Doc. 300.1.1

Date: 29 September 2021

External Evaluation Report

(Conventional-face-to-face programme of study)

- **Higher Education Institution:**

  University of Nicosia
- **Town:** Nicosia
- **School/Faculty (if applicable):** Sciences and Engineering
- **Department/ Sector:** Engineering
- **Programme of study- Name (Duration, ECTS, Cycle)**
  In Greek:

  Προπτυχιακό Πρόγραμμα Πολιτικού Μηχανικού και Μηχανικού Περιβάλλοντος (4 χρόνια, 240 Πιστωτικές Μονάδες ECTS, Κύκλος 1)

  In English:

  BSc Civil and Environmental Engineering (4 years, 240 ECTS, Cycle 1)
- **Language(s) of instruction:** English
- **Programme's status:** Choose status
- **Concentrations (if any):**
  In Greek: Concentrations
  In English: Concentrations

The present document has been prepared within the framework of the authority and competencies of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, according to the provisions of the "Quality Assurance and Accreditation of Higher Education and the Establishment and Operation of an Agency on Related Matters Laws of 2015 to 2019" [N. 136 (I)/2015 to N. 35(I)/2019].

A. Introduction

This part includes basic information regarding the onsite visit.

The committee members visited the University of Nicosia through a virtual setting during the period of September 27 and 28 2021 due to COVID-19 related travelling restrictions. The External Evaluation Committee (EEC) members were provided with sufficient resources so as to successfully complete the external evaluation of the departmental program in Civil & Environmental Engineering, which is a 4 year academic program.

During September 27 2021, the EEC members had the opportunity to meet with the CYQAA officer for a short introduction of the primary tasks associated with the evaluation. The primary meetings during the virtual site visit included those with the Rector, Vice-Rector for Academic Affairs & Quality Assurance, the Dean of the School of Sciences and Engineering as well as the Head of the Department of Engineering. The EEC members also had the opportunity to meet the various faculty members, student representatives and recent graduates. The assessment process was quite comprehensive. During the exit discussion, the members of EEC were able to clarify a few additional points, which was helpful to successfully complete the evaluation process.

During the virtual visit, the members of the department as well as all associated parties provided detailed information that was deemed very useful for the successful completion of the evaluation of the members of EEC. Moreover, the department members were quite helpful by replying to a number of questions that facilitated the evaluation process. The EEC committee firmly believes that the evaluation report is comprehensive and was not impacted by the nature of the visit, which was virtual, given the circumstances of the pandemic.

B. External Evaluation Committee (EEC)

Name	*Position*	*University*
Andrew Heath	Professor	University of Bath, UK
Dimitrios Lignos	Associate Professor	EPFL, Switzerland
Konstantinos Noutsopoulos	Associate Professor	NTUA, Greece
Marios Hadjipanagi	Graduate student	Cyprus University of Technology
Andreas Theodotou	Professional Engineer	Technical Chamber of Cyprus

C. Guidelines on content and structure of the report

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

Findings

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

Strengths

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

Areas of improvement and recommendations

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

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

1. Study programme and study programme's design and development

(ESG 1.1, 1.2, 1.7, 1.8, 1.9)

Sub-areas

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

1.1 Policy for quality assurance

Standards

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

1.2 Design, approval, on-going monitoring and review

Standards

- *The programme of study:*
  - *is designed with overall programme objectives that are in line with the institutional strategy and have explicit intended learning outcomes*
  - *is designed by involving students and other stakeholders*
  - *benefits from external expertise*
  - *reflects the four purposes of higher education of the Council of Europe (preparation for sustainable employment, personal development, preparation for life as active citizens in democratic societies, the development and maintenance, through teaching, learning and research, of a broad, advanced knowledge base)*

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

1.3 Public information

Standards

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

1.4 Information management

Standards

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

- *students' satisfaction with their programmes*
- *learning resources and student support available*
- *career paths of graduates*

- *Students and staff are involved in providing and analysing information and planning follow-up activities.*

You may also consider the following questions:

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

- *How long does it take a student on average to graduate? Is the graduation rate for the study programme analogous to other European programmes with similar content? What is the pass rate per course/semester?*
- ***How is it ensured that the actual student workload is in accordance with the workload expressed by ECTS?***
- *What are the opportunities for international students to participate in the study programme (courses/modules taught in a foreign language)?*
- *Is information related to the programme of study publicly available?*
- *How is the HEI evaluating the success of its graduates in the labor market? What is the feedback from graduates of the study programme on their employment and/or continuation of studies?*
- *Have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?*
- *What are the reasons for dropping out (voluntary withdrawal)? What has been done to reduce the number of such students?*

Findings

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

The university is situated in Nicosia, Campus of 20 buildings, including well-equipped laboratories and classrooms as well as 3 affiliated resident halls for 850 students. About 20% of the students are registered to the faculty of Engineering. The university ranks from 601 to 800 according to the World University Rankings as well as among 250 in the EU.

The university and academic program of interest follows the European Guidelines and Standards for Quality Assurance since 2015, the European Approach for Quality Assurance of Joint Programmes, and the Greek Law on Higher Education due to the large number of Greek students.

Admission criteria are established based on the high-school average grade above 15/20, and a proficient knowledge in English. Other internal evaluation criteria have been established to ensure that students can follow the academic program.

Information regarding the academic program is available online and is regularly revised, when needed. Moreover, this information is publicly available through a dedicated website.

The university's workload is structured according to four academic years/eight academic semesters (i.e., 240 ECTS); including 43 courses and a compulsory undergraduate thesis. The courses combine theoretical concepts and hands-on experience along with basic science techniques.

The program is designed to meet the registration requirements of ETEK (i.e., the Scientific and Technical Chamber of Cyprus), which is the professional body that recognizes Engineering Science in Cyprus. The students can register as professional Civil Engineers in Cyprus.

The program is taught in English. Students are usually about 40-50% from Cyprus and Greece, the rest are from Russia, Middle-East as well as African countries. One or two Erasmus students per semester are also registered to the program, but this decreased during the COVID disruption.

The academic program is coordinated between five (5) appointed research faculty members, six (6) adjunct staff members and 6-7 affiliated faculty members from other departments. The requirements of at least 70% of the courses taught by permanent faculty members are respected. The average workload per full-time professors is 2 courses per semester. Associate and Assistant professors teach 9 to 12 hours per week. The faculty-to-student ratio is about 1:10.

The drop out rate is about 15% for first year students due to transfers or weak performance. Students may also hold for a year their degree because of financial matters. Some of these decide to return back; the average course failure rate is about 20-30% (e.g., in courses related to structural analysis). However, this percentage varies depending on the course. The students usually graduate after 8 to 10 semesters, on average, depending if they are registered as full or part time.

The private sector absorbs more than 80 % of the graduate students. However, other students are absorbed in the municipalities, as well as the public sector.

The Civil and Environmental Engineering Society has been set since 2019 to organize various activities with the industry sector, field trips, among others.

With regard to new faculty, an entry program has been established to ensure a high quality of teaching including an orientation program that focuses on e-learning techniques, which proved to be valuable particularly during the pandemic period.

Strengths

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

1. *Professionally accredited degree to directly practice civil engineering in Cyprus.*
2. *Nicely equipped facilities including laboratories for teaching to ensure hands-on experience and opportunities for inquiry-based learning.*
3. *Students get the opportunity to be involved in activities associated with both practical works along with appropriate theoretical grounding.*
4. *Full-time students get to finish on time their academic degree (about 4 years).*
5. *Course offerings in English attract a good portion of international students (about 40-50%).*

Areas of improvement and recommendations

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

1. *Consider improving certain elements for testing facilities that can facilitate the research activities of existing and future faculty by engaging in research proposals.*
2. *An alumni center could be eventually established to follow up on graduates. However, some efforts exist in this direction through the university's career center.*

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

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

1.4	Information management	Compliant

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

Sub-areas

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

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

Standards

- *The process of teaching and learning supports students' individual and social development.*
- *The process of teaching and learning is flexible, considers different modes of delivery, where appropriate, uses a variety of pedagogical methods and facilitates the achievement of planned learning outcomes.*
- *Students are encouraged to take an active role in creating the learning process.*
- *The implementation of student-centered learning and teaching encourages a sense of autonomy in the learner, while ensuring adequate guidance and support from the teacher.*
- *Teaching methods, tools and material used in teaching are modern, effective, support the use of modern educational technologies and are regularly updated.*
- *Mutual respect within the learner-teacher relationship is promoted.*
- *The implementation of student-centred learning and teaching respects and attends to the diversity of students and their needs, enabling flexible learning paths.*
- *Appropriate procedures for dealing with students' complaints regarding the process of teaching and learning are set.*

2.2 Practical training

Standards

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

2.3 Student assessment

Standards

- *Assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures.*
- *Assessment is appropriate, transparent, objective and supports the development of the learner.*
- *The criteria for the method of assessment, as well as criteria for marking, are published in advance.*
- *Assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary, is linked to advice on the learning process.*
- *Assessment, where possible, is carried out by more than one examiner.*
- *A formal procedure for student appeals is in place.*
- *Assessors are familiar with existing testing and examination methods and receive support in developing their own skills in this field.*
- *The regulations for assessment take into account mitigating circumstances.*

You may also consider the following questions:

- *How is it monitored that the teaching staff base their teaching and assessment methods on objectives and intended learning outcomes? Provide samples of examination papers (if available).*
- *How are students' different abilities, learning needs and learning opportunities taken into consideration when conducting educational activities?*
- *How is the development of students' general competencies (including digital skills) supported in educational activities?*
- *How is it ensured that innovative teaching methods, learning environments and learning aids that support learning are diverse and used in educational activities?*
- *Is the teaching staff using new technology in order to make the teaching process more effective?*
- *How is it ensured that theory and practice are interconnected in teaching and learning?*
- *How is practical training organised (finding practical training positions, guidelines for practical training, supervision, reporting, feedback, etc.)? What role does practical training have in achieving the objectives of the study programme? What is student feedback on the content and arrangement of practical training?*
- ***Are students actively involved in research? How is student involvement in research set up?***
- *How is supervision of student research papers (seminar papers, projects, theses, etc.) organised?*

- ***Do students' assessments correspond to the European Qualifications Framework (EQF)?***
- *How are the assessment methods chosen and to what extent do students get supportive feedback on their academic progress during their studies?*
- *How is the objectivity and relevance of student assessment ensured (assessment of the degree of achievement of the intended learning outcomes)?*

Findings

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

Undergraduate students (about 30 to 40%) usually request an experimental or advanced numerical component as part of their capstone project and they are somewhat exposed to research. This gives them an opportunity to explore innovative aspects in Civil Engineering. The students are involved in experimental activities within the University's laboratories. Based on the discussions with existing faculty, students generally prefer the hands-on experience. The course on engineering surveying seems to be appreciated well by the students. Moreover, field visits (e.g., visits to community-critical facilities, such as dams) seem to be highly regarded by students because these visits give a different perspective to students regarding potential challenges of large infrastructure projects besides the technical ones.

There is one elective course that relates to practical training of at least 150 hours. This is usually arranged over summer. At the end of the internship the students should file a report that is co-signed by the company involved and a university representative. The students who had the opportunity to work as interns during their studies, considered the experience very beneficial for their future career in civil engineering.

The faculty usually employs the Moodle platform to circulate pertinent material among students. This corroborates with what is done in other academic institutions in Cyprus and Europe. Due to the COVID-19 Pandemic, the teaching approach featured other e-learning tools and modules to facilitate learning and ensure a high-quality of teaching. In that respect, the faculty is using state-of-the-art technology to make the teaching process more effective.

Digital skills are supported by various activities associated with the use of pertinent software tools and modules that are demonstrated in parallel with the theoretical grounding to link fundamentals in mechanics with practical skills. Moreover, students get the opportunity to access digital resources through a VPN client, particularly those who need to use commercial finite element software that requires a campus-wide licence. Electronic books are also offered to students.

Courses are evaluated through a final examination as well as other assessment techniques (e.g., at least one midterm examination, homework assignments) as well as a small participation grade to encourage student interaction and participation. In certain courses, assessment methods involve a laboratory component. The above assessment methods allow the faculty to provide constant feedback to students during the semester, which is generally appreciated by them as attested by student evaluations. Overall, the assessment methods satisfy the European Qualifications Framework. Finally, faculty holds regular office hours to provide feedback to students and ensure that the workload is according to the ECTS units they are registered with.

Strengths

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

1. Well-equipped laboratory facilities for teaching
2. Assessment methods appear to be working fairly well including constant feedback to students
3. Field visits are regularly organized and are highly appreciated by students

Areas of improvement and recommendations

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

1. The department should consider increasing the length or amount of practical training offered to the students. It is anticipated that in this case students will be encouraged to do more internships particularly during the summer period.

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

Sub-area		***Non-compliant/ Partially Compliant/Compliant***
2	Process of teaching and learning and student-centred teaching methodology	Compliant
2.2	Practical training	Compliant
2.3	Student assessment	Compliant

3. Teaching staff *(ESG 1.5)*

Sub-areas

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

3.1 Teaching staff recruitment and development

Standards

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

3.2 Teaching staff number and status

Standards

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

3.3 Synergies of teaching and research

Standards

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

You may also consider the following questions:

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

Findings

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

The recruitment of teaching staff links into the University process, which is a formal process involving applications, shortlisting and interviews, and is what can be expected for a well developed international university. Although teaching is in English which opens the recruitment to a broad range of international faculty, applicants are generally from Cyprus for the Civil and Environmental disciplines.

New staff are required to take a University teaching development course (approximately 12 week programme) which covers learning and teaching standards and processes at the University. Junior and senior staff both indicated that the programme was helpful in their development. In addition there are continuous improvement processes which ensure staff have consistent approaches to, for example, the use of Moodle.

Junior staff indicated they were aware of what is required for promotion in their role as University timeline and minimum criteria were clear to them. Students evaluations of teaching were used for promotion, as were research and administration activities. As the laboratories are focussed on teaching activities, some staff do not have direct access to the research equipment they need to further their research careers. Many have indirect access through other universities or research organisations and while this can help, it is not the same as having direct access to equipment and research students at your own institution.

While the number of teaching staff is low, all major areas in the current curriculum are covered by either permanent or adjunct teaching staff. Because the student numbers are low, the student: staff ratio is considered acceptable (approximately 10:1) in spite of the low teaching staff numbers. There is a risk that if certain members of permanent staff with a Civil or Environmental Engineering background had to cease teaching (leaving the University or another reason such as illness), it may be difficult to obtain cover for their range of teaching on short notice.

Although the Civil and Environmental Engineering programme is reasonably new (less than 10 years old), there is a good profile in teaching and research staff experience, with sufficient senior staff to provide input and mentor junior staff. A number of staff (including many of the senior staff teaching on the programme) are from outside the field of Civil or Environmental Engineering which does place a large responsibility on those from within Civil and Environmental Engineering. The teaching staff apply their research to the teaching either directly or indirectly, depending on the subject.

Even though some important subject areas are not covered by permanent staffing (e.g. hydrology or coastal engineering), with the low student numbers on the courses (which have not significantly increased since the course opened), it may be difficult for the Department to convince the University senior management to increase permanent staff unless the total number of students increases through the proposed new MSc course, or through increasing BSc student numbers through other means. Attempting to start a new MSc in Civil and/or Environmental Engineering without additional staff could place the existing BSc course at risk.

Strengths

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

1. The faculty approach was collaborative, with a number from different specialisms teaching on the course.
2. Those from outside the subject area (e.g. background in mathematics) focussed their teaching on Engineering or Civil and Environmental Engineering as appropriate.
3. Staff and the University senior management take teaching seriously and have the support available (IT systems and administrative staff) to help teaching staff achieve success in teaching. In particular their plans for teaching during the COVID disruption, and the plans for exams during lockdown were well thought out.

Areas of improvement and recommendations

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

1. Additional permanent Civil and Environmental Engineering focused teaching and research staff and additional research laboratory equipment would strengthen the programmes, but this may be linked to additional student recruitment (either at BSc or MSc level).

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

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

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

Sub-areas

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

4.1 Student admission, processes and criteria

Standards

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

4.2 Student progression

Standards

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

4.3 Student recognition

Standards

- *Pre-defined and published regulations regarding student recognition are in place.*
- *Fair recognition of higher education qualifications, periods of study and prior learning, including the recognition of non-formal and informal learning, are essential components for ensuring the students' progress in their studies, while promoting mobility.*
- *Appropriate recognition procedures are in place that rely on:*
    - *institutional practice for recognition being in line with the principles of the Lisbon Recognition Convention*

- *cooperation with other institutions, quality assurance agencies and the national ENIC/NARIC centre with a view to ensuring coherent recognition across the country*

4.4 Student certification

Standards

- *Pre-defined and published regulations regarding student certification are in place.*
- *Students receive certification explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed.*

You may also consider the following questions:

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

Findings

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

On average 15 students are admitted in the program annually accounting for almost 50% of the maximum planned number of students per class. Almost 73% of these students graduate (dropout rate of 27%). About half of the students are from Cyprus and Greece, while the other half comes from Middle East countries, Russia, Ukraine, and African countries.

The admission requirements are clearly detailed in University's web page and are based on the University of Nicosia Academic Rules and Regulations. Based on these, a student can be admitted upon complying with the following criteria: i) a recognized High School Leaving Certificate of more than 75% (15/20) and ii) an English language

proficiency. In case of lower certifications, preparatory courses are offered for further evaluation. The average HSLC of the students admitted is 16.9/20.

Pre-defined rules regarding student progression are clearly specified well in advance to the students. The respective information is also available to UNIC web page. Most of the courses correspond to 5-6 ECTS credits. In order to be awarded the Bachelor's degree, a student has to complete a four years program with 240 ECTS credits (30 ECTS per semester), in agreement with the requirements of the Cyprus Scientific and Technical Chamber (ETEK). A minimum cumulative grade point average of 2.0 is required. There is a mandatory 4th year research-oriented thesis project which is implemented individually from every student and accounts for 10 ECTS.

Several methods (homework assignments, group projects, laboratory exercises or field projects, midterm exams, final exams, participation) are used to evaluate students' progression in each course. The final exam accounts for around 60% of the final grade.

Regulations regarding student recognition are in place and publicly available through the UNIC web page. Credits awarded in one program may be transferred into another program in national or international universities. A maximum of 120 ECTS has been set for transferring credits being acquired in other universities. A specific committee is responsible for credits transfer which considers both the ECTS and the similarity of the content of both programs (a value of more than 85% is usually expected), while being approved also by the Cyprus Scientific and Technical Chamber.

There is the option of resiting exams during September upon failure in the fall or spring semester. In case of a successive failure the course is retaken typically in the following year. There is a limit on the total ECTS one can take per semester of 30 ECTS credits having a cumulative grade point average of 2.0 in the previous semester or session. Students may be allowed to register for more than 30 ECTS per semester in exceptional cases. Maximum duration of studies is 9 years, while the average duration is 4.9 academic years (including the graduation record of part-time students).

Each student receives academic mentoring by the academic advisor throughout her/his studies. In most cases the Program Coordinator serves as the academic advisor of all the students of the program. There are provisions for extra tutorials for students performing poorly in the courses who receive support by faculty members and senior students especially during the first year of their studies in maths, computer programming and English language.

Strengths

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

1. The very effective ratio of students per lecturers
2. The admission rules are clearly defined.
3. Pre-defined student progression rules are well stated.
4. A mixture of several educational tools (individual or team classworks or projects, lab or field assignments, participation, midterm and final exam) is used in the marking process.
5. There are provisions for extra tutorials for low performance students in their early stage of their studies.

6. The Degree is in very good alignment with the accreditation requirements of Cyprus Scientific and Technical Chamber (ETEK).

Areas of improvement and recommendations

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

1. The number of students being admitted to the program annually is rather moderate. The Committee believes that the Department should intensify its national and international campaign to increase this number. The issuing of an MSc program may help towards this direction.
2. The weighting scheme for marking is needed to be pre-defined and be included in the syllabus of each course.
3. The committee believes that several faculty members should be engaged as Academic Advisors.

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

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

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

Sub-areas

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

5.1 Teaching and Learning resources

Standards

- *Adequate and readily accessible teaching and learning resources (teaching and learning environments, materials, aids and equipment) are provided to students and support the achievement of objectives in the study programme.*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose.*
- *Student-centred learning and flexible modes of learning and teaching, are taken into account when allocating, planning and providing the learning resources.*

5.2 Physical resources

Standards

- *Physical resources, i.e. premises, libraries, study facilities, IT infrastructure, are adequate to support the study programme.*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose and students are informed about the services available to them.*

5.3 Human support resources

Standards

- *Human support resources, i.e. tutors/mentors, counsellors, other advisers, qualified administrative staff, are adequate to support the study programme.*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose and students are informed about the services available to them.*

5.4 Student support

Standards

- *Student support is provided covering the needs of a diverse student population, such as mature, part-time, employed and international students and students with special needs.*
- *Students are informed about the services available to them.*
- *Student-centred learning and flexible modes of learning and teaching, are taken into account when allocating, planning and providing student support.*
- *Students' mobility within and across higher education systems is encouraged and supported.*

You may also consider the following questions:

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

- *How students' special needs are considered (different capabilities, different levels of academic preparation, special needs due to physical disabilities, etc.)?*
- *How is student mobility being supported?*

Findings

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

The Department has a satisfactory infrastructure (classrooms, laboratories, library, etc) and resources (lab consumables, software) to adequately support its teaching mission. All premises of the Department, including classrooms and laboratories are located in the Research and Technology Building. The building has several classrooms which are well equipped with modern audiovisual media. The existing lab facilities of the Civil Engineering Laboratory, although adequate for teaching purposes, are rather limited to support advanced research activities and/or experimental theses. As of now, the research conducted by the University relies on collaborations with other institutes. Other collaborations of the University related to the laboratory equipment may include reliable companies for the setup, service and repair, even if urgently needed. Several course lab works (mostly related with the discipline of environmental engineering) are being hosted by lab facilities of other departments. The technical staff for the operation and maintenance of the lab-scale equipment is limited. The Department has two specialized computer labs (25 computers each) equipped with specialized licensed software for students, while other IT facilities are also available centrally by the university. An online platform is available for all the students of the program with updated information regarding their studies.

All the buildings provide access to students with disabilities. The department is served by the university's library which holds a big number of print books, e-books and full text e-journals. All resources are available through the library's web page.

Several student support services are available to enhance students' needs. All these services are listed in the university's web page. Specific services (e.g. academic counselling, accommodation office, Centre for Therapy, Training and Research, student success centre, international student support, career success centre, etc) are available at the university level. Special procedures are available to support students with special needs (students with learning disabilities, health or social and psychological problems, etc). The university offers pedagogical support and teaching training seminars to faculty members.

A mobility office centrally operates to provide support to international exchange programs and internships.

Strengths

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

1. The University clearly provides several mechanisms to support students' academic and social life during their studies. This is well evidenced by the students' satisfaction regarding supporting services.

2. The well-equipped classrooms support the student-centred learning procedure.
3. Almost all of the program's premises are concentrated in one building.

Areas of improvement and recommendations

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

1. The existing laboratory and its equipment cannot fully support advanced experimental research activities. A strategic plan for seeking for additional lab facilities and purchasing advanced laboratory equipment in the near future is advisable (especially in the case of issuing a new graduate program). The Committee suggests that strengthening the collaborations with other European research groups might further increase the research status of the group thus allowing faculty members to increase the applications for European funding and therefore allocating budget for expanding and maintaining the existing laboratory facilities.
2. A more detailed plan for students' mobility opportunities can also be implemented by the Department to enhance the centrally operated mobility office.

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

Sub-area		***Non-compliant/ Partially Compliant/Compliant***
5	Teaching and Learning resources	Compliant
5.2	Physical resources	Compliant
5.3	Human support resources	Compliant
5.4	Student support	Compliant

6. Additional for doctoral programmes *(ALL ESG)*

Findings

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

There is currently no doctoral provision or doctoral programmes in Civil Engineering or Environmental Engineering. No plans were presented for starting doctoral programmes. It is unlikely that PhD programmes will be started before the planned new Masters programmes in Civil / Civil and Environmental Engineering have started.

D. Conclusions and final remarks

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

The BSc Civil and Environmental Engineering is a reasonably new programme (less than 10 years old) and it has consistently attracted between 10 and 20 students per year. These student numbers are typical across all the Engineering disciplines at the University, and the low numbers are a major reason why there are not more permanent teaching staff, particularly directly related to Civil and Environmental Engineering.

The Department adheres to University processes for admissions, student support, standards, assessment and awarding of degrees, and these processes are well developed and coherent. The programme is compatible with the Bologna agreement cycle 1. There is practical training embedded through laboratory classes, field trips, and the option for internships (as an optional module). Options for more (or longer) practical training should, however, be considered by the programme team.

Teaching staff are committed to providing an excellent education for the students, and staff recruitment and promotion procedures are clear and transparent. The small number of permanent Civil and Environmental Engineering staff does increase the pressure on these staff, and does pose a risk to the programmes if one or more staff were unable to teach at short notice. Increasing student numbers is likely to be the most effective means for justifying increases in staffing.

Student admission and progression rules are well defined, and there is support in place for students with either intake levels slightly below the requirement, or for other students struggling with the programme. The assessment includes a range of activities including laboratory reports, design and other coursework, midterms and final exams. Approximately 60% of the final year mark is from final exams. Most students take more than the 4 years to complete the programme and the reasons for this are varied (financial, part-time study, failing one or more module, etc). The Degree is in very good alignment with the accreditation requirements of Cyprus Scientific and Technical Chamber (ETEK).

The University clearly provides several mechanisms to support students' academic and social life during their studies. This is well evidenced by the students' satisfaction regarding supporting services. The low student and staff numbers ensure students and staff know each other. The well-equipped classrooms support the student-centred learning procedure.

There is currently no Doctoral provision, and no plans on implementing it were noted. Plans for a new MSc in Civil and/or Environmental Engineering are being developed, and it is anticipated that this will be the next MSc offered by the Department.

The opinion of the external evaluation committee is that this is a well run programme, which provides a good experience to the limited number of students on it. There are no serious concerns with the programme, but there are some areas for improvement which the programme team should consider. Increasing the number of students studying Civil and Environmental Engineering (though increasing number on the BSc or starting a new MSc) is likely to be beneficial as it will allow more teaching staff to be employed. It will also allow more research to be conducted which could further increase international standing, but this may require additional laboratory space and research equipment (current laboratory equipment is focussed on teaching rather than research).

E. Signatures of the EEC

Name	*Signature*
Andrew Heath	
Dimitrios Lignos	
Konstantinos Noutsopoulos	
Marios Hadjipanagi	
Andreas Theodotou	

Date: 29 September 2021