members of staff (six were provided)
- Policy Statement on Resident Faculty Responsibilities
- Participants' Handbook
- Research output (August 2016)

II. The Internal Evaluation procedure

- Comments concerning the quality and the completeness of the application submitted by the institution of higher education (Doc. Number 200.1), as well as concerning the overall acceptance of and participation in the quality assurance procedures, by the institution in general and by the program of study under evaluation in particular.

The Doc. Number 200.1 was comprehensive and helped set the stage for the rest of the evaluation in an effective manner. Standardization of CVs and clarify as to their employment status (with regards to CIIM) would have been welcome.

FINDINGS:

1. EFFECTIVENESS OF TEACHING WORK – AVAILABLE RESOURCES

- Organization of Teaching Work

The committee was overall satisfied with the way the programme team has suggested organising teaching which is in line with the Institute's current practice.

- Teaching

Given the technical nature of some of the content included in this programme, the committee was concerned that students will not have sufficient time to develop their skills and expertise within a concentrated period of time.

Recommendation: We recommend that programme team considers alternative approaches to delivering content (within the institutional constraints), in order to allow students time to absorb it.

- Teaching personnel

We are impressed by the enthusiastic team who are keen to deliver an excellent student experience.

The committee appreciates that a number of members of staff involved in this MSc are early career colleagues and do not have much experience in teaching. We note the appointment of pedagogic specialist, who not only contributes to the relevant MSc, but more broadly also support her colleagues.

Recommendation: To support all staff to undertake a teaching/pedagogic related course/training. To consider putting in place mechanisms for sharing good pedagogic practice between faculty and across programmes and courses.

2. PROGRAM OF STUDY AND HIGHER EDUCATION QUALIFICATIONS

- Purpose and Objectives and learning outcomes of the Program of Study

It was positive to see that the program team had produced a mapping of the Institution's learning objectives corresponded to the program learning objectives. Upon investigation, it became apparent that PILOS and ILOS were very loosely coupled. As such concerns were raised as to the overall pedagogic strategy with regards to the objectives of the program.

Recommendation: To revisit all the correspondences and critically evaluate whether the links are justified or not. A narrative should be included in the revised documentation to support the correspondences.

- Structure and Content of the Program of studies

The core structure of the program is broadly appropriate for such an MSc. However, the committee felt that key elements were missing. Equally, the committee felt that the program can be significantly improved, if electives could be grouped to provide a more focused and coherent offering related to the excellent industry links.

Recommendations:

- Project preparation module should be in place (which will include research methods).
- Dissertation or project should be a compulsory course, making it possible for students to apply their skills and knowledge in order to demonstrate disciplinary competence.

Recommendation: A better balance between the data analytics techniques and their application in the context of real business cases should be considered. Elective modules could be grouped under key themes such as marketing, operations/supply chain management, finance etc. This can become a common thread, improving the program's coherence, while can also enhance the employability prospects of students who would like to pursue careers in such areas.

Recommendation: There are a number of important topics spread across different courses. The program team should consider how to bring these together (such as data mining, data analysis, visualization).

- Quality Assurance of the Program of studies

We acknowledge the structures and processes that exist when it comes to Quality Assurance. We were particularly pleased with the recent introduction of the Quality Assurance Committee which is tasked to oversee all related matters.

The evidence presented to the committee of existing modules, raised very significant concerns related to feedback and assessment practice. These include over-generous marking, inconsistent marking, lack of written feedback, inappropriate use of generic

feedback and inconsistencies in approaches to feedback and justification of marks. These are very important aspects in terms of completing the pedagogic cycle and ensuring the program has met its objectives.

Recommendations:

- All courses should be moderated by a resident member of staff. Moderation should include (20%) of student work across grade bands, and include all distinction and failed ones.
- Dissertation and project feedback should be provided in writing and the process and rationale for agreed final marks for dissertations should be captured in a separate form.
- Presentations that account for more than 10% of a course mark should be attended by at least 2 members of staff.
- When presentations are undertaken as a substantive form of assessment (10% or more), written feedback should be provided justifying the grades awarded.
- Feedback should be comprehensive and consistent with the learning outcomes advertised.
- A policy should be established, detailing how feedback should be provided and when. All staff (resident and visiting) should adhere to the policy. The Quality Assurance Committee should monitor the feedback provided and ensure that the policy is applied consistently across programs and courses.
- Appointing an independent external examiner who has the necessary specialization and experience in quality assurance.

- Management of the Program of Study

The committee was overall satisfied by the proposed management of this new program.

- International Dimension of the Program of Study

We note there are a number of active links with institutions abroad. A number of visiting staff of high caliber visit CIIM to deliver courses in their areas of expertise. This will benefit the proposed program and offer an international perspective. Judging by the provided statistics related to the other programs on offer, the expected cohort is likely to feature primarily Cypriot students. CIIM has a small number of foreign students, on occasions supported by scholarships.

- Connection with the labor market and the society

The program team has conducted extensive market research in order to come up with a program that meets national demands. A number of stakeholders groups were involved in this exercise. The committee agrees that there is demand for such a program and graduates will be potentially highly employable.

3. RESEARCH WORK AND SYNERGIES WITH TEACHING

- Research Teaching Synergies

Although CIIM is primarily focused on providing quality business and management education, it is commendable that the Institution also aspires to establish a research community. To this end a number of systems and processes have been implemented. One example of this is that the Institute has recently introduced a new workload policy that explicitly acknowledges the need for allocating time to staff in order to undertake research (30% of their time). It also supports attendance to international conferences, by making a significant budget available to resident staff. In addition, members of staff are incentivised to publish in high-standing academic journals. For each such publication a bonus is awarded.

Although resident members of staff have a number of publications across business and management, research published so far in the area of business intelligence and data analytics is rather scarce. Resident members of staff are currently working on a number of relevant papers.

Recommendation: Encourage students to undertake research projects that could potentially be converted into research publications.

Recommendation: Establish a formal mentoring process for facilitating the research and academic development of staff.

Recommendation: Utilise the expertise and experience of visiting professors to mentor resident staff (especially early career ones) and help them develop their research competencies (through paper writing workshops, seminars etc).

Recommendation: Explore inviting visiting professors solely for research purposes and activities.

4. ADMINISTRATION SERVICES, STUDENT WELFARE AND SUPPORT OF TEACHING WORK

- Administrative Mechanisms

Sufficient administrative mechanisms already exists to support student wellbeing. The committee was pleased to see that the CIIM offers students external professional support when necessary. While we noted a very supportive environment there seems to be some confusion surrounding the role of academic and administrative staff.

Recommendation: To formalise the process of identifying students who are in need more proactively and clarify the hand over process among colleagues so that such cases are dealt as effectively as possible.

- Infrastructures / Support

CIIM features a range of teaching spaces that make it possible to engage in different forms and style of teaching. The equipment in these spaces were on par with the evaluation committee's expectations. Library facilities were good and so was the implementation of the virtual learning environment used (Moodle). ICT labs and connectivity were also sufficient, given the nature of the programme proposed. Administrative infrastructure and recreational spaces were all found to be in good standing order.

- Financial Resources

The committee feels comfortable with the proposed financial arrangements and fees for the programme. Senior management is committed to resourcing the programme sufficiently.

5. DISTANCE LEARNING PROGRAMS

N/A

6. DOCTORAL PROGRAMS OF STUDY

N/A

CONCLUSIONS AND SUGGESTIONS OF THE EXTERNAL EVALUATION COMMITTEE¹

- The present situation of the program, good practices, weaknesses that have been detected during the external evaluation procedure by the external evaluation committee, suggestions for improvement.

After carefully considering all the facts and evidence provided to the committee as part of this evaluation, the committee believes that the program team has produced a solid basis for the proposed MSc.

However, as mentioned in the previous sections a number of improvements related to content, quality assurance, and support for staff need to be considered and implemented before proceeding further.

¹ It is highlighted, at this point, that the External Evaluation Committee is expected to justify its findings and its suggestions on the basis of the Document num.: 300.1. The External Evaluation Committee is not expected to submit a suggestion for the approval or the rejection of the program of study under evaluation. This decision falls under the competencies of the Council of the Agency of Quality Assurance and Accreditation of higher education.

Doc. Number: 300.1

Quality Standards and Indicators

External Evaluation of a Program of Study

Institution: CIIM

Program of Study: MSc Business Intelligence and Data Analytics

Duration of the Program of Study: 1 year FT / 2 years PT

Evaluation Date: 29/05/17

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 2016”.

The document describes the quality standards and indicators, which will be applied for the external evaluation of programs of study of institutions of higher education, by the External Evaluation Committee.

DIRECTIONS: Note what is applicable for each quality standard/indicator.

1. Applicable to a minimum degree
2. Applicable to a non satisfactory degree
3. Applicable to a satisfactory degree
4. Applicable to a very satisfactory degree
5. It applies and it constitutes a good practice

It is pointed out that, in the case of standards and indicators that cannot be applied due to the status of the institution and/or of the program of study, N/A (= Not Applicable) should be noted and a detailed explanation should be provided on the institution’s corresponding policy regarding the specific quality standard or indicator.

Members of the External Evaluation Committee

NAME	TITLE	UNIVERSITY / INSTITUTION
David Allen	Professor	University of Leeds
Andreas Nearchou	Associate Professor	University of Patras
Savvas Papagiannidis	Professor	Newcastle University
Nicolas Poyiadjis	Student	University of Cyprus

Date and Time of the On-Site Visit: 9am 29/05/17

Duration of the On-Site Visit: 9 hours

1. EFFECTIVENESS OF TEACHING WORK – AVAILABLE RESOURCES						
1.1	Organization of teaching work	1	2	3	4	5
1.1.1	The student admission requirements to the program of study, are based on specific regulations which are adhered to in a consistent manner.				X	
1.1.2	The number of students in each class allows for constructive teaching and communication, and it compares positively to the current international standards and/or practices.					X
1.1.3	The organization of the educational process safeguards the quality implementation of the program's purpose and objectives and the achievement of the learning outcomes. Particularly, the following are taken into consideration:				X	
1.1.3.1	The implementation of a specific academic calendar and its timely publication.					X
1.1.3.2	The disclosure of the program's curricula to the students, and their implementation by the teaching personnel					X
1.1.3.3	The course web-pages, updated with the relevant supplementary material					X
1.1.3.4	The procedures for the fulfillment of undergraduate and postgraduate assignments / practical training	X				
1.1.3.5	The procedures for the conduct and the format of the examinations and for student assessment				X	
1.1.3.6	The effective provision of information to the students and the enhancement of their participation in the procedures for the improvement of the educational process.					X
1.1.4	Adequate and modern learning resources, are available to the students, including the following:					
1.1.4.1	facilities				X	
1.1.4.2	library				X	

	1.1.4.3	infrastructure				X	
	1.1.4.4	student welfare					X
	1.1.4.5	academic mentoring				X	
1.1.5	A policy for regular and effective communication, between the teaching personnel and the students, is applied.					X	
1.1.6	The teaching personnel, for each course, provide timely and effective feedback to the students.			X			
1.1.7	Statutory mechanisms, for the support of students and the communication with the teaching personnel, are effective.					X	
1.1.8	Control mechanisms for student performance are effective.					X	
1.1.9	Support mechanisms for students with problematic academic performance are effective.					X	
1.1.10	Academic mentoring processes are transparent and effective for undergraduate and postgraduate programs and are taken into consideration for the calculation of academic work load.				X		
1.1.11	The program of study applies an effective policy for the prevention and detection of plagiarism.						X
1.1.12	The program of study provides satisfactory mechanisms for complaint management and for dispute resolution.				X		

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

Overall, we had a positive view of the way teaching has been organized with the exception of feedback and assessment practice which can be improved as indicated in section 2 above. With regards to the composition of student cohorts, evidence provided suggests that the majority of the students are Cypriots with a small number of foreign students also attending CIIM program.

1.2	Teaching	1	2	3	4	5
1.2.1	The methodology utilized in each course is suitable for achieving the course's purpose and objectives and those of the individual modules.				X	
1.2.2	The methodology of each course is suitable for adults.					X

1.2.3	Continuous-formative assessment and feedback are provided to the students regularly.				X	
1.2.4	The assessment system and criteria regarding student course performance, are clear, adequate, and known to the students.					X
1.2.5	Educational activities which encourage students' active participation in the learning process, are implemented.				X	
1.2.6	Teaching incorporates the use of modern educational technologies that are consistent with international standards, including a platform for the electronic support of learning.					X
1.2.7	Teaching materials (books, manuals, journals, databases, and teaching notes) meet the requirements set by the methodology of the program's individual courses, and are updated regularly.					X

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

We are satisfied with the overall teaching provision and especially the plans for pedagogic innovations such as business simulations.

1.3	Teaching Personnel	1	2	3	4	5
1.3.1	The number of full-time academic personnel, occupied exclusively at the institution, and their fields of expertise, adequately support the program of study.			X		
1.3.2	The members of teaching personnel for each course have the relevant formal and fundamental qualifications for teaching the course, as described by the legislation, including the following:					
1.3.2.1	Subject specialization, preferably with a doctorate, in the discipline.				X	
1.3.2.2	Publications within the discipline.		X			
1.3.3	The specializations of Visiting Professors adequately support the program of study.					X
1.3.4	Special Teaching Personnel and Special Scientists have the necessary qualifications, adequate work experience and specialization to teach a limited number of courses in the program of study.			N/A		

1.3.5	In every program of study the Special Teaching Personnel does not exceed 30% of the Teaching Research Personnel.			N/A		
1.3.6	The teaching personnel of each private institution of tertiary education, to a percentage of at least 70%, has recognized academic qualification, by one level higher than that of the program of study in which he/she teaches.				X	
1.3.7	In the program of study, the ratio of the number of courses taught by full-time personnel, occupied exclusively at the institution, to the number of courses taught by part-time personnel, ensures the quality of the program of study.					X
1.3.8	The ratio of the number of students to the total number of teaching personnel is adequate for the support and safeguarding of the program's quality.					X
1.3.9	The academic personnel's teaching load does not limit the conduct of research, writing, and contribution to the society.				X	
1.3.10	Future redundancies / retirements, expected recruitment and promotions of academic personnel safeguard the unimpeded implementation of the program of study within a five-year span.			NA		
1.3.11	The program's Coordinator has the qualifications and experience to efficiently coordinate the program of study.				X	

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

The program is supported by an enthusiastic team that aspires to offer a high quality course. We note that a few members of the team are early career researcher and/or research active staff in transition from one discipline to another. As such, it is not surprising that a publication list in the program's core area is not in place. There are however clear plans set for future publications. Evidence provided indicated only a small subset of permanent and visiting staff teaching on this program regularly publish in business and management.

2. PROGRAM OF STUDY AND HIGHER EDUCATION QUALIFICATIONS						
2.1	Purpose and Objectives and learning outcomes of the Program of Study	1	2	3	4	5
2.1.1	The purpose and objectives of the program of study are formulated in terms of expected learning outcomes and are consistent with the mission and the strategy of the institution.				X	
2.1.2	The purpose and objectives of the program and the learning outcomes are utilized as a guide for the design of the program of study.				X	
2.1.3	The higher education qualification and the program of study, conform to the provisions of their corresponding Professional and Vocational Bodies for the purpose of registration to these bodies.			NA		
2.1.4	The program's content, the methods of assessment, the teaching materials and the equipment, lead to the achievement of the program's purpose and objectives and ensure the expected learning outcomes.			X		
2.1.5	The expected learning outcomes of the program are known to the students and to the members of the academic and teaching personnel.					X
2.1.6	The learning process is properly designed to achieve the expected learning outcomes.				X	
2.1.7	The higher education qualification awarded to the students, corresponds to the purpose and objectives and the learning outcomes of the program.					X
<p>Justify the answer you have provided and note the additional comments you may have on each standard / indicator.</p> <p>Overall we were satisfied with the purpose and objectives set for this program. We would like the program team to revisit the mapping of the institutional learning objectives to the program learning objectives and provide a more accurate correspondence. Feedback and assessment practice could be improved so that the objectives of the program can be reliably validated.</p>						
2.2	Structure and Content of the Program of Study	1	2	3	4	5
2.2.1	The course curricula clearly define the expected learning outcomes, the content, the teaching and learning approaches and the method of assessing student performance.				X	
2.2.2	The European Credit Transfer System (ECTS) is applied and there is true correspondence between credits and workload per course				X	

	and per semester for the student either he / she studies in a specific program or he/she is registered and studies simultaneously in additional programs of studies according to the European practice in higher education institutions.					
2.2.3	The program of study is structured in a consistent manner and in sequence, so that concepts operating as preconditions precede the teaching of other, more complex and cognitively more demanding, concepts.					X
2.2.4	The higher education qualification awarded, the learning outcomes and the content of the program are consistent.					X
2.2.5	The program, in addition to the courses focusing on the specific discipline, includes an adequate number of general education courses.				X	
2.2.6	The content of courses and modules, and the corresponding educational activities are suitable for achieving the desired learning outcomes with regards to the knowledge, skills, and abilities which should be acquired by students.				X	
2.2.7	The number and the content of the program's courses are sufficient for the achievement of learning outcomes.				X	
2.2.8	The content of the program's courses reflects the latest achievements / developments in science, arts, research and technology.			X		
2.2.9	Flexible options / adaptable to the personal needs or to the needs of students with special needs, are provided.					X

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

Overall we find the core part of program to be in line with expectations for such a program. The compulsory courses list could include a courses on visualization and a course on advanced statistics (including inferential statistics). A research methods module and the dissertation/project courses should become compulsory too in line with other MSc program.

The electives included could be grouped in thematic areas. For instance, electives can be offered in the business/application areas of marketing, operations/supply chain management, finance etc. This will help balance the data analytics side of the program with the application of the skills acquired in core part.

2.3	Quality Assurance of the Program of Study	1	2	3	4	5
2.3.1	The arrangements regarding the program's quality assurance define clear competencies and procedures.				X	
2.3.2	Participation in the processes of the system of quality assurance of the program, is ensured for					

	2.3.2.1	the members of the academic personnel					X
	2.3.2.2	the members of the administrative personnel					X
	2.3.2.3	the students.					X
2.3.3	The guide and / or the regulations for quality assurance, provide detailed information and data for the support and management of the program of study.				X		
2.3.4	The quality assurance process constitutes an academic process and it is not restricted by non-academic factors.					X	

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

The Institute has clear policies on quality assurance and has developed a new committee to overlook this area. The membership of the committee is sufficiently inclusive to involve a number of different stakeholder groups. Although information is collected on a various aspect of the program, a more systematic approach is encouraged. Please refer to comments related to feedback and assessment and the impact these can have on quality assurance in section 2 in the first part of the document.

2.4	Management of the Program of Study		1	2	3	4	5
2.4.1	Effective management of the program of study with regard to its design, its approval, its monitoring and its review, is in place.					X	
2.4.2	It is ensured that learning outcomes may be achieved within the specified timeframe.					X	
2.4.3	It is ensured that the program's management and development process is an academic process which operates without any non-academic interventions.						X
2.4.4	The academic hierarchy of the institution, (Rector, Vice-Rectors, Deans, Chairs and Programs' Coordinators, academic personnel) have the sole responsibility for academic excellence and the development of the programs of study.						X
2.4.5	Information relating to the program of study are posted publicly and include:						
	2.4.5.1	The provisions regarding unit credits			NA		
	2.4.5.2	The expected learning outcomes			NA		
	2.4.5.3	The methodology			NA		
	2.4.5.4	Course descriptions			NA		
	2.4.5.5	The program's structure			NA		

	2.4.5.6	The admission requirements			NA		
	2.4.5.7	The format and the procedures for student assessment			NA		
2.4.6	The award of the higher education qualification is accompanied by the Diploma Supplement which is in line with the European and international standards.				NA		
2.4.7	The effectiveness of the program's evaluation mechanism, by the students, is ensured.						X
2.4.8	The recognition and transfer of credit units from previous studies is regulated by procedures and regulations which ensure that the majority of credit units is awarded by the institution which awards the higher education qualification.				NA		

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

The committee was satisfied with the evidence provided with regards to the management of program. As this is a new program, we gave "NA" scores to all the questions related to publicly promoting the program, as this should not take place until the program approval has been confirmed.

2.5	International Dimension of the Program of Study	1	2	3	4	5
2.5.1	The program's collaborations with other institutions are compared positively with corresponding collaborations of other departments / programs of study in Europe and internationally.			NA		
2.5.2	The program attracts Visiting professors of recognized academic standing.					X
2.5.3	Students participate in exchange programs.			NA		
2.5.4	The academic profile of the program of study is compatible with corresponding programs of study in Cyprus and internationally.				X	

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

Overall, we were satisfied with the international dimension of the program, which is enhanced by the active participation of a number of visiting professors of recognized academic standing.

2.6	Connection with the labor market and the society	1	2	3	4	5
2.6.1	The procedures applied, so that the program conforms to the scientific and professional activities of the graduates, are adequate and effective.				X	

2.6.2	According to the feasibility study, indicators for the employability of graduates are satisfactory.					X
2.6.3	Benefits, for the society, deriving from the program are significant.					X

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

Market research was undertaken when designing the program to ensure that graduates acquire the necessary skills needed for pursuing a career as data scientists. There is evidence for such needs locally and beyond. Staff indicated there was a particular interest in the financial sector. It will be useful if a closer link can be made between the specific program content and the skills required by these sectors as this can enhance the employability of students.

3. RESEARCH WORK AND SYNERGIES WITH TEACHING						
3.1	Research - Teaching Synergies	1	2	3	4	5
3.1.1	It is ensured that teaching and learning have been adequately enlightened by research.			X		
3.1.2	New research results are embodied in the content of the program of study.		X			
3.1.3	Adequate and sufficient facilities and equipment are provided to support the research component of the program of study, which are available and accessible to the personnel and the students.					X
3.1.4	The results of the academic personnel's research activity are published in international journals with the peer-reviewing system, in international conferences, conference minutes, publications etc.	X				
3.1.5	External, non-governmental, funding for the academic personnel's research activities, is compared positively to the funding of other institutions in Cyprus and abroad.		X			
3.1.6	Internal funding, of the academic personnel's research activities, is compared positively to the funding of other institutions in Cyprus and abroad.					X
3.1.7	The policy for, indirect or direct, internal funding of the academic personnel's research activity is satisfactory.					X

3.1.8	The participation of students, academic, teaching and administrative personnel of the program in research activities and projects is satisfactory.			X		
3.1.9	Student training in the research process is sufficient.	X				

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

Overall, members of staff aspire to engage with research by publishing in high-standing academic journals and other appropriate outlets, attending conferences and engaging with the community, and generating research income. The committee notes that members of staff associated with this program are early career researchers and/or are in a transition mode to a typical Business School setting. The Institution supports such aspirations in a number of ways, for instance there is a reasonable conference budget and a bonus is provided when papers are accepted for publication in recognized journals. We also note the introduction of a 30% allowance for research in the School's workload policy. This should be protected when the policy is fully operationalized.

Despite the above positive points, the committee feels there is much room for improvement. For example, research leadership should be undertaken by senior research active staff. A process could be put in place to develop, mentor and support early career researchers and those in transition to undertake management and research roles in an incremental manner over time. More broadly, the School can consider how to foster a research environment. For instance, visiting professors (who are typically research active and senior figures) can be invited to formally mentor resident staff and give research seminars.

We gave a low score for research funding as after validating claims of income generation (such as in the case of the BARAC project for which we used the EPSRC web site) we did not find mention of CIIM as project partner nor was the said staff mentioned in any capacity. We have also given a low score for student research training. Although a dissertation module has been included as elective, no research methods module was included to provide research training.

4. ADMINISTRATION SERVICES, STUDENT WELFARE AND SUPPORT OF TEACHING WORK

4.1	Administrative Mechanisms	1	2	3	4	5
4.1.1	There is a Student Welfare Service that supports students with regards to academic and personal problems and difficulties.					X
4.1.2	Statutory administrative mechanisms for monitoring and supporting students are sufficient.					X
4.1.3	The efficiency of these mechanisms is assessed on the basis of specific criteria.				X	

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

We were very happy with the support provided by the administrative staff to students and the structures and processes put in place to facilitate student well-being. In particular, the institution appears to have a supportive and caring culture towards its students.

There is room of improvement in the practice of identification of students at need and handing their cases over to the appropriate administrative personnel. Student handbooks should include a more detailed section on how students can access the provided support. We noted the rules and regulations related to scholarships and the conditions attached, which we find overly punitive and need to be reviewed as a matter of urgency, as they can negatively impact on student well-being.

4.2	Infrastructure / Support	1	2	3	4	5
4.2.1	There are suitable books and reputable journals supporting the program.					x
4.2.2	There is a supportive internal communication platform.					x
4.2.3	The facilities are adequate in number and size.					x
4.2.4	The equipment used in teaching and learning (laboratory and electronic equipment, consumables etc) are quantitatively and qualitatively adequate.					x
4.2.5	Teaching materials (books, manuals, scientific journals, databases) are adequate and accessible to students.					x
4.2.6	Teaching materials (books, manuals, scientific journals, databases) are updated regularly with the most recent publications.				x	
4.2.7	The teaching personnel are provided with training opportunities in teaching method, in adult education, and in new technologies on the basis of a structured learning framework.		x			

Justify the answer you have provided and note the additional comments you may have on each standard / indicator.

As far the library and virtual learning environment are concerned we were overall satisfied with the provisions available. An extension to the library is planned. We were also satisfied with the general ICT/computer labs infrastructure and the teaching spaces. Reading materials on some modules could include more recent academic journal articles and make better use of the services to which the library has subscribed to.

4.3	Financial Resources	1	2	3	4	5
-----	---------------------	---	---	---	---	---

4.3.1	The management and allocation of the financial resources of the program of study, allow for the development of the program and of the academic / teaching personnel.					x
4.3.2	The allocation of financial resources as regards to academic matters, is the responsibility of the relevant academic departments.					x
4.3.3	The remuneration of academic and other personnel is analogous to the remuneration of academic and other personnel of the respective institutions in Cyprus.					x
4.3.4	Student tuition and fees are consistent to the tuition and fees of other respective institutions.					x
<p>Justify the answer you have provided and note the additional comments you may have on each standard / indicator.</p> <p>We have received assurance from senior staff that resources will be made available to the programmer director as needed to support and develop the program further.</p>						

The following criterion applies additionally for distance learning programs of study.

5.	DISTANCE LEARNING PROGRAMS	1	2	3	4	5
5.1	Feedback processes for teaching personnel with regards to the evaluation of their teaching work, by the students, are satisfactory.			NA		
5.2	The process and the conditions for the recruitment of academic / teaching personnel, ensure that candidates have the necessary skills and experience for long distance education.			NA		
5.3	Through established procedures, appropriate training, guidance and support, are provided to teaching personnel, to enable it to efficiently support the educational process.			NA		
5.4	Student performance monitoring mechanisms are satisfactory.			NA		
5.5	Adequate mentoring by the teaching personnel, is provided to students, through established procedures.			NA		

5.6	The unimpeded long distance communication between the teaching personnel and the students, is ensured to a satisfactory degree.			NA		
5.7	Assessment consistency, its equivalent application to all students, and the compliance with predefined procedures, are ensured.			NA		
5.8	Teaching materials (books, manuals, scientific journals, databases) comply with the requirements provided by the long distance education methodology and are updated regularly.			NA		
5.9	The program of study has the appropriate and adequate infrastructure for the support of learning.			NA		
5.10	The supporting infrastructures are easily accessible.			NA		
5.11	Students are informed and trained with regards to the available educational infrastructure.					
5.12	The procedures for systematic control and improvement of the supportive services are regular and effective.			NA NA		
5.13	Infrastructure for distance education is comparable to university infrastructure in the European Union and internationally.			NA		
5.14	Electronic library services are provided according to international practice in order to support the needs of the students and of the teaching personnel.			NA		
5.15	The students and the teaching personnel have access to the necessary electronic sources of information, relevant to the program, the level, and the method of teaching.			NA		
5.16	The percentage of teaching personnel who holds a doctorate, in a program of study which is offered long distance, is not less than 75%.			NA		
<p>Justify the answer you have provided and note the additional comments you may have on each standard / indicator.</p> <p>NA</p> <p>If the following apply, note “√” in the appropriate space next to each statement. In case the following statements do not apply, note what is applicable:</p>						
<p>The maximum number of students per class-section, should not exceed 30 students.</p>						

<p>The conduct of written examinations with the physical presence of the students, under the supervision of the institution or under the supervision of reliable agencies which operate in the countries of the students, is compulsory.</p>	
<p>The number of long distance classes taught by the academic personnel does not exceed the number of courses taught by the teaching personnel in conventional programs of study.</p>	
<p>NA</p>	

The following criterion applies additionally for doctoral programs of study.

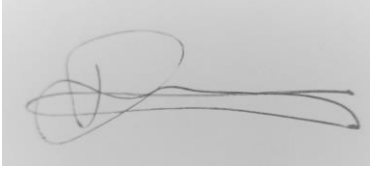

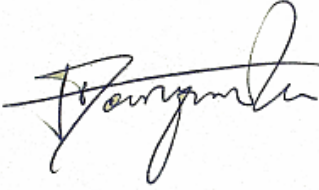
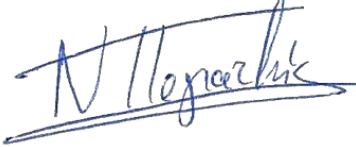
6.	DOCTORAL PROGRAMS OF STUDY	1	2	3	4	5
6.1	The provision of quality doctoral studies is ensured through Doctoral Studies Regulations.			NA		
6.2	The structure and the content of a doctoral program of study are satisfactory and they ensure the quality provision of doctoral studies.			NA		
6.3	The number of academic personnel, which is going to support the doctoral program of study, is adequate.			NA		
6.4	The doctoral studies' supervisors have the necessary academic qualifications and experience for the supervision of the specific dissertations.			NA		
6.5	The degree of accessibility of all interested parties to the Doctoral Studies Regulations is satisfactory.			NA		
6.6	The number of doctoral students, under the supervision of a member of the academic personnel, is apt for the continuous and effective feedback provided to the students and it complies with the European and international standards.			NA		
6.7	The research interests of academic advisors and supervisors are satisfactory and they adequately cover the thematic areas of research conducted by the doctoral students of the program.			NA		
Justify the answer you have provided and note the additional comments you may have on each standard / indicator. NA						

FINAL REMARKS – SUGGESTIONS

Please note your final remarks and suggestions for the program of study and/or regarding particular aspects of the program.

The proposed MSc documentation provides a sound basis for the program. We have made detailed recommendations for improvement both in the first and the second part of this report. We wish the programme team and CIIM all the best.

Names and Signatures of the Chair and the Members of the External Evaluation Committee:

Name:	Signature:
David Allen	
Andreas Nearchou	
Savvas Papagiannidis	
Nicolas Poyiadjis	

Date: 30/05/2017

300_1_1_ External Evaluation Report.docx