

Doc. 300.1.1

Date: Date.

External Evaluation Report (Conventional-face- to-face programme of study)

- **Higher Education Institution:**
Cyprus Institute of Technology
- **Town:** Limassol
- **School/Faculty (if applicable):**
Engineering/Engineering and Technology
- **Department/ Sector:** Civil Engineering and
Geomatics/Civil Engineering
- **Programme of study- Name (Duration, ECTS, Cycle)**
In Greek:
Τοπογράφου Μηχανικού & Μηχανικού
Γεωπληροφορικής
In English:
BEng in Surveying Engineering & Geoinformatics
- **Language(s) of instruction:** Greek/English
- **Programme's status:** Currently Operating



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 members, which was comprised of four academics, a professor 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 Geomatics 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 study programmes of the Department of Civil Engineering and Geomatics 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)

| <i>Name</i> | <i>Position</i> | <i>University</i> |
|-----------------------|-----------------------------|---|
| 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 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 program purposes and objective and the intended learning outcomes are well described in a complete, in-depth and detailed way in terms of knowledge, skills and autonomy and responsibility according to the European Qualifications Framework (EQF).

The course descriptions are complete including prerequisites, main objectives, learning outcomes and methods, short syllabus, bibliography and assessment modality.

The program of the courses appears well balanced between the different disciplines of surveying engineering and Geoinformatics and despite the number of academic staff probably due to:

- a good integration between the curriculum of the assessed programme (BEng Surveying Engineering and Geoinformatics Engineering). and the programme in BEng Civil Engineering with a common I year and many common courses in II years;
- a clear separation of the program curriculum of BEng Surveying Engineering and Geoinformatics in the third and fourth years to reach expected specific skills and learning outcomes including the fundamental disciplines and topics of geomatics;
- a limited number of students per years (20-25) that allows to implement “in field” exercises required for making a good Surveyors and an expert in Geoinformatics.

The teaching load is well distributed during the semesters with 2 periods of practical training to introduce students in the real professional world.

The Procedure for syllabus changes and monitoring is well defined. The responsible for the Programs of Study and the Curricula is the Department of Civil Engineering and Geomatics that guarantees the quality assurance defining 3 specific Committees: Undergraduate Studies Committee, committee for curriculum revision specialized in Surveying, Internal Quality Assurance Committee.

The participation of students in decision making processes and in monitoring activities (students in Departmental Council and student representatives in other relevant University committee) allows an effective and robust information gathering for an effectual quality assessment.

Strengths

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

The tremendous success of the Department in Civil Engineering and Geomatics in a relatively short period despite existing in a very challenging economic environment in the last few years guarantees an optimal and solid link between this programme and the current emerging trends in job market. This aspects are continuously confirmed by the Departments being in constant contact with our social partners Industrial Partners, Society (e.g. Chamber of Engineers ETEK, Civil Eng Association, Surveying Engineers Association etc Government (e.g. public departments e.g. Water Development Department, Ministry of Interior, Civil Defense Land Survey Department), Funded projects (e.g. results from the existing funded project synergy with teaching).

The presence of a significant number of students (5) inside of Department Council guarantees an effective interaction with students to better analyse the curriculum, highlighting critical aspects to monitor, understand and possibly modify and correct. The confirmation of the correctness and importance of this approach comes from the high level of satisfaction of students for curriculum extracted by anonymous questionnaires.

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 language of this program (Greek) does not allow a significant internationalization of the students. Given the strengths described above that denote a very innovative programme, it is suggested in the future to evaluate the possibility to propose an duplication in English of this programme for improving the presence of international students.

Some pages (Structure & contents and Semester modules, Modules description) of the CUT website relative to the programme of BEng Surveying Engineering and Geoinformations Engineering does not allow a correct visualization in English language despite , there is the EN command option in the top right part of the web pages.

Given the level of attention of this curriculum to the most current issues, it is finally suggested the possibility of including some parts relating to the topic of Geospatial Artificial Intelligence (GeoAI), an emerging topic in the geomatics field.

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

| Sub-area | | <i>Non-compliant/ Partially Compliant/Compliant</i> |
|-----------------|--|--|
| 1.1 | 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

2.1 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 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.

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.

The variety of the random examples presented regarding the Final Report of the students involved in Field Exercises and the variety of their current employment status indicates a student and specific skill centred policy which has excellent results.

During the virtual visit, no critical issues or point of attention emerged in the student assessment procedures.

Strengths

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

The proposed curriculum contains some valuable and innovative aspects:

- many laboratory activities are well programmed with a good and modern experimental facilities;
- 2 specific Field Exercises in Surveying Geoinformatics during summer period help the student in applying the theoretical concepts learned in the semester (“learning by doing”);
- 2 specific courses on Integrated Design for Civil, Surveying Geoinformatics Engineers permit to deal the engineering design activities with new multidisciplinary approaches in a definitely modern and innovative way;
- 2 courses in Professional Studies and Skills and 2 stage periods introduce students in the job market allowing a practical evaluation of achieved abilities and autonomy.

The good results of this program is confirmed by the high level of satisfaction of students for curriculum extracted by anonymous questionnaires, to confirm the effective integration of students in decision-making processes.

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.

During the virtual visit and the analysis of the application no specific criticalities emerged.

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

| Sub-area | | <i>Non-compliant/ Partially Compliant/Compliant</i> |
|-----------------|---|--|
| 2.1 | 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.

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 (8 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.

Teaching staff numbers and status

The undergraduate degree has 20-25 students per year, with a good integration with the BEng in Civil Engineering. Hence the number of the teaching personnel (34 in total, in collaboration with BSc in Civil Engineering, MSC in Civil Engineering and Sustainable Design and MSc in Geoinformatics and Geospatial Technologies) 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 8 hours per week roughly at most 6 courses per year which is a reasonable requirement. There are some teachers with many brief courses (from 7 to 13 courses with 2-3 ECTS) with a potential criticality, that requires a future development in the number of involved teachers, for example with new positions banned in the most suffering sectors.

Teaching and research

As previously stated research and teaching are very well integrated. The teaching staff are Civil Engineers, Surveying Engineers, Geoinformatics Engineers, Physics, Environmental Engineering, Architectural Engineering with master degrees and often PhD specialisation: the teaching personnel denotes a 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. A part of the evaluation of assistant professors during their tenure period teaching is a requirement for the post of the lecturers to be permanent.

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.

Strengths

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

- Research and teaching are very well integrated
- This allows the staff to teach innovative courses that follow the state-of-the art
- The teaching personnel is predominantly permanent post holders
- The lecturers have expertise related to the courses they teach
- 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
- A separate office, the Learning Center, for teaching matters exists supporting students and lecturers
- Very good ratio of number of students to lecturers

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.

During the virtual visit no significant critical issues emerged, as well as analysing application and other documents.

However, a certain suffering of teaching staff is reported with many brief courses (up to 13) held by the same teacher. It is suggested to try to increase the teaching staff, particularly in the topics most closely related to geomatics.

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

| Sub-area | | <i>Non-compliant/ Partially Compliant/Compliant</i> |
|------------|--|---|
| 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.

Student admission

The undergraduate student admission to the University is regulated by the participation of students to the Pancyriot 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.

Student progression

The student progression is again defined clearly. 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.

Recognition

In terms of recognition, the state nature of the University aligns its policy on recognition to the national policy of Cyprus which is of course aligned with the Lisbon Recognition Convention and the policies of ENIC/NARIC.

Student certification

The undergraduates receive a certification of a BSc upon successful completion. All certifications and the requirements to achieve them are clearly defined. This programme is accredited by the Cyprus Scientific and

Technical Chamber (National Engineering Licensing Body) and address traditional, current and emerging trends in the fields of Civil Engineering and Geomatics (www.etek.org.cy). It provide professional rights ETEK Cyprus Association of Rural Surveying Engineers Cyprus Civil Engineers Association-SPOLMIK.

Strengths

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

A strength of BEng Surveying Engineering and Geoinformatics is the small number of students admitted in the after a very competitive national entry exam.

A particular feature to highlight is related to the student admission where a determined number of additional positions (up to 14%) are destined to:

- Cypriots candidates from families with special circumstances;
- Cypriots candidates with serious health problems;
- Cypriots candidates with particular characteristics (religion, sports, ...);
- candidates from abroad (up to 10% of Cypriot 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.

During the virtual visit no significant critical issues emerged, as well as analysing application and other documents.

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

| Sub-area | | <i>Non-compliant/ Partially Compliant/Compliant</i> |
|-----------------|---|--|
| 4.1 | 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.

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.

Strengths

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

The following items are considered to be current strengths of the programme:

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.

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.

While the committee thinks that there should not be any particular areas of improvement, two 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;
- the implementation of specific policies for teachers, students and other involved people to achieve gender equality and empower all women and girls according to goal 5 of Sustainable Development Goals proposed by ONU.

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

| Sub-area | | <i>Non-compliant/ Partially Compliant/Compliant</i> |
|----------|---------------------------------|---|
| 5.1 | 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)

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.

Click or tap here to enter text.

Strengths

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

Click or tap here to enter text.

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.

Click or tap here to enter text.

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

| Sub-area | | <i>Non-compliant/ Partially Compliant/Compliant</i> |
|----------|-------------------------------------|---|
| 6.1 | Selection criteria and requirements | Choose answer |
| 6.2 | Proposal and dissertation | Choose answer |
| 6.3 | Supervision and committees | Choose answer |

7. Additional for joint programmes (ALL ESG)

Sub-areas

- 7.1 Legal framework and cooperation agreement**
- 7.2 The joint programme**

7.1 Legal framework and cooperation agreement

Standards

- *The joint programme is offered in accordance with legal frameworks of the relevant national higher education systems.*
- *The terms and conditions of the joint programme are laid down in a cooperation agreement. The agreement in particular covers the following issues:*
 - *Denomination of the degree(s) awarded in the programme*
 - *Coordination and responsibilities of the partners involved regarding management and financial organisation, including funding, sharing of costs and income, resources for mobility of staff and students*
 - *Admission and selection procedures for students*
 - *Mobility of students and teaching staff*
 - *Examination regulations, student assessment methods, recognition of credits and degree awarding procedures*
 - *Handling of different semester periods, if existent*

7.2 The joint programme

Standards

- *The partner universities apply joint internal quality assurance processes.*
- *The joint programme is offered jointly, involving all cooperating universities in the design, delivery and further development of the programme.*
- *Aims and learning outcomes are clearly stated, including a joint syllabus, language policy, as well as an account of the intended added value of the programme.*
- *Study counselling and mobility plans are efficient and take into account the needs of different kinds of students.*

You may also consider the following questions:

- Does the joint study programme conform to the requirements of a study programme offered at the specific level?
- Is there a system that assures the quality of joint provision and guarantees that the aims of the programme are met?
- Do the mechanisms for ensuring the quality of the joint study programme take into consideration the European Standards and Guidelines (ESG)? Are they adopted by all the universities involved?
- Is the division of responsibilities in ensuring quality clearly defined among the partner universities?
- Is relevant information about the programme, e.g. admission requirements and procedures, course catalogue, examination and assessment procedures, well documented and published by taking into account the specific needs of students?
- What is the added value of the programme of study?
- Is there a sustainable funding strategy among the partner universities? Explain.

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.

Click or tap here to enter text.

Strengths

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

Click or tap here to enter text.

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.

Click or tap here to enter text.

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

| Sub-area | | <i>Non-compliant/ Partially Compliant/Compliant</i> |
|----------|---|---|
| 7.1 | Legal framework and cooperation agreement | Not applicable |
| 7.2 | The joint programme | Not applicable |

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 members of the EEC committee found the academic programme in Surveying Engineering and Geoinformatics to be compliant in all examined aspects. Overall, the programmes have been very successful in attracting high caliber 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 (“learning by doing”) and it is essential in Surveying topics. 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 report of “in field” exercises and on final dissertations demonstrates the complementary activities of academic staff in various emerging areas in Surveying 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-caliber students enter the university at all levels.

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);
- the implementation of specific policies for teachers, students and other involved people to achieve gender equality (Sustainable Development Goals by ONU);
- 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;
- potentially new hiring of young academic staff members could be more focused in the specific areas of geomatics to relieve some teachers very busy.



E. Signatures of the EEC

| <i>Name</i> | <i>Signature</i> |
|-----------------------|------------------|
| Giuseppe Andrea Ferro | |
| Emmanouil Chatzis | |
| Dimitrios Lignos | |
| Andrea Maria Lingua | |
| Alexis Valiantis | |
| Aimilia Patouna | |

Date: 19.02.2021