Doc. 300.3.1/1

External Evaluation Report

(Programmatic within the framework of Departmental Evaluation)

Date: Date.

- **Higher Education Institution:**
  Cyprus Institute of Technology
- **Town:** Limassol
- **School/Faculty:** Engineering/ Engineering and Technology
- **Department:** Civil Engineering and Geomatics/Civil Engineering
- **Programme(s) of study - Name (Duration, ECTS, Cycle)**

Programme 1 – [Title 1]
In Greek:
Πτυχίο πολιτικών μηχανικών

In English:
B.Eng, in Civil Engineering and Geomatics
Language(s) of instruction: Greek

Programme 2 – [Title 2]
In Greek:
μεταπτυχιακό πρόγραμμα πολιτικών μηχανικών και αειφόρος σχεδιασμός

In English:
M.Sc in Civil Engineering and Geomatics and Sustainable Design
Language(s) of instruction: Greek

Programme 3 – [Title 3]
In Greek:
Διδακτορικό πρόγραμμα πολιτικών μηχανικών

In English:

PhD in Civil Engineering and Geomatics

Language(s) of instruction: Greek

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 EEC committee, which was comprised of four academics, a professional civil engineer and a student representative, completed a virtual site visit of the university during February 15 and 16 2021 due to Covid-19 related restrictions. The department of civil engineering and Geoinformatics provided a great variety of resources to facilitate the evaluation procedure including in-depth presentations among others. Moreover, the EEC members had the opportunity to pose a variety of questions to properly assess various parts of the evaluation process. Because of the insightful information, meetings with academic faculty, university personnel as well as the student body representatives, the EEC committee members are of the opinion that the evaluation process was done thoroughly and was not impacted by the virtual nature of the visit. The department faculty and other members involved in this evaluation should be commended for their efforts given the current challenges due to the pandemic crisis.

The general consensus among the EEC committee members from the information that was carefully reviewed, discussions with all associated parties is that the programmes of the department of civil engineering and Geoinformatics of the Cyprus Institute of Technology are of high quality in all pertinent areas of evaluation.

While the EEC committee is of the opinion that there are no major axes of improvement, a number of recommendations have been provided to be considered for the further evolution of the programmes.

B. External Evaluation Committee (EEC)

Name	*Position*	*University*
Giuseppe Andrea Ferro	Professor	Politecnico di Torino, Italy
Emmanouil Chatzis	Associate Professor	University of Oxford, UK
Dimitrios Lignos	Associate Professor	École Polytechnique Fédérale de Lausanne, Switzerland
Andrea Maria Lingua	Professor	Politecnico di Torino, Italy
Alexis Valiantis	Professional Civil Engineer	Scientific and Technical Chamber of Cyprus
Aimilia Patouna	Student Member	University of Cyprus, 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 each 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.

Findings for B.Eng

The program of the courses appears well balanced between different disciplines of civil engineering and despite the number of academic staff.

The content of the program corresponds to the EQF.

The program is coherent without significant overlaps between courses.

The foundation courses are designed to ensure a solid theoretical basis of students so as they can eventually apply the theoretical basis of what they were taught into practice. Passing/failing rates are deemed reasonable.

Findings for M.Sc

The fundamental topics are well distributed during the semesters and new topics like Sustainability, Surveying, Environmental Impact Assessment, Durability of Infrastructures and Risk Management have been inserted, for giving a modern approach of civil engineering.

The content of the program corresponds to the EQF.

The program is coherent without significant overlaps between courses.

The foundation courses are designed to ensure a solid theoretical basis of students so as they can eventually apply the theoretical basis of what they were taught into practice and/or in research works. Passing/failing rates are deemed reasonable.

Findings for PhD

Usually, a full time PhD student graduates in 4 years.
Reasons for dropping out may be related to failing the candidacy examination after one year of the doctoral studies.

Strengths

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

Strengths for B.Eng

The stages during summer period assist students in applying the theoretical concepts learned during the semester. Also, the laboratory activities are well planned, and the quality of experimental facilities is exceptional.

Strengths for M.Sc

N/A

Strengths for PhD

N/A

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.

Areas of improvement and recommendations for B.Eng

N/A

Areas of improvement and recommendations for M.Sc

The courses taught only in Greek do not help the participation of international students. This issue is related to the student exchange (Erasmus).

Areas of improvement and recommendations for PhD

The courses taught only in Greek do not help the participation of international students. This will offer the possibility to host international academic staff so giving up the opportunity to increase the research exchange.

While the program is well run, few more ECTS may be considered.

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

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

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

Sub-areas

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

2.1 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 and 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.

Findings for B.Eng

The virtual visit and the application files have demonstrated that the HEI follows a student-centred teaching policy, and this is reflected by the various modes of conduct for the transfer of information and knowledge to the student.

Findings for M.Sc

The virtual visit and the application files have demonstrated that the HEI follows a student-centred teaching policy, and this is reflected by the various modes of conduct for the transfer of information and knowledge to the student.

Findings for PhD

The virtual visit and the application files have demonstrated that the HEI follows a student-centred teaching policy, and this is reflected by the various modes of conduct for the transfer of information and knowledge to the student.

Strengths

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

Strengths for B.Eng

Interesting balance between theory and practical applications; hands on experience along with active learning both at local and urban scale.

Strengths for M.Sc

The variety of random examples presented regarding the Master Dissertations of the students and the variety of their current employment status indicates a student and specific skill centred policy which has excellent results.

Strengths for PhD

Consistent assessment procedures are established; this is demonstrated by the fact that doctoral students are efficient in completing their work in 4 years when they work full time. A formal evaluation procedure of doctoral students is put in place for transparent evaluation and feedback.

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.

Areas of improvement and recommendations for B.Eng,

Perhaps the programme coordinator through the procedures for syllabus monitoring could examine the suggestions of the Scientific and Technical Chamber of Cyprus (ETEK) during the initial accreditation of the syllabus, to make minor adjustments such as incorporation of specialty courses that could not be incorporated to the BEng program due to the limitations within the given timetable.

Areas of improvement and recommendations for M.Sc

N/A

Areas of improvement and recommendations for Ph.D.
N/A

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

Sub-area		***Non-compliant/ Partially Compliant/Compliant***		
		B.Eng	*M.Sc*	*PhD*
2.1	Process of teaching and learning and student-centred teaching methodology	Compliant	Compliant	Compliant
2.2	Practical training	Compliant	Compliant	Compliant
2.3	Student assessment	Compliant	Compliant	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 virtual visit and the application files have demonstrated that the HEI follows a compliant policy for all three sub-categories related to teaching staff.

Findings for B.Eng

Teaching staff recruitment and development

The competence of the teaching staff is ensured as the lecturers in the courses are predominantly the assistant, associate and full professors of the Department. In certain courses that require additional expertise, specialized teaching personnel are used where in the few cases this is done the corresponding staff are of good academic standing. The recruitment procedure is of high quality as the standards for the teaching staff are predominantly the standards used for the appointed assistant professors. The teaching staff is responsible for teaching courses that are very well correlated to their field of research and there is a very good agreement between the academic expertise of the lecturer of a course and the syllabus of the course. The HEI has a separate office of teaching related experts and administrators who appeared during the visit to be very actively involved in making suggestions to the staff related to their further training. Furthermore, the fact that the lecturers are teaching courses related to their research ensures that they are kept up to date on the syllabus of the course. A specific number of teaching hours is mandatory for all assistant/associate/full professors (6 hours per week). The HEI does not allow for researchers to buy-out teaching hours using research projects. This protects younger members of the department from being overloaded and ensures that the high-profile researchers continue to teach the courses related to their expertise. The previous are indicative of the HEI's recognition of the importance of teaching. The use of innovative teaching methods was demonstrated during the visit and the demo of the on-line course, where an online platform was used for students to directly answer quiz -questions and receive feedback on their replies in real time.

Findings for M.Sc

The undergraduate degree accepts 20 students per year, the MSc on average seems to accept certainly below 20 and usually around the low tens. Hence the number of the teaching personnel (16) results in a very appropriate ratio of students to lecturers, which allows for initiative such as tutorials. The staff is predominantly assistant/associate/full permanent position or tenure track professors. The staff is on average expected to teach 6 hours per week, roughly at most 4 courses per year which is a reasonable requirement.

Findings for PhD

As previously stated, research and teaching are very well integrated. The teaching staff are Civil Engineers (or Surveying Engineers for those compulsory courses) with very relevant background and research to the courses taught. Several members have efficiently integrated research related courses, but of high value to industry and good theoretical value, to the programme. Teaching evaluation takes into account through a questionnaire that officially gathers the view of students. Additionally, the lecturers appear to monitor feedback from the students during the lectures. As teaching is part of the evaluation of assistant professors during their tenure period teaching is a requirement for the post of the lecturers to be permanent.

Strengths

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

Strengths for B.Eng,

-The teaching personnel is predominantly permanent post holders

-The lecturers have expertise related to the courses they teach

-Lecturers receive additional student feedback during lectures

-The HEI's policy of not allowing research based buy-outs from teaching protects younger academics from being overloaded and ensures that high profile researchers are engaged in teaching

-The HEI has a good official mechanism to collect feedback

-Lecturers receive additional student feedback during lectures

Strengths for M.Sc

-Very good ratio of number of students to lecturers

-The HEI has a good official mechanism to collect feedback

Strengths for PhD

-Research and teaching are very well integrated. This allows the staff to teach innovative courses that follow the state-of-the art

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.

Areas of improvement and recommendations for B.Eng,

There aren't many problems detected during this virtual visit. A recommendation would be the following:

-The Department can consider a joint points system for teaching and participation in administrative tasks.

-The Department can consider retaining a fixed ratio of students registered in a class per number of lecturers and apply that rule even to courses where a large number of students attends the course because of re-sits.

Areas of improvement and recommendations for M.Sc

There aren't many problems detected during this virtual visit. A recommendation would be the following:

-The Department can consider a joint points system for teaching and participation in administrative tasks.

-The Department can consider retaining a fixed ratio of students registered in a class per number of lecturers and apply that rule even to courses where a large number of students attends the course because of re-sits.

Areas of improvement and recommendations for PhD

There is not much to improve at this stage.

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

Sub-area		***Non-compliant/ Partially Compliant/Compliant***		
		B.Eng	*M.Sc*	*PhD*
3.1	Teaching staff recruitment and development	Compliant	Compliant	Compliant
3.2	Teaching staff number and status	Compliant	Compliant	Compliant
3.3	Synergies of teaching and research	Compliant	Compliant	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.

Findings for B.Eng

The undergraduate student admission to the University is regulated by the participation of students to the Pan Cypriot exam. As such the regulations regarding admission are very well defined on a national level. Additional students and exceptions related to access policies and the related criteria have been defined consistently on a national level and are appropriate and have been defined in a transparent manner.

The student progression is again defined clearly for the undergraduate program. Students are expected to pass each of the compulsory and the required number of elective modules. This results in very clear conditions for progression. The Learning centre monitors the failure rate of students in various courses and suggests additional tutorials to support courses with high failure rate, or of observed higher difficulty and further support students who have need further help in the form of tutorials being in their last years.

The undergraduates receive a certification of a BEng upon successful completion of the program.

Findings for M.Sc

The admittance to the MSc program follows evaluation by a Departmental committee under criteria related to the academic qualifications and grade of the Candidate (in a Civil Engineering degree) and reference letters. The information about the requirements is clearly stated and publicly available in the Universities Website.

The student progression is again defined clearly for the MSc program. Students are expected to pass each of the compulsory and the required number of elective modules. This results in very clear conditions for progression. The Learning centre monitors the failure rate of students in various courses and suggests additional tutorials to support

courses with high failure rate, or of observed higher difficulty and further support students who have need further help in the form of tutorials being in their last years.

The M.Sc students receive an M.Sc certification upon completion of the program. All certifications and the requirements to achieve them are clearly defined.

Findings for PhD

The PhD student progression involves two comprehensive examinations that have an advisory role during the progress of the PhD, the allocation of a 3-member supervisory committee, an oral presentation in front of the supervisory committee in the final year and before the defense, and a defense of the thesis in front of an Examination Board that includes external examiners. Hence, the process has multiple control and advisory to the PhD student points.
The doctoral students receive a PhD certification upon completion of the program. All certifications and the requirements to achieve them are clearly defined.

Strengths

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

Strengths for B.Eng

-A small number of students admitted in the BEng after a very competitive national entry exam

Strengths for M.Sc

A reasonable number of students admitted in the M.Sc after careful evaluation

Strengths for PhD

-Previous experience is recognized in the stipend of PhD students

-Multiple control points of the progress of PhD candidates

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.

Areas of improvement and recommendations for B.Eng

Nothing in particular.

Areas of improvement and recommendations for Msc

Nothing in particular.

Areas of improvement and recommendations for PhD

The following is a recommendation, rather than an identified strong weakness:

-As the University has been very successful in securing funding for PhD students from EU sources, the Department will benefit from an official policy on how the fees of PhD students working in those projects are to be covered. For

example, it would be reasonable for the Department to either wave the fees or to increase the salaries of those students so that they can cover the fees.

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

Sub-area		***Non-compliant/ Partially Compliant/Compliant***		
		B.Eng	*M.Sc*	*PhD*
4.1	Student admission, processes and criteria	Compliant	Compliant	Compliant
4.2	Student progression	Compliant	Compliant	Compliant
4.3	Student recognition	Compliant	Compliant	Compliant
4.4	Student certification	Compliant	Compliant	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.

Findings for B.Eng

During the virtual site visit of the evaluation committee and after review of pertinent material distributed to the committee, it is evident that the teaching and learning resources offered by the department to students meet the standards seen in high-profile universities in Europe. The students are well informed regarding the available resources to them during classes. Moreover, the library services organize regular information sessions. The library services ensure access to a large volume of textbooks and other material (over 500000 titles available). Moreover, the IT infrastructure is sufficient including multiple workstations, access to pertinent software that is currently used in the civil engineering research and practice communities.

With regard to teaching materials and equipment, the faculty maintains and constantly improves them to ensure the high quality of the education process. It is evident that the condition of classrooms, lab spaces for teaching and research purposes is exceptional. Students are regularly advised on how to excel. Moreover, services are provided to students with special needs due to physical disabilities. The students seem to appreciate access to support services including pertinent software, textbooks to fulfil their needs.

Finally, after careful evaluation and comparison with a number of universities in Europe, it is evident that proper procedures have been established to ensure a seamless transition to meet demands in case that student number(s) change or in operations under special circumstances such as the COVID-19 pandemic period.

Findings for M.Sc

During the virtual site visit of the evaluation committee and after review of pertinent material distributed to the committee, it is evident that the teaching and learning resources offered by the department to students meet the standards seen in high-profile universities in Europe. The students are well informed regarding the available resources to them during classes. Moreover, the library services organize regular information sessions. The library services ensure access to a large volume of textbooks and other material (over 500000 titles available). Moreover, the IT infrastructure is sufficient including multiple workstations, access to pertinent software that is currently used in the civil engineering research and practice communities.

With regard to teaching materials and equipment, the faculty maintains and constantly improves them to ensure the high quality of the education process. It is evident that the condition of classrooms, lab spaces for teaching and research purposes is exceptional. Students are regularly advised on how to excel. Moreover, services are provided to students with special needs due to physical disabilities. The students seem to appreciate access to support services including pertinent software, textbooks to fulfil their needs.

Finally, after careful evaluation and comparison with a number of universities in Europe, it is evident that proper procedures have been established to ensure a seamless transition to meet demands in case that student number(s) change or in operations under special circumstances such as the COVID-19 pandemic period.

Findings for PhD

During the virtual site visit of the evaluation committee and after review of pertinent material distributed to the committee, it is evident that the teaching and learning resources offered by the department to students meet the standards seen in high-profile universities in Europe. The students are well informed regarding the available resources to them during classes. Moreover, the library services organize regular information sessions. The library

services ensure access to a large volume of textbooks and other material (over 500000 titles available). Moreover, the IT infrastructure is sufficient including multiple workstations, access to pertinent software that is currently used in the civil engineering research and practice communities.

With regard to teaching materials and equipment, the faculty maintains and constantly improves them to ensure the high quality of the education process. It is evident that the condition of classrooms, lab spaces for teaching and research purposes is exceptional. Students are regularly advised on how to excel. Moreover, services are provided to students with special needs due to physical disabilities. The students seem to appreciate access to support services including pertinent software, textbooks to fulfil their needs.

Strengths

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

Strengths for B.Eng,

1. Exceptional quality of teaching and research labs that ensure high-quality hands-on experience in teaching and research
2. Effective use of student evaluations to ensure high quality of teaching across programmes
3. The library offers many customized services for students, researchers, faculty and visitors, including ways to trace plagiarism in student works, consultations with a librarian, training sessions, guides and tutorials, remote services.

Strengths for M.Sc

1. Exceptional quality of teaching and research labs that ensure high-quality hands-on experience in teaching and research
2. Effective use of student evaluations to ensure high quality of teaching across programmes
3. The library offers many customized services for students, researchers, faculty and visitors, including ways to trace plagiarism in student works, consultations with a librarian, training sessions, guides and tutorials, remote services.

Strengths for PhD

1. Exceptional quality of teaching and research labs that ensure high-quality hands-on experience in teaching and research
2. The library offers many customized services for students, researchers, faculty and visitors, including ways to trace plagiarism in student works, consultations with a librarian, training sessions, guides and tutorials, remote services.

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.

Areas of improvement and recommendations for B.Eng

While the committee thinks that there should not be any particular areas of improvement, one recommendation for potential future improvements could be the development of Massive Open Online Courses (MOOC), which is a great

resource in contemporary efforts with regard to digital education. However, after discussions with current faculty during the virtual site visit, it is evident that preliminary discussions have already commenced on how to offer additional resources to students to strengthen educational initiatives with emphasis on digital resources for teaching and learning.

Areas of improvement and recommendations for MSc

While the committee thinks that there should not be any particular areas of improvement, one recommendation for potential future improvements could be the development of Massive Open Online Courses (MOOC), which is a great resource in contemporary efforts with regard to digital education. However, after discussions with current faculty during the virtual site visit, it is evident that preliminary discussions have already commenced on how to offer additional resources to students to strengthen educational initiatives with emphasis on digital resources for teaching and learning.

Areas of improvement and recommendations for PhD

N/A.

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

Sub-area		***Non-compliant/ Partially Compliant/Compliant***		
		B.Eng	*M.Sc*	*PhD*
5.1	Teaching and Learning resources	Compliant	Compliant	Compliant
5.2	Physical resources	Compliant	Compliant	Compliant
5.3	Human support resources	Compliant	Compliant	Compliant
5.4	Student support	Compliant	Compliant	Compliant

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

Sub-areas

6.1. Selection criteria and requirements
6.2. Proposal and dissertation
6.3. Supervision and committees

6.1 Selection criteria and requirements

Standards

- *Specific criteria that the potential students need to meet for admission in the programme, as well as how the selection procedures are made, are defined.*
- *The following requirements of the doctoral degree programme are analysed and published:*
  - *the stages of completion*
  - *the minimum and maximum time of completing the programme*
  - *the examinations*
  - *the procedures for supporting and accepting the student's proposal*
  - *the criteria for obtaining the Ph.D. degree*

6.2 Proposal and dissertation

Standards

- *Specific and clear guidelines for the writing of the proposal and the dissertation are set regarding:*
  - *the chapters that are contained*
  - *the system used for the presentation of each chapter, sub-chapters and bibliography*
  - *the minimum word limit*
  - *the binding, the cover page and the prologue pages, including the pages supporting the authenticity, originality and importance of the dissertation, as well as the reference to the committee for the final evaluation*
- *There is a plagiarism check system. Information is provided on the detection of plagiarism and the consequences in case of such misconduct.*
- *The process of submitting the dissertation to the university library is set.*

6.3 Supervision and committees

Standards

- *The composition, the procedure and the criteria for the formation of the advisory committee (to whom the doctoral student submits the research proposal) are determined.*
- *The composition, the procedure and the criteria for the formation of the examining committee (to whom the doctoral student defends his/her dissertation), are determined.*
- *The duties of the supervisor-chairperson and the other members of the advisory committee towards the student are determined and include:*
  - *regular meetings*
  - *reports per semester and feedback from supervisors*
  - *support for writing research papers*
  - *participation in conferences*
- *The number of doctoral students that each chairperson supervises at the same time are determined.*

You may also consider the following questions:

- *How is the scientific quality of the PhD thesis ensured?*
- *Is there a link between the doctoral programmes of study and the society? What is the value of the obtained degree outside academia and in the labour market?*
- *Can you please provide us with some dissertation samples?*

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 PhD programme has been established to secure admission to high calibre graduate students. Besides detailed bachelor's and Master's degree titles, a list of reference letters is required along with certificates of proficiency in Greek and English. Moreover, candidates are required to submit a research statement on the particular reasons for selecting the program as well as their research interests. The department ensures the proper advertisement of PhD positions through the formal website of the university, social media as well as the network of existing faculty. A full-time PhD student completes, on average, the PhD degree in about 4 years, which is typical in civil engineering and Geoinformatics considering the nature of research work.

Through the presentation of a variety of examples, doctoral students have access to established guidelines on how to write a dissertation, detect plagiarism through best practices established by library services. Moreover, the students are well informed regarding the consequences of plagiarism actions. Doctoral students generally follow the standard procedures established by the university library to submit their dissertation.

To ensure proper training and supervision, the PhD student progression involves two comprehensive examinations that have an advisory role early on during the progress of the PhD, the allocation of a 3-member supervisory

committee, an oral presentation in front of the supervisory committee in the final year and before the defence, and a defence of the thesis in front of an Examination Board that includes external examiners. Hence, the process has multiple control and advisory to the PhD student points. Moreover, doctoral students are required to take sufficient coursework from a variety of electives in the department as well as across the university to best fulfil the research needs of their work. The above are well developed mechanisms to ensure a high scientific quality of a PhD thesis work. This is also attested from the fact that the vast majority of PhD graduates has already been absorbed by either high profile industry nationally or internationally. Moreover, a good portion of recent graduate work as research associates of faculty in academic institutions.

Supervisors meet regularly with their students to evaluate progress over the course of a PhD thesis and provide constant feedback to doctoral students. Based on sufficient evidence presented during the virtual visit, it is clear that students and supervisors regularly participate in scientific conferences, publish in high quality peer-reviewed journals in their respective disciplines. Some of the existing faculty participate in research-to-practice activities to ensure a seamless transition of scientific findings to the practice communities

Strengths

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

1. Well-established examination mechanisms for doctoral students to ensure a successful path during a PhD thesis.
2. Active participation in conferences and scientific meetings to ensure dissemination of research findings.
3. Regular publications in high-quality peer-reviewed journals.
4. Well established program requirements including compulsory courses (total of 6 ECTS units).
5. Financial resources to doctoral students are sufficient for them to focus on their research work.

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 committee firmly believes that the department has established a successful path to ensure a high-quality doctoral degree program. One recommendation may be the offering of courses in English to potentially attract more international students. Another suggestion may be to increase the number of ECTS units from 6 to 12 or 60 as it is done in other EU universities so as doctoral students could take more elective courses that could be potentially interesting in their research work. This could allow them to build a more diverse background as well.

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

Sub-areas		***Non-compliant/ Partially Compliant/Compliant***
6.1	Selection criteria and requirements	Compliant
6.2	Proposal and dissertation	Compliant
6.3	Supervision and committees	Compliant

D. Conclusions and final remarks

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

The members of the EEC committee found the academic programmes in civil engineering and Geoinformatics to be compliant in all examined aspects. Overall, the programmes have been very successful in attracting high calibre students. The existing course offerings provide a balance between fundamentals and practice including several activities that demonstrate effective practices of active learning, which is an important element of contemporary education. Moreover, the existing teaching labs and university facilities in general, although distributed over a large area in the city, they are of exceptional quality.

A thorough revision of a broad range of examples on masters/PhD dissertations demonstrates the complementary activities of academic staff in various emerging areas in civil engineering and Geoinformatics. This is particularly interesting because former graduates have been absorbed in high-profile industries or they hold academic positions in various institutions.

With regard to teaching, formal procedures have been established so as student feedback is seen in a constructive manner for the further tailoring of existing coursework, which follows the state-of-the-art. Moreover, the ratio of number of students-to-lecturers appears to be fairly optimal.

With regard to admission requirements, formal control points have been established so as high-calibre students enter the university at all levels. Moreover, doctoral student supervising/mentoring follows the same standards and practices of top academic institutions from around the world. Doctoral students get the opportunity to present their research and disseminate their research findings in top scientific meetings and national/international conferences. The faculty along with graduate students publish their scientific results in top peer-reviewed journals in the field of discipline based on numerous (and impressive) examples presented to the EEC committee.

While the EEC committee members are of the opinion that there are no major aspects of immediate action to improve the overall quality of the programmes of study under review, a number of recommendations have been suggested for consideration to ensure the future evolution of the programmes. These recommendations include to the following:

- Potential future improvements with regard to digital resources in education (e.g., Massive Open Online Courses) as well as considerations in the graduate and post-graduate programmes.
- A potential increase in number of required ECTS units in the doctoral programme to further enrich the academic background of future graduates.
- The consideration of course offerings in English in addition to Greek to further attract international students in addition to Erasmus students. This could potentially attract International academic staff and embrace international collaborations.
- Syllabus monitoring and updating in coordination with the Scientific and Technical Chamber of Cyprus (ETEK) in accordance with the initial accreditation of the syllabus.
- Potentially new hiring of young academic staff could be more focused in the general areas of computational mechanics, data-driven methods for performance-based engineering, sensing, among others.

E. Signatures of the EEC

Name	*Signature*
Giuseppe Andrea Ferro	
Emmanouil Chatzis	
Dimitrios Lignos	
Andrea Maria Lingua	
Alexis Valiantis	
Aimilia Patouna	

Date: 19.02.2021