ASIIN Certification Report

Programmes

Ass. Degree Construction Technology (2 yrs)
Higher Diploma Construction and Technical Drawing Technology (Ass Degree +1 yr)
Ass. Degree Mapping and Cadastral Survey

Provided by
Eastern Mediterranean University, Famagusta, North Cyprus

Version: 02 of December 2015
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A About the Certification Process

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<th>Title of the Programmes</th>
<th>Previous certification</th>
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<tr>
<td>Associate degree in Construction Technology/ İnşaat teknoloji</td>
<td>n.a.</td>
</tr>
<tr>
<td>Higher Diploma in Construction and Technical Drawing Technology / İnşaat ve Teknik Çizim Teknolojileri</td>
<td>n.a.</td>
</tr>
<tr>
<td>Associate degree in Mapping and Cadastral Survey / Harita ve Kadastro</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

**Date of the contract:** 18.03.2014

**Submission of the final version of the self-assessment report:** 27.05.2015

**Date of the onsite visit:** 09.-10.09.2015

at: School of Computing and Technology, Famagusta, North Cyprus

**Peer panel:**

Prof. Dr. Wolfgang Huep, Hochschule für Technik Stuttgart (University of Applied Sciences)

Dipl.Ing. Rüdiger Lexau, Ingenieurkammer Hessen

Prof. Dr.-Ing. Tim Ricken, Technische Universität Dortmund (Technical University)

Prof. Dr. Günter Schmidt-Gönner, Hochschule für Technik und Wirtschaft des Saarlandes (University of Applied Sciences)

**Representative of the ASIIN headquarter:** Dr. rer. nat. Thomas Lichtenberg

**Responsible decision-making committee:** Certification Committee

**Criteria used:**

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 27.07.11.

European Standards and Guidelines as of May 2015.
### B Characteristics of the Programmes

<table>
<thead>
<tr>
<th>a) Name of the programme</th>
<th>b) Degree awarded upon conclusion</th>
<th>c) Mode of Study</th>
<th>d) Duration &amp; Credit Points</th>
<th>e) First time of offer &amp; Intake rhythm</th>
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</thead>
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<tr>
<td>Associate degree in Construction Technology</td>
<td>Associate Degree</td>
<td>Full time</td>
<td>4 Semester 125 ECTS (72 EMU credits)</td>
<td>Fall 2001-2002 / Fall-Spring semester</td>
<td>15 in fall semester, 10 in spring semester</td>
<td>€ 2,543/year for Northern Cyprus students</td>
</tr>
<tr>
<td>Higher Diploma in Construction and Technical Drawing Technologies</td>
<td>Higher Diploma</td>
<td>Full time</td>
<td>2 Semester (Ass Degree + 1 year)/60 ECTS (16 EMU credits)</td>
<td>Spring 2001-2002 / Fall-Spring semester</td>
<td>15 in fall semester, 10 in spring semester</td>
<td>€ 2,543/year for Northern Cyprus students</td>
</tr>
<tr>
<td>Associate degree in Mapping and Cadastral Survey</td>
<td>Associate Degree</td>
<td>Full time</td>
<td>4 Semester 125 ECTS (72 EMU credits)</td>
<td>Fall 2009-2010 / Fall-Spring semester</td>
<td>15 in fall semester, 10 in spring semester</td>
<td>€ 2,543/year for Northern Cyprus students</td>
</tr>
</tbody>
</table>

For the **Associate degree programme in Construction Technology** the institution has presented the following profile in the Self-Evaluation Report (SER):

Students will be able to:

- be prepared for profession in the Construction area as it applies to construction site applications, static and architectural plan drawing, topographic survey applications, and construction of materials knowledge.
- develop skills for effective verbal and written communication, and for participating effectively in the execution projects, and to foster professional attitudes and awareness of the benefits of life-long learning.
- provide a learning environment that is based on open interaction with experienced staff and a curriculum that follows the developments in Construction area with practical knowledge compatible with business requirements.
For the **Higher Diploma degree programme in Construction and Technical Drawing Technologies** the institution has presented the following profile in the Self-Evaluation Report (SER):

In addition to the training course, students are registered to a graduation project related to the summer training area and during the training, students are also asked to complete the graduation project agreed with the academic advisor. Similar to the training course, a report and a powerpoint presentation are prepared by the students and presented to the academic staff. The educational objectives of the Construction and Technical Drawing Technology are listed below.

Students will be able to:

- be prepared for profession in the Construction area as it applies to construction site applications, static and architectural plan drawing, topographic survey applications, and construction of materials knowledge.
- develop skills for effective verbal and written communication, and for participating effectively in the execution projects, and to foster professional attitudes and awareness of the benefits of life-long learning.
- provide a learning environment that is based on open interaction with experienced staff and a curriculum that follows the developments in Construction area with practical knowledge compatible with business requirements.
- The main objective of the third year is to give chance to the students to make more real life applications and integrate to the industry. With the help of this long training course some of the students are employed by the same company.

For the **Associate degree in Mapping and Cadastral Survey programme** the institution has presented the following profile in the Self-Evaluation Report (SER):

The aim of the Mapping and Cadastral Survey programme is to equip students with a strong foundation needed for practical applications in Mapping and Cadastral Survey field. The programme focuses on satisfying the needs of learners with a balanced education between the theoretical and practical concepts required for each module. The educational objectives of the Mapping and Cadastral Survey are listed below.

Students will be able to:

- be prepared for profession in Surveying area as it applies to dams, building, land, roads, irrigation, which constitutes the major infrastructure projects such as the
maps and plans and implementation work is to train manpower between practitioners working with engineers to work personally.

- develop skills for effective verbal and written communication, and for participating effectively in the execution projects, and to foster professional attitudes and awareness of the benefits of life-long learning.

- provide a learning environment that is based on open interaction with experienced staff and a curriculum that follows the developments in mapping and cadastral survey field with practical knowledge compatible with business requirements.
C Peer Report for the ASIIN Certificate

1. Formal Information

### Criterion 1.1 Formal Information

**Evidence:**

- Self-Evaluation Report (SER) (chapter 2.1)
- Programme website Construction Technology:
- Programme website Construction and Technical Drawing Technologies:
  - Programme Description: No information (accessed 18.09.2015)
- Programme website Mapping and Cadastral Survey:

Preliminary assessment and analysis of the peers:

The panel members analysed the formal information on the three different programmes provided by the university and came to the following conclusion:

The names of the programmes (1) Construction Technology, (2) Construction and Technical Drawing Technologies and (3) Mapping and Cadastral Survey programme properly reflect the objectives and intended learning outcomes of the programmes. The panel members understood that all programmes are offered as full-time programmes and the degrees aimed at correspond to maximum level 5 of the European Qualification Framework for lifelong learning; this is being elaborated in more detail under criterion 2.1. The programmes run over a period of two or three years which was judged as appropriate by the panel members. The programmes provide ECTS credit points which had been converted from the national credit point system. The peers were not satisfied with the credit point – work load calculation which is being discussed in more detail under criterion 3.2.

The panel members understood from the self assessment report that 15 students enrol in fall semester and 10 in spring semester for each programme. The panel members wondered about the low number of enrolments and learnt that the programmes had been developed in close cooperation with partner institutions from the labour market. The Eastern Mediterranean University (EMU) underlined that there is a constant demand for graduates with the qualification profiles acquired in these programmes. But the number of graduates provides sufficient supply for the demand; that is why there is no intention to increase the number of enrolments. The prospects of the labour market are presented under criterion 2.2. The Construction Technology programmes commenced in fall 2001/02 and the Mapping and Cadastral Survey programme in fall 2009/10. The panel members acknowledged that study fees have to be paid and this is communicated in a transparent manner on the website to interested applicants. The peers also understood that scholarships are primarily available for students from Cyprus.

The panel members confirmed that all formal information was provided appropriately; the panel members also verified that a summary of this information was made available to relevant stakeholders on the subject-specific websites except the Construction and Technical Drawing Technologies. They ask the university to provide a link with valid information for this specific programme.
**Criterion 1.2 Legal relationship: mutual rights and duties**

**Evidence:**

**Preliminary assessment and analysis of the peers:**
The panel members accessed the above mentioned website and confirmed that the “Regulations for Education, Examinations and Success” clearly define the legal relationship between learners and the Eastern Mediterranean University (EMU). A number of by-laws define issues like “Entrance Exam and Student Admission”, “Examinations and Assessment” of examination and the “Eastern Mediterranean University Student Disciplinary Code”. The panel members confirmed that the provided documents define the mutual rights and duties of learners and EMU and that these rules and regulations are publicly available to all interested stakeholders.

**Final assessment of the peers after the comment of the Provider regarding criterion 1:**
The peers appreciated that the missing information about the Construction and Technical Drawing Technologies programme was prepared and sent to be placed onto the University website by the related administrator. However, the information was not publicly available yet. The peers confirmed the envisaged requirement that the qualification objectives should be accessible for all relevant stakeholders.

Apart from this the peers considered the criterion fulfilled.

### 2. Courses/Modules: Content, Policy and Implementation

**Criterion 2.1 Learning outcomes of the course/module**

**Evidence:**
- Self-Evaluation Report (SER) (chapter 2.1 and 2.2)
- Descriptors defining levels in the European Qualification Framework (EQF), in particular level 5; [https://ec.europa.eu/ploteus/content/descriptors-page](https://ec.europa.eu/ploteus/content/descriptors-page) (accessed 18.09.2015)
- Programme website Construction Technology:
C Peer Report for the ASIIN Certificate


  - Programme website Construction and Technical Drawing Technologies:
    - Programme Description: No information (accessed 18.09.2015)

  - Programme website Mapping and Cadastral Survey:

**Preliminary assessment and analysis of the peers:**

The panel members confirmed that the objectives and intended learning outcomes of the three programmes have been clearly defined in the self assessment report. The peers comprehended that the three different programmes aim at qualifications corresponding to the descriptors of level five of the European Qualification Framework (EQF). They thoroughly analysed the intended learning outcomes of the programmes and compared them with the descriptors of the EQF level 5.

The learning outcomes for the **Associate degree in Construction Technology programme** state that graduates shall have up to date fundamental theoretical and practical knowledge in the construction area and practical and theoretical knowledge in the materials used in construction areas. However, the peers pointed out that the building materials used should also consider materials that foster aspects of sustainable use of resources like energy saving building materials, renewable energy generation etc. The panel members recommended adding this component to the learning outcomes. Furthermore, graduates shall obtain technical knowledge of the main areas in construction technology. The panel members see that graduates shall acquire comprehensive, specialised, factual and theoretical knowledge within the field of construction. Graduates learn practical skills as defined for level 5 of the EQF through civil engineering and architectural projects on the construction site. Graduates shall be able to draw architectural and civil engineering
projects by using computer programmes. Additionally, graduates shall be able to identify problems and apply basic problem solving skill; the peers acknowledged that this implies the competence to cope with unpredictable change as required for level 5 EQF programmes. The graduates shall also obtain social skills through team work, basic written and spoken English competences and be aware of the importance of use of professional ethics.

The objectives are identical for the Higher Diploma in Construction and Technical Drawing Technologies programme. But the students have to complete one more year to obtain this degree. EMU explains that the third year has a strong focus on practical application and practical working experiences which is also outlined in the intended learning outcomes. The EQF qualification level remains the same. Due to the additional practical working experiences the graduates are better prepared for practical work placements. However, an increase in theoretical knowledge will be not addressed during the third year.

Regarding the Associate degree in Mapping and Cadastral Survey programme the panel members could see that competences as defined in the EQF descriptor level 5 like comprehensive, specialised, factual and theoretical knowledge shall be obtained through fundamental theoretical and practical knowledge in mathematics useful in mapping and the cadastral field. Graduates shall have the ability to use simple and modern surveying (measuring) instruments and have knowledge of drawing maps with photogrammetric and remote sensing methods. In addition, the graduates can follow the latest developments in the mapping and cadastral survey field with the awareness that lifelong learning is essential. Graduates shall have abilities to make analysis of key issues, and analytical thinking skills that enable them to provide solutions to practical problems of mapping subjects. The panel members comprehended that cognitive and practical skills shall be developed and that problem solving skills are part of the envisaged qualification profile. Graduates can work effectively in teams, develop skills for effective verbal and written communication, and participate effectively in the execution of projects. The peers confirmed that this implies the management and supervision in contexts of work and leads to the competence to review and develop performance of self and others.

The panel members confirmed that the programme objectives and intended learning outcomes of all three programmes, except for the added recommendation, correspond to the qualification descriptors level 5 of the European Qualification Framework for lifelong learning.

EMU applies an employer survey regularly which collects feedback data from partners from industry. This information is being used for revision and enhancement of the curricu-
ula of the programmes. Additionally, students have to carry out a work placement in companies; the partner enterprises are requested to provide feedback on the qualification and performance of the students which is an additional source of information to critically review the envisaged qualification profile of the programmes under review (compare criterion 2.2). The peers confirmed that relevant stakeholders were adequately included in the process of programme revision. The panel members also concluded that the names of the programmes properly reflected the intended learning outcomes.

The overall intended learning outcomes are systematically substantiated in individual modules. The module descriptions are part of the self-assessment report provided by EMU, however the panel members had difficulties to understand how the module descriptions are being made available to the students. The module descriptions provide detailed information in Turkish and English about the course title, the prerequisites to attend a module, the language and the ECTS credit points connected to the workload. Furthermore, the knowledge, skills and competences that learners are supposed to acquire in each module are elaborated in details and substantiated with a weekly schedule. Literature, requirements and methods of assessment are also being described in a transparent manner. However, the panel members could not fully comprehend what kind of activities the information on “workload” comprised. There was no distinction between contact hours, lab time and time for self-study. Based on the work schedule provided and the calculated workload connected with the ECTS points, the panel members gained the impression that the overall amount of time dedicated to self-study was unrealistic. In the module description of “Construction Materials” it does not become transparent that there is a comprehensive laboratory component included. The assessment of the workload is elaborated in more detail under criterion 3.2. With regard to the module descriptions, the panel members underlined that the workload should be explicited in more detail. The module description of “Computing of Static and Structures” is incorrect and needs to be rectified (compare criterion 2.4). Aside from this, the peers concluded that the module descriptions provided comprehensive information on the content of the modules.

**Criterion 2.2 Prospects of the labour market and practical orientation**

**Evidence:**
- Self-Evaluation Report (SER) (chapter 2.3)
- Results from exit and alumni survey
- Results from employer survey
- Discussions with Rector of EMU, programme coordinators, lecturers, and students
Preliminary assessment and analysis of the peers:
The panel members understood that the curriculum of the three programmes is geared towards practical application. EMU explained that all modules incorporate lab applications which cover practices in the construction area. Additionally, each student is required to participate in a summer training session, which entails a placement in a company for a duration of 40 working days for the Construction Technology and Mapping and Cadastral Survey programme and 80 working days for the Construction and Technical Drawing Technology programme. The industry provides feedback on the student’s knowledge and practical performance to the department. The students have to find their own summer training place. At the completion of summer training, each student returns a sealed training log book where a supervisor evaluates the performance of the student on the work assigned within the company. The supervisor also provides feedback on the technical knowledge, practical ability and professional behaviour of the student. Another approach utilized for gathering feedback from the industry is to use the employer survey. Additionally, the programmes organise meetings with officials from leading construction companies in Northern Cyprus in order to identify the state of this changing field. The programmes are revised and enhanced in the light of this feedback. EMU underlines that all graduates find employment within a few months after graduation and, due to some changes in the legislation, even more graduates with these competence profiles will be demanded on the labour market. The students confirmed that there is a growing demand for graduates from these study programmes. However, a detailed alumni statistic about the student’s professional career success was not available. The panel members also understood that these programmes have been running for a number of years and are closely connected to relevant companies in the country; the auditors confirmed that they can see that there is a demand for graduates from these programmes and that there are sufficient practical components integrated in the curriculum.

Criterion 2.3 Admission requirements

Evidence:
- Admission rules and entrance exam: [http://mevzuat.emu.edu.tr/5-1-1-Rules-Entrance_exam.htm](http://mevzuat.emu.edu.tr/5-1-1-Rules-Entrance_exam.htm)
- EMU By-Law under article 4(2): “EMU Entrance Exam and Student Admission” (Amendment no. 1/94 -1/99)

Preliminary assessment and analysis of the peers:
The EMU By-Law under article 4 (2) defines the rules for admission and distinguishes between different groups of applicants; the by-law is published on the website. In order to be admitted to EMU, students are required to graduate from a high school or any other equivalent institution. All students from the Turkish Republic of Northern Cyprus need to take an EMU entrance exam and can be admitted to EMU according to the set quota. The same applies to Citizens of the Turkish Republic; however, applicants have to pass a Student Selection and Placement Exam by the Turkish Republic Higher Education Board. All students from other countries are admitted to the university based on the set quota for third countries and their performance in high school. The peers confirmed that all processes and quality criteria required for admission to the courses are defined in a transparent and binding way. The peers could also see that particularly through the EMU entrance exam the admission requirements are structured in a way that supports the learners in reaching the learning outcomes. As there are no international students for the three programmes under review, the peers focused primarily on the rules applying to students from the Turkish Republic of Northern Cyprus and the Turkish Republic. If there is a lack of previous knowledge the students are offered additional courses (also language courses if need be) to compensate the missing knowledge.

While the admission rules for the two-year programme are published and transparent on the university website, the panel was not in a position to confirm the same for the three-year programme. This should be remedied in order to achieve full transparency for all external stakeholders. The panel acknowledged in this context that the majority of students in the programmes currently had a local background with only a few students coming from Turkey.

<table>
<thead>
<tr>
<th>Criterion 2.4 Contents</th>
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**Evidence:**
- Module descriptions in the Self-Evaluation Report (SER) (Annex C)
- Programme website Construction Technology:

• Programme website Construction and Technical Drawing Technologies:
  o Programme Description: No information (accessed 18.09.2015)

• Programme website Mapping and Cadastral Survey:
  o Discussions with programme coordinators and lecturers

Preliminary assessment and analysis of the peers:

Even though the university did not provide an objective-module matrix, the panel members examined the module descriptions and came to the conclusion that the modules were appropriate to reach the intended learning outcomes with some minor exceptions. More specifically, for the Construction Technology programme, the specialised and theoretical knowledge can be obtained in modules like “Basic Mathematics”, “Construction Technology I and II” or “Construction Materials”. However, as indicated under criterion 2.1, the peers underlined that the construction materials that are presented in this module focus on traditional building materials only and leave new building materials that deal with isolation of buildings and energy saving materials, for example, unmentioned. The panel members strongly recommended to also include new building materials in the curriculum to make sure to cover currently predictable technical developments. As far as
cognitive and practical skills are concerned which enable the students to develop creative solutions to abstract problems, the panel members understood that the modules “Computer Aided Drawing II”, “Computer Application for Construction” as well as “Engineering Drawing” and the summer training are modules where problem solving competences shall be developed. The students do not learn how to program computer applications but the panel members indicated that this competence is not coercively relevant for this level of qualification. As indicated under criterion 2.3 all modules incorporate lab applications which cover practices in the construction area and each student is required to participate in a summer training session. The panel members agreed that these practical components are adequate to develop practical skills. Management and supervision skills are being taught in the module “Construction Side Techniques”. This module teaches the students to set up a construction site, mobilise and organise the necessary resources and to supervise sub-contractors. The students have to monitor the consumption of materials and verify the progress claims and the man-hour concepts.

The curriculum of Higher Diploma Construction and Technical Drawing Technology is principally the same with the distinction that students of this programme pursue another year of studies with modules that focus on practical experiences and application.

The curriculum of the Mapping and Cadastral Survey programme shows that the modules “Topography I and II”, “Map Trigonometry”, “Map Information” and “Map Drawing” are designed to bring about the professional and theoretical knowledge required for the degree aimed at. The module “Professional Ethics” makes the students reflect about their profession and creates an awareness of the boundaries of the professional knowledge the students obtain. Problem solving competences are included in a number of modules like “Topography II” where instruments and techniques are used in making horizontal, vertical, and angular measurements, and the application in the practical field and to solve mapping problems. In the module “Map Trigonometry” the students shall obtain competences in the basic equations in the triangle, triangle solutions, quadrilateral shapes, trapezoid solutions, circle solutions, spherical triangles concept global triangle solutions. As indicated for the other programmes, students need to carry out a summer training session. Very specific programme related practical skills shall be developed in the module “Cadastral Survey I and II” where students do the technical cadastre, renovation and special cadastral operations. In addition, students have to implement a “Graduation Project” (the same applies to the Higher Diploma Construction and Technical Drawing Technology) where students are required to form teams and propose a real life project to the graduation project committee which may be accepted as graduation project. Each team has to explore the needs and requirements of their project; they may receive support from the project supervisor. This “Graduation Project” also helps to develop management and
team work competences as the panel members acknowledged. The panel members discussed where Global Navigation Satellite Systems are being taught and learned that real time software was used in all courses. Hence, data from the Global Navigation Satellite System feed directly into the Geographic Information Systems (e.g. ARC-View) and can be used for all kinds of mapping exercises.

In summary, the panel members concluded that the curriculum is designed in a way to reach the intended learning outcomes, except for the field of construction materials where aspects of sustainability should be introduced. However, the panel members noticed for all programmes that no elective courses are offered. The panel members strongly recommend introducing elective courses to give students the opportunity to develop their specific fields of expertise. EMU indicated that the introduction of elective courses in the near future is already under consideration. Possible elective courses may include: Mechanics, Structural Analysis, Structural Design, Building Informatics, Construction Management and Business.

The panel members confirmed that the aims and contents of the individual modules are properly arranged and coordinated; the auditors could not see any overlapping in the modules except for “Computing of Static and Structures” where the module description implies a strong focus on drawing. The university admitted that this module description was faulty. The panel members request to submit the corrected version of the module description. Apart from these challenges the auditors considered the criterion fulfilled.

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

The peers welcomed that the learning outcomes of the modules of construction technology programme had been revised and the general learning outcome now include modern building materials. Furthermore, the peers acknowledged that the course content of ITEK113 (Construction Materials) had been modified and includes components like “energy saving building materials”.

Even though the peers welcomed the efforts of the university to change the objectives and the curricular content in the module descriptions, the peers still considered the added items of “energy saving building materials” as too little and encourage the university to widen the scope of sustainable construction materials. The peers upheld their intended recommendation.

The peers could not verify that the module descriptions had been revised with regard to information on the contact time, lab time and self-study time and type and duration of exam for each module. The peers upheld the envisaged requirement.
The peers appreciated the ongoing efforts of the university to collect data about alumni systematically. The peers could comprehend that no detailed alumni statistical data is available yet.

The peers understood there is no direct entrance to a three-year higher diploma programme in Eastern Mediterranean University. In order to get acceptance to the three-year programme, a student has to graduate from the related two-year associate degree programme. The peers acknowledged the clarification regarding the admission to the three-year programme.

The peers welcomed the intention of the university to introduce elective courses and comprehended that the actual implementation takes time. The peers upheld their intended recommendation.

3. Courses/Modules: Structures, Methods and Implementation

<table>
<thead>
<tr>
<th>Criterion 3.1 Structure</th>
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**Evidence:**
- Module descriptions in the Self-Evaluation Report (SER) (Annex C)
- Programme website Construction Technology:
- Programme website Construction and Technical Drawing Technologies:
  - Programme Description: No information (accessed 18.09.2015)
Preliminary assessment and analysis of the peers:
The Associate Degree in Construction Technology and the Associate Degree in Mapping and Cadastral Survey are two years full-time programmes. The students need to complete 125 ECTS credit points to receive the degree. The Higher Diploma in Construction and Technical Drawing Technologies is a consecutive one year full-time programme building upon the Associate Degree in Construction Technology. To achieve this degree, 60 ECTS points need to be completed. The panel members disagreed with the ECTS credit point and workload calculation which is analyzed in more detail under criterion 3.2. The panel members noted that the programmes consist of modules which are composed of coherent and consistent learning and teaching. The aims and the teaching methods to accomplish the learning objectives are described in a transparent manner.

As indicated under criterion 2.4 the panel members recommended introducing elective courses to give students the opportunity to develop their specific fields of expertise. In summary, the panel members confirmed that the chosen structure and the modularisation are appropriate to reach the intended learning outcomes.

Criterion 3.2 Workload

Evidence:
- Module descriptions (Course Policy Sheets) in SER
- Programme website Construction Technology:
**Course Descriptions:**

**Programme website Construction and Technical Drawing Technologies:**

**Programme website Mapping and Cadastral Survey:**

- Discussions with programme coordinators, lecturers, and students

**Preliminary assessment and analysis of the peers:**
In **Construction Technology** each semester students have to complete 6 modules between 4-6 ECTS points; except for the module “Atatürk’s Principles and History of Turkish Reforms” which consists only of 2 ECTS points. In **Construction Technology** the first semester consist of 29 and the second of 30 ECTS points. The third semester has a higher workload of 34 ECTS points. The university explained that this is due to the summer training which takes place in the summer break and has to be seen as an additional component of the normal semester workload. The peers found this reasonable. The fourth semester consists of 32 ECTS points. The first semester of the **Higher Diploma in Construction and Technical Drawing Technologies** consists of 35 ECTS points and the second only of 25 ECTS points. From a structural point of view, the panel members could comprehend that the first semester consists of modules and the second semester focuses on practical working experiences like the “Semester Training” or the “Graduation Project” but they saw the workload distribution unbalanced. The panel members underlined that EMU should have a more balanced workload over the semesters.

The **Associate Degree in Mapping and Cadastral Survey** also comprises 4 semesters with 6 modules in the first and second semester with a range of 3-6 ECTS credit points per module. The third semester consists of 38 ECTS credit points but, as in the **Construction Methodology** programme, the students have to complete a “Summer Training” in the summer break. The fourth semester consists of 29 ECTS points. Even though the panel members had the impression that the distribution of workload was not solved ideally they considered it as still acceptable the way it is.
Based on the information provided in the Self-Evaluation Report (SER, chapter 3.2) one ECTS point corresponds to 30 hours; this is in line with the workload – ECTS credit point information provided in the module description as well as with the ECTS Users’ Guide. However, the panel members could not understand the actual workload expected from students and the distribution of lecture time and self-study time. In the module descriptions under the section “Teaching Format” it is defined that in most modules 2 hours lectures and 2 hours of drawing, tutorial, lab etc. take place. This means that 4 contact hours in one module times 16 weeks per semester sum up to 64 contact hours. In some of these modules like “Plumbing”, “Cost Estimation” or “Health and Safety in Construction” the total amount of work load is indicated with 210 hours (7 ECTS points). The panel members wondered if it was realistic that there were 64 contact hours and 146 hours of self-study. The university agreed that this amount of self-study time was unlikely. The panel members underlined that the ECTS credit points should reflect the actual workload realistically and the module descriptions need to indicate the contact time and the time for self-study.

**Criterion 3.3 Teaching methodology**

**Evidence:**
- Module descriptions (Course Policy Sheets) in SER
- Programme website Construction Technology:
- Programme website Construction and Technical Drawing Technologies:
- Programme website Mapping and Cadastral Survey:
- Discussions with programme coordinators, lecturers, and students
Preliminary assessment and analysis of the peers:
The panel members were informed that the general teaching methodology used in the programmes include two hours of lecture covering theoretical or foundational material followed by two hours of laboratory showing practical applications under the supervision of the course instructor. Alternatively, the lecture can also be followed by drawing exercises or tutorials. The auditors welcomed that the module descriptions provide clear and transparent information on the “Teaching Format” used in each module. The university added that the lecture/laboratory materials, announcements, attendances, grades and related reading materials are available for the students on the course websites. This could not be verified by the auditors as the website is only available in Turkish. In addition to the modules combining theoretical and practical approaches the curriculum also includes modules like “Summer Training” and a “Graduation Project” which deepen the theoretical knowledge through practical working experiences. The panel members could see that different forms of teaching are applied corresponding to the respective aims of the modules. The auditors concluded that the teaching methods and instruments support the learners in reaching the learning outcomes at the level aimed for.

Criterion 3.4 Support and assistance

Evidence:
- Self-Evaluation Reports
- Results from Exit and Alumni survey

Preliminary assessment and analysis of the peers:
EMU maintains a student affairs department which is responsible for information on general study conditions as well as for academic measures for prospective students. The website is available in Turkish and English and provides comprehensive information on Admission Requirements, Tuition Fees & Payment, Scholarships, Liaison Offices / EMU Representatives, Online Application, Visa and Residence Permit and Student Exchange Programme. The International Office provides specific support and help to international
students. However, there are hardly any international students matriculated in the programmes under review. Students with health or psychological issues can make use of the University Health Centre or the EMU Psychological Counselling Guidance and Research Centre.

Subject-specific information can be obtained directly from the website and contact details of the programme coordinator are available; the department provides information to all prospective students on request. For the existing students the academic advisors provides relevant guidance. Before the registration is completed, the students are required to decide on the courses that they will take during the next semester with the guidance of the academic advisor. The advisor makes recommendations to the students with regard to mandatory prerequisites for courses to be taken into account and courses the students have problems with so that they can complete their studies on time.

The panel members confirmed that appropriate resources are available to provide individual assistance, advice and support for all learners. The auditors were also convinced that the planned advice and guidance measures are suitable for assisting the learners in reaching the learning outcomes and completing the programme within the scheduled time.

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

The peers welcomed the clarification of the university explaining that more weeks of teaching and learning have to be taken into consideration when judging the workload. However, the peers could still not comprehend the actual workload expected from students and the distribution of lecture time and self-study time. Hence, the peers were not convinced that the workload expressed in ECTS currently reflected the actual student workload. This should be clarified in the module descriptions and be verified e.g. through results from students surveys. Through additional evidence provided by the university the peers concluded that a balanced workload over the semesters was reached in all educational programmes.

### 4. Examination: System, Policy and Forms

**Criterion 4 Exams: System, policy and forms**

**Evidence:**


**Preliminary assessment and analysis of the peers:**

The “By Law for Examinations and Assessment”, which is published on the website of EMU, defines in detail the rules which apply to examinations. At the beginning of the term, the course instructor informs the relevant department chair and the students in writing about the number of examinations to be administered and their weights towards the semester grade, as well as the weights of quizzes and lab/workshop reports. This information is also provided in the module descriptions. The examinations may be given in written, oral or practical (on-computer) or drawing (on-computer or by hand) forms. For each course, a minimum of one midterm examination and a final examination are held. Additional examinations, any number of quizzes, homework, lab applications, projects or presentations may be organised according to the course content and objectives. Examination questions are prepared and evaluated by the respective course instructor. A student has the right to ask the relevant academic staff member to see all documents involved in the determination of the semester grade. The panel members confirmed that a comparable assessment for all learners is carried out on whether the learning outcomes have been achieved. The panel members learned that oral examinations or presentations have to be made after the “Summer Training”, in the English courses and in the “Graduation Project”. In the laboratory courses oral presentations may also be given occasionally. The panel members noticed that no information about the duration of written or oral examinations was provided neither in the by law on examinations nor in the module descriptions. The auditors underlined that the duration of the exams should to be determined and clearly stated in the module descriptions.

Midterm and final exams are generally administered on the dates specified in the academic calendar announced by the university administration at the beginning of each term; the examination period for the final exams is in the 15th and 16th week of the semester. As far as possible, the examinations are organised in a way that students have sufficient time to prepare between the examinations but as this is organised centrally in exceptional cases it may not be optimal for all students. The panel members acknowledged that a central system may not accommodate all students to their full satisfaction but the students confirmed that normally there was sufficient time for preparation. Re-sit examinations for all courses are administered, at the end of the fall and spring semesters for students who have gained the right to take the final exam on dates specified on the Academic Calendar. In summary, the peers concluded that the rules and regulations for examinations are properly defined and transparent for all stakeholders.
Final assessment of the peers after the comment of the Provider regarding criterion 4:
The peers upheld their requirement that the duration of the exams should be clearly stated in the module descriptions. Apart from this, the peers considered the criterion to be fulfilled.

5. Resources

Criterion 5.1 Staff

Evidence:
- Staff Handbook, included in the Self-Evaluation Report (SER)

Preliminary assessment and analysis of the peers:
The peer members acknowledged that the staff members involved in the programmes under review hold at least a Master’s degree. The auditors noted that only few staff members hold a PhD degree but given the level of the programmes under review they considered this to be acceptable. About 50% of the staff members have been recruited from other institutions and thus have not completed their own education at EMU. Part-time teachers are also involved in the teaching. They bring experiences and expectations from private companies into the classes. The panel members confirmed that contributions from private businesses were an asset to the programmes. In summary, the panel members confirmed that the composition and qualification of the teaching staff guarantee that the learning outcomes can be reached at the level aimed for.

Regarding the workload of lecturers, the panel members were surprised to learn that the amount of mandatory teaching hours for staff members was less than at German universities of applied sciences. The auditors acknowledged that the lecturers have enough time to teach the modules and to appropriately assist learners. This was also confirmed by the students who praised the guidance and academic support provided by lecturers.

Regarding further training and qualification of staff members the panel members were informed that university-wide seminars are offered at Eastern Mediterranean University about presentation and coaching, teaching and coaching, effective planning and organization teaching, effective teaching techniques or fair evaluation of the students. The lecturers confirmed that they are encouraged to publish papers and that resources are available to attend academic conferences to meet with people in the same area of interests. It was also mentioned that each instructor uses the results obtained by the instructor evaluation survey for personal development. However, the auditors gained the impres-
sion that the lecturers were hardly aware of the opportunities of further didactical training. The peers strongly recommended to make the opportunities of further education and didactical training available at EMU more known to lecturers and to encourage them to actually participate in these courses.

**Criterion 5.2 Institutional setting, funding and equipment**

**Evidence:**
- Self-Evaluation Report
- Inspection of laboratories during audit

**Preliminary assessment and analysis of the peers:**
The panel members inspected the relevant classrooms and computer labs which they found to be of adequate condition. In the library a number of textbooks were outdated but as it was demonstrated to the peers that students have access to relevant electronic publications and journals, the auditors concluded that the library was appropriate for the needs of the students of the programmes under review. The panel members were impressed about the number of newly erected buildings and learnt that the university increased particularly the number of foreign students in the last years. As students have to pay tuition fees, the university wanted to upgrade and expand its infrastructure to be able to properly accommodate the growing needs of the students. Among the plans for new buildings will also be a large library complex as the present library is not prepared for the increased number of students. The laboratories for Construction Technology were of adequate standard and the auditors noted positively that research projects particularly dealing with construction in earthquake areas were implemented, although students of the programmes under review are not involved in the research projects. For the programme Mapping and Cadastral Survey the auditors noticed that new equipment had been purchased and was unpacked. However, the peers could see that the new equipment was about to be integral part of the teaching of this programme. The panel members concluded that the equipment available was of appropriate standard to be able to reach the intended learning outcomes.

Regarding financial resources, the university explained that school fees are the main income of EMU. Also, the Ministry of Education of Northern Cyprus supports the university budget with the agreed ratios. The Ministry of Education also provides scholarships to EMU students every year. The Turkish Republic also funds infrastructural projects. The vice rector underlined that there was a long-term commitment for the programmes under review. They have been implemented in close cooperation with regional businesses a
number of years ago and EMU will definitely continue these programmes. The panel members came to the conclusion that the necessary resources for these programmes are secured for the duration of certification.

EMU highlighted that the university maintained a number of international exchange programmes and was busily increasing its international partnerships. But as the programmes under review are offered in Turkish only and the qualification profile is focused on the demand of the regional market international exchange programmes are not envisaged. The panel members could understand this.

Final assessment of the peers after the comment of the Provider regarding criterion 5:
The peers welcomed that the university encouraged staff members to attend seminars, conferences and make publications. The peers considered this criterion as fulfilled.

6. Quality Management: Development and Enhancement

Criterion 6.1 Quality assurance & enhancement

Evidence:
- Eastern Mediterranean University Quality Assurance Handbook, provided to panel members
- Self-Evaluation Report (SER), chapter 6
- Discussions with Rector of EMU, programme coordinators, lecturers, and students

Preliminary assessment and analysis of the peers:
The university provided a Quality Assurance Handbook to the panel members. The auditors noticed that this handbook was not available on the website dealing with the rules and regulations of student affairs. The panel members confirmed that this handbook provided relevant information on quality-related targets for the implementation of the modules as well as for further development purposes.

The students regularly evaluate the teaching and study programmes. The instructor and course evaluations are carried out at the end of every academic term by the students. Students anonymously complete a standard questionnaire on their student portal and automatically submit their comments to the central computer system where all results are compiled. The final evaluation results are transferred to the academic staff portal. The instructor evaluations are used as an indicator for the efficiency of the academic staff and also to receive feedback on their performance. The students indicated that no systematic feedback was provided to them, however, if certain issues had been evaluated badly they
can notice changes. The lecturers added that the results of the evaluation were forwarded to the heads of departments but the students could receive some information on the results if they asked. EMU provided different questionnaires which are part of the quality assurance system to the auditors. The auditors acknowledged that the learners and other stakeholders take part in the quality assurance process. However, the students were hardly able to participate in the feedback loops of the quality assurance system. The auditors comprehended that feedback loops are in place and evaluation results were used for the enhancement of the study programmes but they underline that students should be involved more actively in this process.

The panel members learnt the annual revision of all the study programmes was carried out by the “University Curriculum Committee” (UCC) based on the principles and policies which were approved by the University Senate. The main duty of the “University Curriculum Committee” is to prepare guidelines for submitting curricular proposals, including the development, revision and deletion of programs and courses at EMU in consultation with relevant bodies. The panel members confirmed that the responsibilities and mechanisms for the continued development of the study programmes have been defined.

<table>
<thead>
<tr>
<th>Criterion 6.2 Instruments, data and methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evidence:</strong></td>
</tr>
<tr>
<td>• Self-Evaluation Report</td>
</tr>
<tr>
<td>• Survey results and questionnaires: exit survey, alumni survey, employer survey</td>
</tr>
<tr>
<td>• Instructors evaluation questionnaire</td>
</tr>
<tr>
<td>• Statistics about student number, drop-outs</td>
</tr>
</tbody>
</table>

**Preliminary assessment and analysis of the peers:**
EMU provided detailed statistical data on the development of the cohorts of the different study programmes and the auditors could see that the overall drop-out rate was low and the average duration of students in the programmes was acceptable. The relevance of the study programmes for the labour market was discussed under criterion 2.2. The evaluation results showed a high degree of satisfaction with the performance of the lecturers and the content of the modules. The panel members confirmed that instruments and methods suitable for the enhancement of the quality of the programmes are in use and the results of the evaluation procedures have been documented and their effect and efficiency are checked on a regular basis.
Final assessment of the peers after the comment of the Provider regarding criterion 6:

The peers gratefully received the links to the publication of the Quality Assurance Handbook. The peers welcomed the efforts of the staff members to place a request to the Rector’s Office to carry out the evaluations earlier in the semester to be able to include the students into the evaluation process and close the feedback loop. The peers upheld their recommendation to see the results of this effort.

7. Documentation & Transparency

Criterion 7.1 Relevant documents

Evidence:

Preliminary assessment and analysis of the peers:
The panel members confirmed that the rules and regulations for the admission, fee structure, examination and actual training were available on the website. However, as mentioned above, the panel members request the links to the English version of the Construction and Technical Drawing Technologies programme (general information), the module descriptions, the opportunities for further education and didactical training and the publication of Quality Assurance Handbook.

Criterion 7.2 Certificate upon conclusion

Evidence:
- Sample Leaving Certificates
- Sample Transcripts

Preliminary assessment and analysis of the peers:
The panel members confirmed that a leaving certificate and a transcript of records was available providing detailed information on the modules, the received credit points and the grades. The transcript of records provides information on how the final mark was awarded and explains in a transparent way which achievements were relevant in which way.

However, the panel members did not receive a Diploma Supplement providing more detailed information on the structure, objectives and content of the study programmes. The panel members asked to submit a Diploma Supplement as additional information.
Final assessment of the peers after the comment of the Provider regarding criterion 7:
The peers gratefully received Appendix D3 which shows a Diploma Supplement which is to be issued for all graduates. The peers considered this criterion as 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:

1. Link to the English version of the *Construction and Technical Drawing Technologies* programme (general information); availability of module descriptions for interested stakeholders
2. Corrected module description of the module “Construction and Static”
3. Certificate Supplement
4. Updated module outlines
5. Modified curriculum
6. Senate Decisions

Additional Documents have been received.
E Summary: Peer recommendations (26.11.2015)

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

<table>
<thead>
<tr>
<th>Programme</th>
<th>ASIIN Certificate</th>
<th>Maximum duration of certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ass. Degree Construction Technology</td>
<td>With requirements</td>
<td>31.12.2020</td>
</tr>
<tr>
<td>Higher Diploma Construction and Technical Drawing Technology</td>
<td>With requirements</td>
<td>31.12.2020</td>
</tr>
<tr>
<td>Ass. Degree Mapping and Cadastral Survey</td>
<td>With requirements</td>
<td>31.12.2020</td>
</tr>
</tbody>
</table>

Requirements

For all Programmes

A 1. (ASIIN 2.1) The module descriptions should include information about the contact time, lab time and self-study time and type and duration of exam for each module

A 2. (ASIIN 3.2) The ECTS points should reflect the actual workload.

Construction and Technical Drawing Technologies

A 3. (ASIIN 1.1) The qualification objectives should be accessible for all relevant stakeholders.

Recommendations

For all Programmes

E 1. (ASIIN 2.4) It is recommended to introduce elective courses to give students the opportunity to develop their specific fields of expertise.

E 2. (ASIIN 5.1) It is recommended to make the opportunities for further education and didactical training known to relevant stakeholders and encourage them to participate.
Ass. Degree Construction Technology / Higher Diploma Construction and Technical Drawing Technology

E 3. (ASIIN 2.1 und 2.4) It is recommended to include aspects of sustainable construction materials in the curriculum.
Decision of the Certification Committee (02.12.2015)

Assessment and analysis for the award of the ASIIN Certificate:

The committee made a number of editorial changes to the proposed requirements and recommendations in order to make them precise and also to align the wording between the three procedures implemented at the university. Therefore, the committee decided to change the recommendation about quality assurance into a requirement and to add a requirement concerning the automatic award of the certificate supplement.

The Certification Committee decided to award the following certificates:

<table>
<thead>
<tr>
<th>Degree Programme</th>
<th>ASIIN-seal</th>
<th>Maximum duration of Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ass. Degree Construction Technology (2 yrs)</td>
<td>With requirements and recommendations</td>
<td>30.09.2020</td>
</tr>
<tr>
<td>Higher Diploma Construction and Technical Drawing Technology (Ass Degree +1 yr)</td>
<td>With requirements and recommendations</td>
<td>30.09.2020</td>
</tr>
<tr>
<td>Ass. Degree Mapping and Cadastral Survey (2 yrs)</td>
<td>With requirements and recommendations</td>
<td>30.09.2020</td>
</tr>
</tbody>
</table>

Requirements

A 1. (ASIIN 2.1) The module descriptions should include information about the contact time, lab time and self-study time and type and duration of exam for each module

A 1. (ASIIN 3.2) It must be demonstrated that the ECTS points reflect the actual student workload.

A 2. (ASIIN 6) Students should be involved in the quality assurance processes at committee level. All students should receive the feedback of quality assurance instruments’ results (to close feedback loops).

A 3. (ASIIN 7.2) A Certificate Supplement should be issued automatically to all graduates.

Construction and Technical Drawing Technologies
A 4. (ASIIN 1.1) The qualification objectives should be accessible for all relevant stakeholders.

Recommendations
E 1. (ASIIN 2.4) It is recommended to introduce elective courses to give students the opportunity to develop their specific fields of expertise.

E 2. (ASIIN 5.1) It is recommended to make the opportunities for further education and didactical training known to relevant stakeholders and encourage them to participate.

Ass. Degree Construction Technology / Higher Diploma Construction and Technical Drawing Technology
E 3. (ASIIN 2.1 und 2.4) It is recommended to include aspects of sustainable construction materials in the curriculum.
Appendix: Programme Learning Outcomes and Curriculum

For the Associate degree programme in Construction Technology the institution has presented the following profile in the Self-Evaluation Report (SER):

Students will be able to:

- be prepared for profession in the Construction area as it applies to construction site applications, static and architectural plan drawing, topographic survey applications, and construction of materials knowledge.
- develop skills for effective verbal and written communication, and for participating effectively in the execution projects, and to foster professional attitudes and awareness of the benefits of life-long learning.
- provide a learning environment that is based on open interaction with experienced staff and a curriculum that follows the developments in Construction area with practical knowledge compatible with business requirements.
The university provided the following curriculum:

**First Year Fall Semester (18 EMU Credits, 30 ECTS) / Birinci Yıl Güz Dönemi (18 DAU Kredi, 30 AKTS)**

<table>
<thead>
<tr>
<th>Course Code / Ders Kodu</th>
<th>Ref. Code / Ref. Kodu</th>
<th>Course Name / Ders Adı</th>
<th>Credit / Kredi</th>
<th>ECTS / AKTS</th>
<th>Category / Kategori</th>
<th>Prerequisite(s) / Öhkousuł</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL171</td>
<td>34711</td>
<td>English – I / İngilizce - I</td>
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<td>6</td>
<td>UC</td>
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<tr>
<td>MATE115</td>
<td>34712</td>
<td>Basic Mathematics / Temel Matematik</td>
<td>(3,0,1) 3</td>
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<td>AC</td>
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<tr>
<td>BDEE111</td>
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<td>Basic Technical Drawing / Temel Teknik Çizim</td>
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<tr>
<td>ITEK113</td>
<td>34714</td>
<td>Construction Materials / Yapı Malzemeleri</td>
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<td>AC</td>
<td>-</td>
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<tr>
<td>BDEC115</td>
<td>34715</td>
<td>Basic Office Applications / Temel Ofis Uygulamaları</td>
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<tr>
<td>ITEK117</td>
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<td>Vocational Orientation / Mesleki Yönlendirme</td>
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**First Year Spring Semester (18 EMU Credits, 29 ECTS) / Birinci Yıl Bahar Dönemi (18 DAU Kredi, 29 AKTS)**

<table>
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<tr>
<th>Course Code / Ders Kodu</th>
<th>Ref. Code / Ref. Kodu</th>
<th>Course Name / Ders Adı</th>
<th>Credit / Kredi</th>
<th>ECTS / AKTS</th>
<th>Category / Kategori</th>
<th>Prerequisite(s) / Öhkousuł</th>
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<tbody>
<tr>
<td>ENGL172</td>
<td>34721</td>
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<td>ENGL171</td>
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<tr>
<td>ITEK120</td>
<td>34722</td>
<td>Computer Application for Construction/ İnşaat Bilgisayar Uygulamaları</td>
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<td>4</td>
<td>UC</td>
<td>-</td>
</tr>
<tr>
<td>ITEK122</td>
<td>34723</td>
<td>Topography - I/ Topografa - I</td>
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<tr>
<td>ITEK124</td>
<td>34724</td>
<td>Construction Technology - I / Yapı Teknigi - I</td>
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<td>-</td>
</tr>
<tr>
<td>BDEE126</td>
<td>34725</td>
<td>Engineering Drawing - I/ Mühendislik Çizimi - I</td>
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</tr>
<tr>
<td>BDEE128</td>
<td>34726</td>
<td>Computer Aided Drawing (CAD) - I / Bilgisayar Destekli Çizim - I</td>
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<td>5</td>
<td>UC</td>
<td>-</td>
</tr>
</tbody>
</table>

**Second Year Fall Semester (19 EMU Credits, 34 ECTS) / İkinci Yıl Güz Dönemi (19 DAU Kredi, 34 AKTS)**

<table>
<thead>
<tr>
<th>Course Code / Ders Kodu</th>
<th>Ref. Code / Ref. Kodu</th>
<th>Course Name / Ders Adı</th>
<th>Credit / Kredi</th>
<th>ECTS / AKTS</th>
<th>Category / Kategori</th>
<th>Prerequisite(s) / Öhkousuł</th>
</tr>
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<tbody>
<tr>
<td>ENGL271</td>
<td>3G131</td>
<td>English - III / İngilizce - III</td>
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<td>ENGL172</td>
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<td>BDEE211</td>
<td>3G132</td>
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<td>AC</td>
<td>-</td>
</tr>
</tbody>
</table>
For the Higher Diploma degree programme in Construction and Technical Drawing Technologies the institution has presented the following profile in the Self-Evaluation Report (SER):

In addition to the training course, students are registered to a graduation project related to the summer training area and during the training, students are also asked to complete the graduation project agreed with the academic advisor. Similar to the training course, a report and a powerpoint presentation are prepared by the students and presented to the academic staff. The educational objectives of the Construction and Technical Drawing Technology are listed below.

Students will be able to:

- be prepared for profession in the Construction area as it applies to construction site applications, static and architectural plan drawing, topographic survey applications, and construction of materials knowledge.
- develop skills for effective verbal and written communication, and for participating effectively in the execution projects, and to foster professional attitudes and awareness of the benefits of life-long learning.
- provide a learning environment that is based on open interaction with experienced staff and a curriculum that follows the developments in Construction area with practical knowledge compatible with business requirements.

- The main objective of the third year is to give chance to the students to make more real life applications and integrate to the industry. With the help of this long training course some of the students are employed by the same company.

The university provided the following curriculum:

<table>
<thead>
<tr>
<th>Course Code / Ders Kodu</th>
<th>Ref. Code / Ref. Kodu</th>
<th>Course Name / Ders Adı</th>
<th>Credit / Kredi</th>
<th>ECTS / AKTS</th>
<th>Category / Kategori</th>
<th>Prerequisite(s) / Önkoşul</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST321</td>
<td>30151</td>
<td>Sihhi Tesisat ve Çizim Uygulamaları / Plumbing</td>
<td>(2,2,0) 3</td>
<td>7</td>
<td>AC</td>
<td>-</td>
</tr>
<tr>
<td>CNST322</td>
<td>30152</td>
<td>Cost Estimating / Bilgisayar Destekli Yapı Maliyet Hesapları</td>
<td>(2,2,0) 3</td>
<td>7</td>
<td>AC</td>
<td>-</td>
</tr>
<tr>
<td>CNST323</td>
<td>30153</td>
<td>Health and Safety in Construction / İnşaatta iş sağlığı ve güvenliği</td>
<td>(2,2,0) 3</td>
<td>7</td>
<td>AC</td>
<td>-</td>
</tr>
<tr>
<td>CNST324</td>
<td>30154</td>
<td>Advanced Desktop Applications / Gelişmiş Masaüstü Yayınıcılık Uygulamaları</td>
<td>(2,2,0) 3</td>
<td>7</td>
<td>AC</td>
<td>-</td>
</tr>
<tr>
<td>CNST325</td>
<td>30155</td>
<td>Architectural Drawing / Mimari Çizim</td>
<td>(2,2,0) 3</td>
<td>7</td>
<td>AC</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code / Ders Kodu</th>
<th>Ref. Code / Ref. Kodu</th>
<th>Course Name / Ders Adı</th>
<th>Credit / Kredi</th>
<th>ECTS / AKTS</th>
<th>Category / Kategori</th>
<th>Prerequisite(s) / Önkoşul</th>
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<tbody>
<tr>
<td>CNST311</td>
<td>30161</td>
<td>Semester Training / Dönem Stajı</td>
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<td>CNST312</td>
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<td>Graduation Project / Mezuniyet Projesi</td>
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<td>-</td>
</tr>
</tbody>
</table>

For the Associate degree in Mapping and Cadastral Survey programme the institution has presented the following profile in the Self-Evaluation Report (SER):

The aim of the Mapping and Cadastral Survey programme is to equip students with a strong foundation needed for practical applications in Mapping and Cadastral Survey field. The programme focuses on satisfying the needs of learners with a balanced education between the theoretical and practical concepts required for each module. The educational objectives of the Mapping and Cadastral Survey are listed below.

Students will be able to:
• be prepared for profession in Surveying area as it applies to dams, building, land, roads, irrigation, which constitutes the major infrastructure projects such as the maps and plans and implementation work is to train manpower between practitioners working with engineers to work personally.

• develop skills for effective verbal and written communication, and for participating effectively in the execution projects, and to foster professional attitudes and awareness of the benefits of life-long learning.

• provide a learning environment that is based on open interaction with experienced staff and a curriculum that follows the developments in mapping and cadastral survey field with practical knowledge compatible with business requirements.

The university provided the following curriculum:

<table>
<thead>
<tr>
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### Appendix: Programme Learning Outcomes and Curriculum

#### Second Year Fall Semester (27 EMU Credits, 38 ECTS) / İkinci Yılı Güz Dönemi (27 DAU Kredi, 38 AKTS)

<table>
<thead>
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<th>Course Code / Ders Kodu</th>
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#### Second Year Spring Semester (12 EMU Credits, 29 ECTS) / İkinci Yıl Bahar Dönemi (12 DAU Kredi, 29 AKTS)

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