



ASIIN Certification Report

Programmes

Associate degree in Computer Programming

Higher Diploma in Computer Programming

Provided by

School of Computing and Technology

Eastern Mediterranean University

Table of Content

A About the Certification Process	3
B Characteristics of the Programmes	4
C Peer Report for the ASIIN Certificate	8
1. Formal Information	8
2. Courses/Modules: Content, Policy and Implementation	9
3. Examination: System, Policy and Forms	16
4. Supporting Processes I: Teaching, Methodology and Support	17
5. Resources	19
6. Quality Management: Development and Enhancement	21
7. Documentation & Transparency	23
D Additional Documents	25
E Comment of the Provider (03.02.2021)	26
F Summary: Peer recommendations (10.02.2021)	27
G Decision of the Certification Committee (12.03.2021)	28
H Fulfilment of Requirements (04.03.2022)	30
Analysis by the Peer Panel (25.02.2022)	30
Decision of the Certification Commission (04.03.2022)	30

A About the Certification Process

Title of the Programmes	Previous certification
Associate degree in Computer Programming/Bilgisayar Programcılığı Önlisans	01.01.2015 – 31.12.2020, ASIIN
Higher Diploma in Computer Programming/Bilgisayar Programcılığı Yüksek Tekniker Önlisans	01.01.2015 – 31.12.2020, ASIIN
<p>Date of the contract: 20.07.2020</p> <p>Submission of the final version of the self-assessment report: 16.10.2020</p> <p>Date of the onsite visit: 07.-14.12.2020</p> <p>at: Online</p>	
<p>Peer panel:</p> <p>Prof. Dr. Bettina Harriehausen-Mühlbauer, Hochschule Darmstadt;</p> <p>Uwe Sesztak, MARCO Systems</p> <p>Dexter Chipango, European University Lefke</p>	
<p>Representative of the ASIIN headquarter: Dr. Martin Foerster</p>	
<p>Responsible decision-making committee: Certification committee</p>	
<p>Criteria used:</p> <p>Standards for the Certification of (Further) Education and Training for courses and modules related to Computer Sciences, Technology, Natural Sciences and Business Economics as of 26.06.2020.</p> <p>European Standards and Guidelines as of 15.05.2015.</p>	

B Characteristics of the Programmes

a) Name of the programme	b) Degree awarded upon conclusion	c) Corresponding level of the European Qualifications Framework	d) Mode of Study	e) Duration & Credit Points	f) First time of offer & Intake rhythm	g) Number of students per intake	h) Fees
Associate degree in Computer Programming	Associate Degree	5	Full time	4 Semester 120 CP	Spring 2009-2010 / Fall-Spring semester	15 in fall semester, 10 in spring semester	14.868 TL for Northern Cyprus citizens
Higher Diploma in Computer Programming	Higher Diploma	5	Full time	6 Semester 180 CP	Spring 2011-2012 / Fall-Spring semester	15 in fall semester, 10 in spring semester	14.868 TL for Northern Cyprus citizens

For the Programmes Associate Degree (2 years)/Higher Diploma (3 years) in Computer Programming, the programmes' websites (<https://www.emu.edu.tr/en/programs/computer-programming-turkish/781> and <https://www.emu.edu.tr/en/programs/computer-programming-turkish/929>, accessed, 16 Dec 2020) state the following **intended learning outcomes**:

“The aim of the Computer Programming program is to equip students with a strong foundation needed for practical applications in Computer Programming (CP). The programme focuses on satisfying the needs of learners with a balanced education between the theoretical and practical concepts required for each module. First year of the programme focuses on developing the knowledge about Basic English, mathematics and computer hardware/software. Students pursue their summer internship and gain experience in the industry, at the end of first year. During their second year, courses on computer networks, internet programming, object-oriented programming, database programming and management are offered, which improve their knowledge and prepare them for employment in the industry.”

In addition, for the third year of the Higher Diploma programme, the website states the following information:

B Characteristics of the Programmes

“Third year of the programme includes advanced technical courses for improving the practical applications and problem solving abilities of students and 80 days training in the industry which integrates the students with the industry before graduating.”

The following **curriculum** is presented:

EASTERN MEDITERRANEAN UNIVERSITY / DOĞU AKDENİZ ÜNİVERSİTESİ
School of Computing and Technology / Bilgisayar ve Teknoloji Yüksek Okulu
Computer Programming (Associate) / Bilgisayar Programcılığı
2-Year Curriculum / 2-Yıllık Müfredat

FRESHMAN YEAR / BİRİNCİ YIL

First Year Fall Semester (18/71 Credits, 25/120 ECTS) Birinci Yıl Güz Dönemi (18/71 Kredi, 25/120 AKTS)						
Course Code / Ders Kodu	Ref. Code / Ref. Kodu	Course Name / Ders Adı	Credit / Kredi	ECTS / AKTS	Category / Kategori	Prerequisite(s) / Önkoşul
ENGL161	3H711	Basic English – I / Temel İngilizce - I	(3,1,0) 3	4	UC	-
MATE117	3H712	Mathematics for Electronic Technicians / Elektronik Teknisyenliği Matematiği	(3,1,0) 3	5	AC	-
BTEP101	3H713	Introduction Algorithm and Programming / Algoritma ve Prog. Giriş	(2,2,0) 3	5	AC	-
BTEP103	3H714	Fundamentals of Information Technologies / Bilgi Teknolojileri Temel Kavramları	(3,0,0) 3	2	AC	-
BTEP105	3H715	Basic Office Applications / Temel Ofis Uygulamaları	(2,2,0) 3	4	UC	-
EETE143	3H716	Electrotechnology / Eloktroteknik	(2,3,0) 3	5	AC	-

First Year Spring Semester (17/71 Credits, 25/120 ECTS) Birinci Yıl Bahar Dönemi (17/71 Kredi, 25/120 AKTS)						
Course Code / Ders Kodu	Ref. Code / Ref. Kodu	Course Name / Ders Adı	Credit / Kredi	ECTS / AKTS	Category / Kategori	Prerequisite(s) / Önkoşul
ENGL162	3H721	Basic English – II / Temel İngilizce - II	(3,1,0) 3	4	UC	ENGL161
BTEP102	3H722	Data Structure and Prog. / Veri Yapıları ve Programlama	(2,2,0) 3	5	AC	BTEP101
BTEP104	3H723	Database Management Systems / Veri Tabanı ve Yönetim Sistemleri	(2,2,0) 3	5	AC	-
BTEP106	3H724	Principles of Business / Genel İşletme	(3,0,0) 3	4	AC	-
EETE264	3H725	Introduction to Computer Hardware / Bilgisayar Donanımına Giriş	(2,3,0)3	5	AC	-

B Characteristics of the Programmes

HIST280	3H726	Ataturk's Principles and History of Turkish Reforms / Atatürk İlkeleri ve İnkılap Tarihi	(2,2,0) 2	2	UC	
---------	-------	--	-----------	---	----	--

First Year (0/71 Credits, 10/120 ECTS)

Birinci Yıl (0/71 Kredi, 10/120 AKTS)

Course Code / Ders Kodu	Ref. Code / Ref. Kodu	Course Name / Ders Adı	Credit / Kredi	ECTS / AKTS	Category / Kategori	Prerequisite(s) / Önkoşul
BTEP200	3H737	Summet Training / Yaz Stajı	(0,0,0) 0	10	AC	-

SOPHOMORE YEAR / İKİNCİ YIL

Second Year Fall Semester (18/71 Credits, 30/120 ECTS)

İkinci Yıl Güz Dönemi (18/71 Kredi, 30/120 AKTS)

Course Code / Ders Kodu	Ref. Code / Ref. Kodu	Course Name / Ders Adı	Credit / Kredi	ECTS / AKTS	Category / Kategori	Prerequisite(s) / Önkoşul
BTEP201	3H731	Visual Programming / Görsel Programlama	(2,2,0) 3	5	AC	BTEP102
BTEP203	3H732	Internet Programming- I / İnternet Programcılığı - I	(2,2,0) 3	5	AC	-
BTEP205	3H733	Operating Systems / İşletim Sistemleri	(2,2,0) 3	5	AC	-
BTEP202	3H734	System Analysis and Design / Sistem Analizi ve Tasarımı	(2,2,0) 3	5	AC	-
BTEP243	3H735	Object Oriented Programming / Nesne Tabanlı Programlama	(2,2,0) 3	5	AC	BTEP102
AS01	3H736	Area Elective - I / Alan Seçmeli - I	(3,0,0) 3	5	AE	-

Second Year Spring Semester (18/71 Credits, 30/120 ECTS)

İkinci Yıl Bahar Dönemi (18/71 Kredi, 30/120 AKTS)

Course Code / Ders Kodu	Ref. Code / Ref. Kodu	Course Name / Ders Adı	Credit / Kredi	ECTS / AKTS	Category / Kategori	Prerequisite(s) / Önkoşul
BTEP207	3H741	Software Architecture / Yazılım Mimarileri	(3,1,0) 3	5	AC	-
BTEP204	3H742	Internet Programming- II / İnternet Programcılığı - II	(2,2,0) 3	5	AC	BTEP203
BTEP206	3H743	Computer Graphics and Animations / Bilgisayar Grafiği ve Animasyonlar	(2,2,0) 3	5	AC	-
BTEP208	3H744	Computer Networks / Bilgisayar Ağ Sistemleri	(2,2,0) 3	5	AC	-
AS02	3H745	Area Elective - II / Alan Seçmeli - II	(3,0,0) 3	5	AE	-
AS03	3H746	Area Elective - III / Alan Seçmeli - III	(3,0,0) 3	5	AE	-

B Characteristics of the Programmes

EASTERN MEDITERRANEAN UNIVERSITY / DOĞU AKDENİZ ÜNİVERSİTESİ
School of Computing and Technology / Bilgisayar Teknoloji ve Yüksek Okulu

Computer Programming / Bilgisayar Programcılığı 3-Year Curriculum / 3-Yıllık Müfredat

JUNIOR YEAR / ÜÇÜNCÜ YIL

Third Year Fall Semester (15/16 Credits, 30/60 ECTS) Üçüncü Yıl Güz Dönemi (15/16 Kredi, 30/60 AKTS)						
Course Code / Ders Kodu	Ref. Code / Ref. Kodu	Course Name / Ders Adı	Credit / Kredi	ECTS / AKTS	Category / Kategori	Prerequisite(s) / Önkoşul
BTEP301	3G151	E-Commerce Application / E-Ticaret Uygulamaları	(2,2,0) 3	6	AC	-
BTEP303	3G152	Information Systems Security / Bilişim Güvenliği	(2,2,0) 3	6	AC	-
BTEP305	3G153	Internet Applications Using Database / Veritabanı Destekli İnternet Uygulamaları	(2,2,0) 3	6	AC	-
BTEP307	3G154	Advanced Desktop Applications / Gelişmiş Masaüstü Yayıncılık Uygulamaları	(2,2,0) 3	6	AC	-
BTEP309	3G155	Advanced Animation Techniques / Gelişmiş Animasyon Teknikleri	(2,2,0) 3	6	AC	-

Third Year Spring Semester (1/16 Credit, 30/60 ECTS) Üçüncü Yıl Bahar Dönemi (1/16 Kredi, 30/60 AKTS)						
Course Code / Ders Kodu	Ref. Code / Ref. Kodu	Course Name / Ders Adı	Credit / Kredi	ECTS / AKTS	Category / Kategori	Prerequisite(s) / Önkoşul
BTEP300	3G161	Semester Training / Dönem Stajı (80 working days)	(0,0,0) 0	22	AC	-
BTEP302	3G162	Graduation Project / Mezuniyet Projesi	(0,0,0) 1	8	AC	-

AC = Area Course(Alan Dersi) AE = Area Elective(Alan Seçmeli) UC = University Core (Üniversite Dersi)

<http://sct.emu.edu.tr/>

C Peer Report for the ASIIN Certificate

1. Formal Information

Criterion 1.1 Formal Information

Evidence:

- Self-Assessment Report
- Programme websites:
 - <https://www.emu.edu.tr/en/programs/computer-programming-turkish/929>
 - <https://www.emu.edu.tr/en/programs/computer-programming-turkish/781?tab=curriculum>
- Study rules and regulations:
 - <http://mevzuat.emu.edu.tr/Content-en.htm>

Preliminary assessment and analysis of the peers:

The peer panel received all required formal information through the self-assessment report as well as through the programmes' English language websites. This information included the programme names, degrees, modes and duration of study, enrolment schedules and places as well as fees for both the Associate Degree and the Higher Diploma programme. All information was transparent and adequate to the task. Both programmes are taught in Turkish language while the corresponding Bachelor and Master degrees at the Eastern Mediterranean University are being offered in English language.

Both programmes are set within the context of a regular university and the rights and duties of students as well as those of the university correspond to those of higher level programmes. Consequently, all necessary information is provided in the rules and regulations administering the student life cycle.

Final assessment of the peers after the comment of the Provider regarding criterion 1:

The peers consider the criterion to be completely fulfilled.

2. Courses/Modules: Content, Policy and Implementation

Criterion 2.1 Learning outcomes of the programmes
--

Evidence:

- Self-Assessment Report
- Programme websites:
 - <https://www.emu.edu.tr/en/programs/computer-programming-turkish/929>
 - <https://www.emu.edu.tr/en/programs/computer-programming-turkish/781?tab=curriculum>
- Appendix H: Module Descriptions (Summaries are also available on the programme websites)
- Appendix F: Objectives-Modules Matrix
- Virtual discussions

Preliminary assessment and analysis of the peers:

The peers reviewed during this certification procedures the Associate Degree and the Higher Diploma Degree in Computer Programming of the Eastern Mediterranean University (EMU). The programmes are identical in curricula and objectives during the first two years (the Associate Degree) and provide additional skills and competencies for interested students who continue in the third study year, thus completing the Higher Diploma. Both programmes have already been certified for a first time by ASIIN in 2015.

The EMU provided described learning objectives for both programmes in the self-assessment report and matched them in the form an Objectives-Modules Matrix with the included modules of the programmes. In addition, the peers noticed that learning outcomes and short module descriptions are also publicly available on the respective programme websites in Turkish as well as English language.

From the thus presented learning objectives, the peers understood that it is the primary objective of both programmes to prepare students for a practical professional career in computer programming through a balanced composition of practical and theoretical content. Graduates are supposed to have developed the necessary foundations for informatics, in particular with mathematical, logical, statistical, and physical tools. Furthermore, they should have developed knowledge about algorithms, data structures and problem-

solving patterns, understand the composition and functioning of computers and key informatics systems, be able to test and verify operating systems, and develop practical solutions for occurring problem. In addition, the graduates should have developed interpersonal skills, the ability to work in teams, as well as independently deepen their acquired knowledge. The peers appreciated that the learning objectives also emphasized that graduates should be aware of ethical questions and security problems connected with the application of information processing systems.

In addition, the Higher Diploma (3-year) degree programme defines as learning objectives that graduates should have deepened their experience in real life applications and problem-solving, developed knowledge in data availability, confidentiality, and integrity, and demonstrated their ability to work in industry through a prolonged training period.

The peers consented that both programmes could well be aligned to the expectations of level 5 of the European Qualification Framework (EQF), since they provide a comprehensive knowledge, theoretical as well as practical, in the field of computer programmes, adequately preparing students for positions as Technicians or similar in the IT industry. Graduates know how to apply fundamental methods and techniques, algorithmic thinking and planning, can test software and develop solutions to problems individually as well as in groups. In addition, they are made aware of the ethical and legal framework of their actions and professional field and will thus be able to easily integrate into the job market.

Criterion 2.2 Contents

Evidence:

- Programme websites:
 - <https://www.emu.edu.tr/en/programs/computer-programming-turkish/929>
 - <https://www.emu.edu.tr/en/programs/computer-programming-turkish/781?tab=curriculum>
- Appendix H: Module Descriptions (Summaries are also available on the programme websites)
- Appendix B: Industrial Training Logbook
- Appendix F: Objectives-Modules Matrix
- Virtual discussions

Preliminary assessment and analysis of the peers:

The panel discussed with the different stakeholder groups how the programme contents contribute to the achievement of the defined learning objectives. This was facilitated by the presentation of a detailed Objects-Modules Matrix as well as excellent module descriptions.

From the curricula the peers understood, that during the first study year, students acquire fundamental knowledge and skills in the fields of Mathematics, Programming and Computer Hardware. In addition, all students take two courses of English language and spend a professional summer training in industry. During the second year, programming skills are further developed and individual preferences can be pursued in the form of three area electives. If the students continue with a third study year in the Higher Diploma programme, the curriculum includes more specialized courses in computer applications such as E-Commerce or Advanced Animation Techniques. During the second half of the third year, students spend an 80-days internship in industry before the programme is completed by a small graduation project.

The peers considered the curricula in general to be adequate in order to meet the defined learning outcomes. The practical focus of the programme becomes clearly apparent and the two internships provide the students with professional experience and preparation for the job market. Nevertheless, some elements were discussed with programme managers and teaching staff, especially the module Electrotechnology (5 ECTS) of the first semester. The peers were not convinced that students of computer programming necessarily need to be acquainted with electrotechnical fundamentals. On the other side, the programme managers pointed out, that this module has a strong focus on the hardware aspects of computer applications and prepares the students for certain requirements of the job market. This was partly confirmed by some of the industry representatives who appreciated the hardware skills of the EMU graduates, while others agreed with the peers that this time of the curriculum could better be used for other, programming-related topics. Consequently, the peers understood the idea behind the module as part of the curriculum but suggested to continue to review its necessity in time.

One aspect that was critically discussed by the peers was the reflection of ethical and security aspects within the curriculum. While the peers approved of the emphasis the learning outcomes put on this topic they realized that it is not yet a mandatory part of the curricula, although there is elective module on Information Ethics and Security. The programme managers explained that this learning objective is also partly covered within the module Fundamentals of Information Technologies but the module description does not provide any information in this regard. Thus, the peers saw the programme managers' readiness to embrace this very important topic and expressed the necessity to make this a mandatory element of the curriculum.

Furthermore, the peers discussed with the stakeholders the importance of modern technological content in the programming modules. Although the curricula are generally up-to-date, they provide the students only with a limited technological diversity. As an example, the peers suggest to include a second programming language such as Python in order to broaden the students' perspectives and potential employability.

Criterion 2.3 Structure

Evidence:

- Curricula on the Programme websites:
 - <https://www.emu.edu.tr/en/programs/computer-programming-turkish/929>
 - <https://www.emu.edu.tr/en/programs/computer-programming-turkish/781?tab=curriculum>
- Appendix H: Module Descriptions (Summaries are also available on the programme websites)
- Virtual discussions

Preliminary assessment and analysis of the peers:

The peers considered the structure of the programme(s) to be suitable and the offered modules as adequate units of teaching and learning. Besides mandatory modules, a list of area electives are also provided on a regular basis from which the students can choose three during the second study year. Especially in the electives section new and modern topics are regularly introduced and also offered in close cooperation with local industry partners.

Criterion 2.4 Workload

Evidence:

- Self-Assessment Report
- Appendix H: Module Descriptions (Summaries are also available on the programme websites)
- Virtual discussions

Preliminary assessment and analysis of the peers:

The programmes(s) indicate workload using EMU credits as well as ECTS credits. One ECTS credit is defined at 30 working hours while each semester consists of an average of 30 ECTS. All elements of the curricula, including the two internships are credited. The suitability of the workload is surveyed on a regular basis through the course survey that is performed each semester in every course. If deviations from the expected workload are detected over a longer period, either the content or the number of credits are adapted. The peers discussed with the students, whether the workload was manageable and they confirmed that the calculation was realistic. Most of the students were also working in parallel to their studies but still considered the workload to be okay. Consequently, the peers approved of the workload survey system in place.

Criterion 2.5 Admission requirements

Evidence:

- Admission regulations and requirements as published on the University website :
 - <https://www.emu.edu.tr/en/prospective-students/undergraduate/undergraduate-admission/1292>
- Official regulations for entrance exams and student admission :
 - http://mevzuat.emu.edu.tr/5-1-1-Rules-Entrance_exam.htm
- Virtual discussions

Preliminary assessment and analysis of the peers:

Admission requirements to the associate degree programmes are based on national regulations for access to higher education, namely allowing all national graduates of vocational or regular high schools. Depending on the results of a central, national entrance exam, students might be exempt from the need for pre-registration. Requirements for applicants from Turkey or other countries equally are based on the completion of high school level studies. International students may also be admitted to the program upon successful completion of Turkish preparatory school or proof of Turkish language proficiency. All regulations are published on the University website and were found by the peers to be transparent and suitable. Admission to the Higher Diploma Programme (3-year) follows upon successful completion of the Associate Diploma programme in Computer Programming or other relevant Associate degree programmes. In such a case, the applicants need to produce a transcript of previous achievements. This is evaluated by a University committee transferring the credits and potentially remaining courses need to be repeated.

Criterion 2.6 Prospects of the labour market and practical orientation

Evidence:

- Self-Assessment Report
- Appendix Q: Alumni Survey
- Appendix R: Employer Survey
- Appendix T: Statistical Data
- Virtual discussions

Preliminary assessment and analysis of the peers:

While reviewing the self-assessment report and the comprehensive statistical data and survey results which the University provided, the peers were surprised to find out that currently 50% of the graduates of the Higher Diploma programme are unemployed. In an industry that is globally booming and where graduates can usually select a job out of several offers, this high percentage needed to be explained by the stakeholders. Thus, the peers understood that the problem is basically threefold: first of all, the current pandemic situation is posing a difficulty in finding a new job. Secondly, many graduates still need to spend their military or social service after completing their higher education; since this answer was not an option in the survey, many of those figuring as unemployed may actually be performing this kind of service. Finally, from the discussion with the industry representatives it became apparent that the IT industry in Northern Cyprus is very small while the growing number Universities in the country is producing ever more graduates. Contrary to the situation in most countries, Northern Cyprus has actually an overproduction in IT graduates and companies can select out of a pool of applicants.

Understanding this to be the basic difficulty for finding an adequate job, and the fact that Diploma graduates need to compete in a small market with Bachelor and Master graduates, the peers discussed with the stakeholders, if not a stronger focus on internationalization might be helpful. IT graduates are desperately sought by companies around the world and oftentimes, programmers would not even necessarily need to leave their home country but could work online, the prerequisite being that the graduates possess an adequate level of English language skills. Similar to the result of the 2015 certification, the peers realized that this is not the case with many of the students and neither is it desired by the programme managers to increase the English language elements in the curricula. Instead, the peers learned that the programmes were originally designed in English as most of the Bachelor and Master programmes at EMU but were changed to entirely Turkish programmes some years ago. While this may be helpful for local students who have not learned much English in

school, the peers emphasize that the IT industry is an extremely international one and that jobs perspectives are highly limited if graduates can only work in Turkish speaking countries. Consequently, the peers urge the programme managers to point out to the students the importance of language skills for their professional career, even though introducing more English into the curriculum may not be possible. Students could be encouraged to and supported in taking extra-curricular English language courses that are generally available at EMU.

Apart from this difficulty, the peers were convinced that EMU has a close connection to the local IT industry and takes excellent care of the students when they struggle to find internship placements. Industry partners are invited to presentations and seminars on a regular basis in order to establish contacts with students and demonstrate job opportunities. While this network is already very close it was also discussed if it was not possible to expand this cooperation network further into mainland Turkey, since a significant number of the students is living there. Through such an extended network, the job perspectives for graduates could also be further enhanced.

Final assessment of the peers after the comment of the Provider regarding criterion 2:

In the comment on the report, the programme managers approve of the peers' suggestions regarding the mandatory inclusion of the topics "ethics and security" as well as alternative programming languages. Therefore, they announce that the current mandatory course "Electrotechnology" will be replaced by two new mandatory core courses that have previously only been available in the form of electives: "Information Ethics and Security" and "Introduction to Python Programming". The peers very much appreciate this development and will consider the issue as removed once the university senate has approved of the indicated changes.

Concerning the graduates' job opportunities and the importance of the English language in an international work environment, the programme managers fully agree with the peers' assessment and announce, that the communication of this factor as well as already existing University offers to improve English language skills shall be enhanced. The peers again emphasize, that the aspect of English language should not be further neglected and that clearly identifiable initiatives would be helpful to ensure a constant development over the next years.

The peers further appreciate the initiative, to strengthen the cooperation network with Turkish companies to provide job and internship opportunities to their students, as well as the organization of meetings and webinars with industry representatives, discussing topics such as the importance of ethics, communication and language skills. All these approaches

appear to be very suitable to further increase the employability of EMU graduates in the future.

Consequently, the peers await the formal approval of the announced curricular changes but consider the criterion to be largely fulfilled.

3. Examination: System, Policy and Forms

Criterion 3 Exams: System, policy and forms
--

Evidence:

- Self-Assessment Report
- Appendix H: Module Handbook
- Regulation for Examinations and Evaluation, published online:
 - http://mevzuat.emu.edu.tr/5-1-4-Rules-examinations_and_evaluations.htm
- Virtual discussions
- Review of exemplary exams

Preliminary assessment and analysis of the peers:

From the documents presented as well as the virtual discussions with teaching staff and students, the peers gathered that at EMU examination rules and regulations are in place and communicated transparently.

Each course includes at minimum one midterm and one final examination for which pre-determined examination weeks are defined by the University and communicated in advance to the students. For each examination period two weeks are allocated. In addition, the teaching staff may include minor assessments such as quizzes, project works, or presentations. Exams are being described in the module descriptions and the students inform detailed information at the beginning of each semester. The final examination contributes a maximum of 50% to the final grade while the successful completion of the midterm exam is not considered to be a prerequisite for participation in the course's final examination.

Rules for re-sits are equally in place and understood by the students. Missed exams can be repeated within the same examination period, if students fail a course completely it needs to be repeated in the following semester.

The students demonstrated their content with the examination structure and organization in general; only during the early stages of the pandemic online assessment proved to be

difficult for various technical reasons. Meanwhile, the peers were impressed by the flexibility with which the teaching staff as well as the students have adapted to the circumstances of assessment during the COVID-19 pandemic.

In general, the peers were convinced that the examination organization and the forms of exams are adequate to support the achievement of the modules' learning outcomes and contribute to an efficient study progress of the students.

Final assessment of the peers after the comment of the Provider regarding criterion 4:

The peers consider the criterion to be fulfilled.

4. Supporting Processes I: Teaching, Methodology and Support

Criterion 4.1 Teaching methodology

Evidence:

- Appendix H: Module Handbook
- Virtual discussions

Preliminary assessment and analysis of the peers:

Details of the teaching methodology of each course are being described in the module descriptions compiled in the module handbook and accessible to the students and all stakeholders online. The peers confirmed that the respective methodological approaches are diverse and related to the individual subject and learning outcomes of the courses, in general offering a combination of theoretical as well as practical elements. With the strong application orientation in the degree programmes under review, the programme managers emphasized that about 60% of the student workload is usually spent in contact hours with the teaching staff and about 40% for self-study and preparation of exams. Through project works and the included internships, the students are animated to apply their acquired skills by themselves at the earliest possible stage; consequently, the peers were convinced that a good preparation for the work life is achieved.

A special focus of the discussions was laid on the teaching and learning process during the COVID-19 pandemic. The University changed to online teaching formats in late March 2020 and since then is offering a growing variety of support measures to their students, many of whom are living in Turkey and cannot even enter the island. For the Cypriot students, the

teaching staff remains available as a supportive element, since all distance teaching is being performed from the offices at EMU and office and contact hours are taken seriously. Classes are offered online via Microsoft Teams or in the form of individual or group works through Moodle and related platforms. The students were very happy with the way, distance learning was performed in the programmes and explained to the peers that in many Turkish universities such standards were not yet achieved.

Criterion 4.2 Support and assistance

Evidence:

- Self-Assessment Report
- Appendix P: Exit Survey Questions and Results
- Appendix Q: Alumni Survey Questions and Results

Preliminary assessment and analysis of the peers:

It was already pointed out above, that the students in the programmes under review felt very well taken care of. In general, each student is assigned an academic supervisor in the department who supports the student throughout the study process with decisions of the academic life. Furthermore, there is a broad variety of clubs and other student activities. Also, the role of the students' union has been constantly developed during recent years. By now, student representatives are included in all relevant University committees and take part in important decisions.

Related to individual study progress, the peers understood that at EMU students and teaching staff have a close connection. The students appreciated the support they receive from the teaching staff at any time, most lecturers are not only available during office hours but also on their mobile phones or via WhatsApp. This close connection becomes especially apparent in the context of the internships. With the IT sector in North Cyprus being only of limited size it is not a certainty that all students find adequate placements in the country. Nevertheless, company representatives and teaching staff explained, that they work closely together in order to provide a placement for all students who have had difficulties in finding a placement on their own. While company internships were not possible during the COVID-19 pandemic, the staff developed long-term projects for the students which could be done online in order to provide a suitable alternative. In conclusion, the peers were convinced that the support and assistance instruments in place are successfully contributing to the students' progress.

Final assessment of the peers after the comment of the Provider regarding criterion 3:

Announced improvements concerning the communication of offers and the importance of English language skills have already been discussed under criterion two. For example, the programme managers announce to organize meetings or webinars where students meet industry representatives and graduates of the programme. During these meetings, the importance of improving language skills for succeeding in a professional career shall be highlighted. In conclusion, the peers consider this criterion to be largely fulfilled.

5. Resources

Criterion 5.1 Staff

Evidence:

- Self-Assessment Report
- Appendix J: Teaching Staff
- Appendix K: Staff Handbook
- Appendix O: Instructor and Course Evaluation Survey

Preliminary assessment and analysis of the peers:

The teaching staff in the programmes under review is formed by the academic staff of Information Technology in the School of Computing and Technology. All the staff members have at least a Master's degree and are highly qualified to perform the requested task. In total, the Department of Information Technology has 21 staff members, five of them being part-time, two full professors and four assistant professors; the remaining staff members are ranked as lecturers or senior instructors.

Concerning the teaching load, the peers learned during the discussions that a reform had taken place at EMU synchronizing the staff workload at 12 contact hours per week (but hours are calculated only as 0.75 contact hours). The workload was considered by the staff members to be acceptable, for some the workload reform has lead to an increase of teaching hours while others profited. Nevertheless, the workload still leaves sufficient time for individual research and projects. Thus, the peers agreed that the available staff is sufficient in numbers and qualified to manage the programmes.

Criterion 5.2 Institutional setting, funding and equipment

Evidence:

- Self-Assessment Report
- Appendix A: Tuition Fees
- Appendix L: Collaboration Agreements
- Virtual Discussions

Preliminary assessment and analysis of the peers:

The financial resources of the EMU and the programmes under review are largely based on student fees. In addition, the University receives some funding from the government as well as it derived income from university property. The peers were convinced that the financial resources are generally sufficient to maintain the programmes, even though the COVID-19 pandemic has resulted in a significant setback of the university finances. Furthermore, the peers understood that the Turkish financial crisis and the ensuing debasement of the Turkish Lira (which is also used in North Cyprus) has increased the costs for international equipment dramatically. At the same time, studying in Northern Cyprus has also become more attractive to international students. Nonetheless, the peers gained the impression, that the programmes' infrastructure is acceptable, although they learned from the teaching staff and programme managers that a significant part of the laboratories' hardware is not entirely up-to-date. Although the peers will only be able to inspect the laboratories in full during a postponed site visit once the pandemic situation allows it, they were convinced that the equipment available is still sufficient for teaching on the level of EQF 5 programmes. For more advanced content on Bachelor or even Master level, the equipment may need an update but the software required for in the present case runs even on more mature hardware equipment. Consequently, the peers supported the ambition of the programme managers to use the pandemic break for a renovation of at least some of the laboratories but they saw no urgent need for a hardware update in the programmes under review. While the students are studying from home, practical exercises are performed using mostly open-source technology that is available all students without additional costs.

The peers further questioned, if the staff members had sufficient support to pursue further education or get involved in research. This was generally confirmed by the teaching staff, although some restrictions are in place for part-time staff members. In any case, the University offers financial support to teaching staff for participation in international conferences and workshops as well as a financial incentive for publications in internationally renowned journals. Sabbaticals are theoretically possible, although the programme was on halt for the past years. Instead, the University supports staff members in pursuing a PhD, offering free of charge matriculation in the University's PhD programmes.

Final assessment of the peers after the comment of the Provider regarding criterion 5:

In the comment on the report, the programme managers confirm once more the importance of continuously updating the available lab equipment. Although the peers did not doubt the suitability of the available equipment for the programmes on EQF level 5, a further renovation of the hardware is envisaged by the programme managers. Nevertheless, they do point out, that due to the financial side effects of the ongoing pandemic, this process may be further delayed. The peers appreciate the programme managers' dedication to this topic and fully support the initiative. In any case, the adequacy of the equipment will eventually be confirmed by a posterior site-visit in the aftermath of the online audit. For the moment, the peers consider the criterion to be fulfilled.

6. Quality Management: Development and Enhancement

Criterion 6.1 Quality assurance & enhancement

Evidence:

- Self-Assessment Report
- Appendix I: Sample Course Assessment Survey
- Appendix O: Instructor and Course Evaluation Survey
- Appendix P: Exit Survey Questions and Results
- Appendix Q: Alumni Survey Questions and Results
- Appendix R: Employer Survey Questions and Results
- Virtual Discussions

Preliminary assessment and analysis of the peers:

From the documents presented and the discussions with the different stakeholder groups, the peers learned that the EMU has established a well working internal quality assurance cycle that aims at the continuous reviewing and improvement of all aspects of university life in general, as well as programme-specific. The School of Computing and Technology disposes of a quality assurance committee that supervises the quality control processes.

The quality assurance cycle is primarily based on a variety of surveys performed with the most relevant stakeholder groups (students, teaching staff, graduates, and employers) on a regular basis. Course evaluation are performed twice each semester, including a questionnaire about the students' achievement of the defined learning objectives. The evalua-

tion results are reported to the quality assurance committee although they are not necessarily discussed with the students. Since this was criticized during the previous certification, the programme managers introduced an additional tool in the form of regular meeting with the students where course and instructor-related issues are being addressed and general problems discussed. This measure shall offer the students a more direct possibility to influence decisions or to express discontent. Furthermore, student representatives of the students' union are part of each university committee and thus participate in the quality improvement cycle. Apart from the students, a regular communication is also established with the local IT industry. According to the industry partners, regular meetings several times are being held with the programme managers in order to discuss the curricula, possible new electives, or other initiatives. The peers very much approved this close connection.

Criterion 6.2 Instruments, data and methods

Evidence:

- Self-Assessment Report
- Appendix T: Statistical Data

Preliminary assessment and analysis of the peers:

Apart from the survey-based quality management processes, the EMU and School of Computing and Technology collects a variety of data in order to better understand students' progress, difficulties, or room for improvement. As was outlined elsewhere in the report, the provided data pointed the peers to the question why so many of the graduates were currently unemployed. Discussions with the programme managers and the HEI management revealed that these data was taken seriously and profound analyses were performed based on the results. In the case of the high unemployment rate, possible reasons have already been discussed. Another issue detected was the exceptionally high dropout rate in 2016. Analysis demonstrated that in this same year several private universities in North Cyprus started to offer their Bachelor degree programmes also in Turkish and thus attracted several of the students who originally started a Diploma degree at EMU. Consequently, the peers could see that analytical data was collected and used by the university management for the better understanding of the study process and student dynamics.

Final assessment of the peers after the comment of the Provider regarding criterion 6:

The peers consider the criterion to be fulfilled.

7. Documentation & Transparency

Criterion 7.1 Relevant documents

Evidence:

- Regulation for Examinations and Evaluation, published online:
 - [http://mevzuat.emu.edu.tr/5-1-4-Rules-examinations and evaluations.htm](http://mevzuat.emu.edu.tr/5-1-4-Rules-examinations%20and%20evaluations.htm)
- Study rules and regulations:
 - <http://mevzuat.emu.edu.tr/Content-en.htm>
- Admission regulations and requirements as published on the University website :
 - <https://www.emu.edu.tr/en/prospective-students/undergraduate/undergraduate-admission/1292>
- Official regulations for entrance exams and student admission :
 - http://mevzuat.emu.edu.tr/5-1-1-Rules-Entrance_exam.htm

Preliminary assessment and analysis of the peers:

The panel acknowledged that all rules and regulations governing the student life cycle, i.e. admission, progression and graduation were transparently published on the university website in Turkish as well as English language. Discussion with the students also demonstrated that they felt well informed and were aware of the general regulations in place.

Criterion 7.2 Certificate upon conclusion

Evidence:

- Appendix U: Sample Leaving Certificates

Preliminary assessment and analysis of the peers:

At the graduation of either of the two degree programmes, students receive a Diploma and Turkish and English language, together with a Transcript of Records, and a Diploma Supplement. This document provides all required information about the programme's learning objectives, curriculum, and the students' individual performance. The peers only pointed out, the Diploma Supplement is not yet indicating a relative grade of the graduate, positioning his final grade in relation to the average grading of that academic year. The EMU

informed the peers that this additional piece of information is currently being prepared and will be included in the Diploma Supplement as soon as possible.

Final assessment of the peers after the comment of the Provider regarding criterion 7:

The programme managers affirm in their comment that the current version of the Diploma Supplement is being updated by the EMU registrar insofar as the relative rank of the graduate, and the positioning of his/her final grade in relation to the grading of that academic year will also be included. The approval of this modification by the senate will follow as soon as possible. Consequently, the peers consider this criterion to be fulfilled.

D Additional Documents

Before preparing their final assessment, the panel ask that the following missing or unclear information be provided together with the comment of the provider on the previous chapters of this report:

None.

E Comment of the Provider (03.02.2021)

The institution provided a detailed comment on the report in a separate document.

F Summary: Peer recommendations (10.02.2021)

Taking into account the additional information and the comments given by the HEI the peers summarize their analysis and final assessment for the award of the ASIIN certificate as follows:

Degree Programme	ASIIN Certificate	Max. duration of certification	Alignment to a Qualification Framework Level
Associate Degree in Computer Programming	With one requirement	31.12.2027	EQF 5
Higher Diploma Degree in Computer Programming	With one requirement	31.12.2027	EQF 5

Requirements

For all programmes

- A 1. (ASIIN 2.2) Aspects of Ethics must be strengthened within the curriculum in accordance with the formulated learning outcomes.

Recommendations

For all programmes

- E 1. (ASIIN 2.2) It is recommended to include more modern technological content in the curriculum, especially in terms of programming languages.
- E 2. (ASIIN 2.2; 4.2) It is recommended to clearly communicate the need among students of an advanced English language proficiency for improved career options.

G Decision of the Certification Committee (12.03.2021)

Assessment and analysis for the award of the ASIIN Certificate:

The Certification Commission (CC) discusses the procedure.

Regarding requirement 1, it endorses the peers' argument that the aims envisaged in the defined programme learning objectives should be reflected comprehensively in the curriculum / in the contents of the courses/modules. Thus, they subscribe to the peers' impression of ethical competences barely reflected in the course content and the ensuing proposal of a corresponding requirement. However, the CC makes some minor editorial changes in the wording of the requirement in order to adjust it to the identified deficit more appropriately.

As regards the recommended insertion of "more modern technological content", the CC considers this too unspecific to adequately advise the University how to further improve the quality of the programme in that respect. In particular, the specification "especially in terms of programming languages" does not raise the clarity of the formulation in the eyes of the CC. Again, the CC considers it sufficient that the point has been made in the report and the University thus been made aware of the peers' concerns.

The CC follows the peers' assessment that – contrary to the other clusters of EMU under review – no additional inspection of the School's facilities is necessary for the Computer Programming degree programmes.

Apart from the above, the CC agrees with the assessment and proposed resolution of the peers.

The Certification Committee decides to award the following certificates:

Degree Programme	ASIIN Certificate	Max. duration of certification	Alignment to a Qualification Framework Level
Associate Degree in Computer Programming	With one requirement	31.12.2027	EQF 5
Higher Diploma Degree in Computer Programming	With one requirement	31.12.2027	EQF 5

Requirements

For both degree programmes

- A 1. (ASIIN 2.2) Evidence how the students acquire ethical competencies as formulated within the programme learning outcomes.

Recommendations

For both degree programmes

- E 1. (ASIIN 2.2; 4.2) It is recommended to clearly communicate the need among students of an advanced English language proficiency for improved career options.

H Fulfilment of Requirements (04.03.2022)

Analysis by the Peer Panel (25.02.2022)

Requirement for both degree programmes

A 1. (ASIIN 2.2) Evidence how the students acquire ethical competencies as formulated within the programme learning outcomes.

Initial Treatment	
Peers	Fulfilled <u>Justification:</u> The peers consider the requirement adequately fulfilled, as the university has created and implemented a new course with exactly this focus. Moreover, they it not only created this new course, but has also replaced a course (EETE143-Electrotechnology), which we have mentioned as having a disappearing importance to the programme in question, i.e. by doing so, they have signaled a hierarchy of importance for the courses.

Decision of the Certification Commission (04.03.2022)

The Certification Commission decides extending the certificates as follows:

Module / Degree programme	ASIIN certificate	Certification until max.	Alignment to European Qualification Framework Level
Associate Degree in Computer Programming	All requirements fulfilled	31.12.2027	5
Higher Diploma in Computer Programming	All requirements fulfilled	31.12.2027	5