Date: 28/05/2019

External evaluation report

- Higher education institution:
  Neapolis University Pafos ...........

- Town: ....... Pafos ............................................................

- Programme of study (Name, ECTS, duration, cycle)
  
  In Greek: .................................................................
  ........................................................................
  In English: ... MSc in Structural Robustness for Extreme Loading Conditions: Fire, Explosion, Earthquake

- Language of instruction: ...English............

- Programme’s status
  New program: X ............
  Currently operating: ............

ΚΥΠΡΙΑΚΗ ΔΗΜΟΚΡΑΤΙΑ
REPUBLIC OF CYPRUS
A. Introduction

This part includes basic information regarding the onsite visit. On Monday May 27th 2019, the delegation of the External Evaluation Committee (see members listed below) visited the Neapolis University Pafos, with the purpose of assessing the newly proposed MSc program on Structural Robustness for Extreme Loading Conditions, Fire, Explosion, Earthquake.

The agenda of the visit included:

- University/Program Presentation
- Management System Presentation
- IT Infrastructure & E-Library
- Quality Assurance Unit presentation
- Feasibility Study
- Meeting with Students & Staff
- Campus Tour

The presentations were perceived as informative for the evaluation of the program.

Two updates were brought to the attention of the committee:

- The possibility to condense the program to 12 months, by carrying out the thesis in parallel to the course work, as long as they start the conduction of their Master’s Dissertation during the first or second semester of their studies, including the summer period. The further option is to carry this out in 18 months. This is in accordance with the relevant announcements made by the Agency of Quality Assurance and Accreditation in Higher Education.
- The delegates were further introduced to additional teaching staff program, who will also be involved in programme (Prof. P. Karydis and lecturer N. Bakas).
### B. External Evaluation Committee (EEC)

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Chair) Yong Lu</td>
<td>Professor</td>
<td>The University of Edinburgh, Scotland, UK</td>
</tr>
<tr>
<td>(Member) Eleni Chatzi</td>
<td>Associate Professor</td>
<td>Swiss Federal Institute of Technology, Zurich, Switzerland</td>
</tr>
<tr>
<td>(Member) Dimitrios Lignos</td>
<td>Associate Professor</td>
<td>École Polytechnique Fédérale de Lausanne, Switzerland</td>
</tr>
<tr>
<td>(Member) Ms. Ioanna Nicolaou</td>
<td>Student Representative</td>
<td>Cyprus University of Technology</td>
</tr>
</tbody>
</table>
1. Study programme and study programme's design and development  
(ESG 1.1, 1.2, 1.8, 1.9)

**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

- **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
  - 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

- **Public information (clear, accurate, objective, up-to date and readily accessible):**
  - about the programme of study offered
  - the selection criteria
  - the intended learning outcomes
  - the qualification awarded
Findings

The MSc Programme under evaluation, is a new MSc Programme. Therefore, our comments are based on the presented plan and procedures, many of which draw from existing experience on postgraduate programmes at the Neapolis University Pafos.

The Programme features a practice-oriented configuration, with the MSc courses carried out over the weekend, thereby targeting working professionals. The maximum number of participants is limited to 35. This is a number that can be accommodated in terms of available facilities (classroom, computer labs). It further justifies the presence of primarily compulsory courses in the existing structure of the programme.

The Quality Assurance plan presented offers a sound structure, which follows the University standards and includes a standardized internal Quality Assurance per School, a set of tools that are used for the Quality Management (PROSE: Review of programs by self-assessment, Moodle-based students’ evaluation, performance evaluation of teaching/administration staff).

In terms of the procedures for fulfilment of postgraduate assignments and practical training, a structured procedure is foreseen, which typically includes a written assignment for every course (30% of the final grade), and an exam for 70% of the final grade. For the MSc dissertation an adequate procedure is in place requiring presentation before a three-member Examination Committee.

The correspondence between ECTS workload and expected learning outcomes should be assessed on availability of further information with respect to further Master degrees in Universities. We would appreciate this information offered to us by the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, i.e., how is the allocated 7.5 ECTS benchmarked against further Institutions in Cyprus.

Strengths

An active engagement of students not only via participation in institutional bodies, but also through their active involvement and feedback to student evaluations (we were reported a high average response rate). The feedback from the students is weighted at 40% in terms of the overall faculty assessment.

The topic lies in a key area of civil engineering, which has significant attracted focus in recent years. A solid bond to practice is ensured, via use of design concepts (codes and standards), and project work, as well as examples inspired from actual field case-studies. The program is not primarily research oriented, however it does incorporate aspects of state-of-the-art research, including selective advanced topics on blast, risk, vulnerability and robustness.
We believe the program and the quality of the instructors will bring added value to the School. The vision is to establish a specialized degree, which is unique, possibly at international level. The topic of assessment under extreme loads is one that is crucial for civil engineering design, but not yet broadly available in terms of targeted graduate programs.

Although this is a young University, and this program is still at proposal stage, the envisioned collaborations with further institutions (NTUA, Politenico di Milano, and industry support) provide added value and are compared positively versus further study programmes in Europe and internationally.

**Areas of improvement and recommendations**

In terms of Programme dissemination, concrete steps are not yet taken since the programme is right now at proposal stage. This should be effectuated as soon as possible so that the Syllabus and Learning Outcomes are disseminated to candidate students. The envisioned structure, learning processes and outcomes seem adequate; however, it should be ensured that they are effectively put into practice.

Given the special format of the Programme, which at least in this initial phase aims to target working professionals, it would be beneficial to include an activity such as practical training (linked to the program). This would offer the opportunity for

- working professionals to expand their knowledge base,
- recruited international students to gain practical knowledge by exploiting the time between lectures (lectures are limited during the weekend)

The course outline is at this stage unsettled. This of course complies with the need to remain flexible and to adjust on the basis of the background of students who eventually register for the course. However, to what the following learning outcomes are concerned, further elaboration is needed:

- An in-depth understanding of methodological approaches, tools and techniques to be used for decision making and design of structures for “structural robustness”, so as to enable graduates to work as expert professionals.
- The ability to critically evaluate new technological developments in the area of protection of structures and infrastructures to accidental/extreme loading conditions.
- The ability to use effectively qualitative and quantitative techniques and methods, computer programs and information technologies in order to carry out analytical tasks involved in structural assessment under extreme loading conditions.

Should the possibility exist for the program to expand in the future (also based on international acclaim), a number of electives, further covering fundamental concepts (such as nonlinear analysis or random processes) should be included in the course offerings.

For every course, a clear definition of the “written assignment” - graded at 30% of the final grade - should be offered.

In terms of teaching materials, it is mentioned that the lectures will be based on blended learning, providing a combination of presentations, illustrated examples, multimedia contents and group projects. This designates a sound structure, however the material does not exist and has not been presented at this stage (proposal stage). We recommend that it is made publically available in due time and well-ahead the initiation of the program.
The dissertation is allotted a high ECTS equivalent. In the updated configuration, the dissertation may be conducted in parallel to coursework so that the degree is condensed to a single year (the option for 18 months also exists). This might correspond to disproportionate workload. The possibility to extend the thesis to the summer months should be considered in order to reflect a realistic workload and a quality that corresponds to the allotted 30ECTS.

Currently, the exposure of students to in-depth developments of
- novel technologies (base isolation, passive control devices), and
- advanced but related scientific concepts (e.g. extreme loading, natural hazards, failure classification conditioned on the loading) is at this initiation stage lacking. However, the teaching staff features the necessary experience for incorporating these elements in an updated revision, or in a possible future extension of the program.

Admission requirements in the form of prerequisites should be defined, in the case of students who lack the necessary background knowledge. This could apply in the case of Bachelor’s student recruited from international programs. Examples of such prerequisites could be a course on structural dynamics and/or advanced analysis. Conditional admission could be an option, whereby the student can be admitted with the obligation to register to a pertinent Bachelors course.

**Mark from 1 to 10 the degree of compliance of each quality indicator/criterion**

1 – 4: Non-compliant

5 or 6: Partially compliant

7 or 8: Substantially compliant

9 or 10: Fully compliant

<table>
<thead>
<tr>
<th>Quality indicators/criteria</th>
<th>1 - 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Academic oversight of the programme design is ensured</td>
<td>9</td>
</tr>
<tr>
<td>1.2 The guide and / or the regulations for quality assurance provide the adequate information and data for the support and management of the programme of study for all the years of study.</td>
<td>8</td>
</tr>
<tr>
<td>1.3 Internal Quality Assurance processes safeguard the quality and the fulfillment of the programme’s purpose, objectives and the achievement of the learning outcomes. Particularly, the following are taken into consideration:</td>
<td></td>
</tr>
<tr>
<td>1.3.1 The disclosure of the programme’s curricula to the students and their implementation by the teaching staff</td>
<td>8</td>
</tr>
<tr>
<td>1.3.2 The programme webpage information and material</td>
<td>N/A</td>
</tr>
<tr>
<td>1.3.3 The procedures for the fulfillment of undergraduate and postgraduate assignments / practical training</td>
<td>8</td>
</tr>
<tr>
<td>1.3.4</td>
<td>The procedures for the conduct and the format of the examinations and for student assessment</td>
</tr>
<tr>
<td>1.3.5</td>
<td>Students’ participation procedures for the improvement of the programme and of the educational process</td>
</tr>
<tr>
<td>1.4</td>
<td>The purpose and objectives of the programme are consistent with the expected learning outcomes and with the mission and the strategy of the institution.</td>
</tr>
<tr>
<td>1.5</td>
<td>The following ensure the achievement of the programme’s purpose, objectives and the learning outcomes:</td>
</tr>
<tr>
<td>1.5.1</td>
<td>The number of courses</td>
</tr>
<tr>
<td>1.5.2</td>
<td>The programme’s content</td>
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<tr>
<td>1.5.3</td>
<td>The methods of assessment</td>
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<tr>
<td>1.5.4</td>
<td>The teaching material</td>
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<td>1.5.5</td>
<td>The equipment</td>
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<tr>
<td>1.5.6</td>
<td>The balance between theory and practice</td>
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<tr>
<td>1.5.7</td>
<td>The research orientation of the programme</td>
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<td>1.5.8</td>
<td>The quality of students’ assignments</td>
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<tr>
<td>1.6</td>
<td>The expected learning outcomes of the programme are known to the students and to the members of the teaching staff.</td>
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<tr>
<td>1.7</td>
<td>The teaching and learning process is adequate and effective for the achievement of the expected learning outcomes.</td>
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<tr>
<td>1.8</td>
<td>The content of the programme’s courses reflects the latest achievements / developments in science, arts, research and technology.</td>
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<tr>
<td>1.9</td>
<td>New research results are embodied in the content of the programme of study.</td>
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<tr>
<td>1.10</td>
<td>The content of foundation courses is designed to prepare the students for the first year of their chosen undergraduate degree.</td>
</tr>
<tr>
<td>1.11</td>
<td>Students’ command of the language of instruction is appropriate.</td>
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<tr>
<td>1.12</td>
<td>The programme of study is structured in a consistent manner and in sequence, so that concepts operating as preconditions precede the teaching of other, more complex and cognitively more demanding, concepts.</td>
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<tr>
<td>1.13</td>
<td>The learning outcomes and the content of the courses are consistent.</td>
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<tr>
<td>1.14</td>
<td>The European Credit Transfer System (ECTS) is applied and there is correspondence between credits, workload and expected learning outcomes per course and per semester.</td>
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<tr>
<td>1.15</td>
<td>The higher education qualification awarded to the students corresponds to the purpose, objectives and the learning outcomes of the programme.</td>
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<tr>
<td>1.16</td>
<td>The higher education qualification and the programme of study conform to the provisions for registration to their corresponding professional and vocational bodies for the purpose of exercising a particular profession.</td>
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<tr>
<td>1.17</td>
<td>The programme’s management in regard to its design, its approval, its monitoring and its review, is in place.</td>
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<tr>
<td>1.18</td>
<td>The programme’s collaborations with other institutions provide added value and are compared positively with corresponding collaborations of other departments / programmes of study in Europe and internationally.</td>
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<tr>
<td>1.19</td>
<td>Procedures are applied so that the programme conforms to the scientific and professional activities of the graduates.</td>
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<tr>
<td>1.20</td>
<td>The admission requirements are appropriate.</td>
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<tr>
<td>1.21</td>
<td>Sufficient information relating to the programme of study is posted publicly.</td>
</tr>
<tr>
<td>1.22</td>
<td>The teaching methodology is suitable for teaching in higher education.</td>
</tr>
</tbody>
</table>

In summary as already communicated in the areas of improvement and recommendations, the following should be implemented:

1. Next steps should be taken for disseminating the Programme

2. A procedure should be in place for including an activity on practical training (internship) that is linked to the program.

   This would offer the opportunity for
   - working professionals to expand their knowledge base,
   - recruited international students to gain practical knowledge by exploiting the time between lectures (lectures are limited during the weekend)

3. Elaboration is needed in terms of the following learning goals:
   - An in-depth understanding of methodological approaches, tools and techniques to be used for decision making and design of structures for “structural robustness”, so as to enable graduates to work as expert professionals.

\textsuperscript{1}We would appreciate related statistics information offered to us by the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, i.e., how is the allocated 7.5 ECTS benchmarked against further Institutions in Cyprus, where typically 5 courses per semester are included?
• The ability to critically evaluate new technological developments in the area of protection of structures and infrastructures to accidental/extreme loading conditions.
• The ability to use effectively qualitative and quantitative techniques and methods, computer programs and information technologies in order to carry out analytical tasks involved in structural assessment under extreme loading conditions.

4. Should the possibility exist for the program to expand in the future (also based on international acclaim), a number of electives, further covering fundamental concepts (such as nonlinear analysis, or random processes) should be included in the course offerings.

5. For every course, a clear definition of the “written assignment” - graded at 30% of the final grade - should be offered.

6. The possibility to carry out the thesis within the summer months should be considered.

7. We recommend that teaching materials are made publically available in due time and well-ahead the initiation of the program.

8. Considering incorporating elements relating to novel technologies or advanced scientific concepts in an updated revision, or in a possible future extension of the program.

9. Admission requirements in the form of prerequisites should be defined, as described in the previous section.

Please circle one of the following for:
Study programme and study programme’s design and development

Non-compliant Partially compliant substantially compliant Fully compliant
2. Teaching, learning and student assessment (ESG 1.3)

Standards

- The process of teaching and learning supports students’ individual and social development and respects their needs.
- 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.
- 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.
- Mutual respect within the learner-teacher relationship is promoted.
- 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.

Findings
Due to the particular nature of the program, and the size of the envisioned classes (original target at 15-20 students, the break-even point lies at 12, with a maximum of 35 allowed), an upright faculty to student ratio is ensured, allowing for a smooth and personalized communication with the students.

Strengths
The use of new technologies and assistive tools, such as the Smart Board, facilitate the delivery of the lectures. The IT support and the further services enabled via the Moodle, Computer Labs, the access to engineering & computing software, as well as the library resources is on par with international standards.

Areas of improvement and recommendations
Despite the small size of the program allowing for flexibility in the communication between instructors and students (further facilitated via the Moodle system), a clear policy should be specified in terms of interaction (formal allocation of teaching/consultation hours) and communication with the students.
In terms of constructive feedback offered to the students, this is for now generically described. The mechanisms of formative feedback throughout the semester should be explicitly stated.

The teaching materials and notes have not yet been made available to the committee (as this is a new course). According to the offered Syllabus table, we assume that these would be adequate.

Given the heterogeneous background of the students, this course is by default more practice-oriented. Therefore, we see the offering of fundamentals as censorious, while the continuous updating on the basis of latest research is a secondary issue at this point.

Mark from 1 to 10 the degree of compliance of each quality indicator/criterion

1 – 4: Non-compliant
5 or 6: Partially compliant
7 or 8: Substantially compliant
9 or 10: Fully compliant

<table>
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<tr>
<th>Quality indicators/criteria</th>
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</tr>
</thead>
<tbody>
<tr>
<td>2.1 The actual/expected number of students in each class allows for constructive teaching and communication.</td>
<td>10</td>
</tr>
<tr>
<td>2.2 The actual/expected number of students in each class compares positively to the current international standards and/or practices.</td>
<td>8.5</td>
</tr>
<tr>
<td>2.3 There is an adequate policy for regular and effective communication with students.</td>
<td>8</td>
</tr>
<tr>
<td>2.4 The methodology implemented in each course leads to the achievement of the course’s purpose and objectives and those of the individual modules.</td>
<td>7</td>
</tr>
<tr>
<td>2.5 Constructive formative assessment for learning and feedback are regularly provided to the students.</td>
<td>7</td>
</tr>
<tr>
<td>2.6 The assessment system and criteria regarding student course performance are clear, adequate, and known to the students.</td>
<td>8</td>
</tr>
<tr>
<td>2.7 Educational activities which encourage students’ active participation in the learning process are implemented.</td>
<td>8</td>
</tr>
<tr>
<td>2.8 Teaching incorporates the use of modern educational technologies that are consistent with international standards, including a platform for the electronic support of learning.</td>
<td>10</td>
</tr>
<tr>
<td>2.9 Teaching materials (books, manuals, journals, databases, and teaching notes) meet the requirements set by the methodology of the programme’s individual courses and are updated regularly.</td>
<td>8</td>
</tr>
</tbody>
</table>
It is ensured that teaching and learning are continuously enriched by research.

The programme promotes students’ research skills and inquiry learning.

Students are adequately trained in the research process.

The following is a summary of the identified deficiencies:

1. A clear policy should be specified in terms of interaction with the students.
2. The mechanisms of formative feedback throughout the semester should be made explicit.
3. The teaching materials and notes should be made available to the students at least a week before the lecture.
4. This course is by default more practice oriented. We see the offering of fundamentals as censorious, while the continuous updating on the basis of latest research is secondary at this stage.

Please circle one of the following for:
Teaching, learning and student assessment

Non-compliant  Partially compliant  substantially compliant  Fully compliant
3. Teaching Staff (ESG 1.5)

**Standards**

- 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 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).
- Recognised visiting teaching staff participates in teaching the study programme.
- The teaching staff is regularly engaged in professional and teaching-skills training and development.
- Assessment of the teaching staff takes into account the quality of their teaching, their research activity, the development of their teaching skills and their mobility.

**Findings**

The procedure for teaching performance seems adequate and compliant with international standards (40% student evaluation, 10% self-assessment, 30% supervisor’s report. 20% course observation).

**Strengths**

The full-time teaching staff corresponds to 86% of the overall staff, according to the updated information received. This reflects a solid structure and a commitment to the programme. We also expect, as foreseen in the proposal document, a full time commitment by the programme coordinator.

Overall, the teaching staff holds expert knowledge and profound experience in the domains of structural assessment under earthquake, fire and blast.

In particular, Prof. Spyrakos, currently Full Professor at NTUA, is to serve as visiting faculty for offering the courses on blast; a domain in which he is an internationally acknowledged expert. It is expected that this will bring in added value to the overall programme.

The Syllabus reflects a healthy distribution of the course-load, allowing the teaching staff to engage in further activities relating to research and contribution to society.

In terms of coordination, Prof. Castiglioni is a well-established expert, having served as faculty member in highly competitive institutions. He has a proven track-record in the specialization domain of the proposed Programme (extreme loading with emphasis on steel structures, vulnerability studies).

**Areas of improvement and recommendations**
Minor Comment: Ensuring added complementary expertise in the particular areas of risk and vulnerability assessment, may be advantageous.

Mark from 1 to 10 the degree of compliance of each quality indicator/criterion

1 – 4: Non-compliant
5 or 6: Partially compliant
7 or 8: Substantially compliant
9 or 10: Fully compliant

<table>
<thead>
<tr>
<th>Quality indicators/criteria</th>
<th>1 - 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 The number of full-time teaching staff, occupied exclusively at the institution, and their fields of expertise, adequately support the programme of study.</td>
<td>9</td>
</tr>
<tr>
<td>3.2 The members of teaching staff for each course have the relevant formal and fundamental qualifications for teaching the course, including the following:</td>
<td></td>
</tr>
<tr>
<td>3.2.1 Subject specialisation</td>
<td>9</td>
</tr>
<tr>
<td>3.2.2 Research and Publications within the discipline</td>
<td>9</td>
</tr>
<tr>
<td>3.2.3 Experience / training in teaching in higher education</td>
<td>9</td>
</tr>
<tr>
<td>3.3 The programme attracts visiting professors of recognized academic standing.</td>
<td>9</td>
</tr>
<tr>
<td>3.4 The specialisations of visiting professors adequately support the programme of study.</td>
<td>9</td>
</tr>
<tr>
<td>3.5 Special teaching staff and special scientists have the necessary qualifications, adequate work experience and specialisation to teach a limited number of courses in the programme of study.</td>
<td>N/A</td>
</tr>
<tr>
<td>3.6 In the programme of study, the ratio of the number of courses taught by full-time staff, occupied exclusively at the institution, to the number of courses taught by part-time staff, ensures the quality of the programme of study.</td>
<td>9</td>
</tr>
<tr>
<td>3.7 The ratio of the number of students to the total number of teaching staff supports and safeguards the programme’s quality.</td>
<td>9</td>
</tr>
<tr>
<td>3.8 The teaching load allows for the conduct of research and contribution to society.</td>
<td>9</td>
</tr>
<tr>
<td>3.9 The programme’s coordinator has the qualifications and experience to coordinate the programme of study.</td>
<td>10</td>
</tr>
<tr>
<td>3.10 The results of the teaching staff’s research activity are published in international journals with the peer-reviewing system, in international conferences, conference minutes, publications etc.</td>
<td>9</td>
</tr>
<tr>
<td>3.11</td>
<td>The teaching staff is provided with adequate training opportunities in teaching methods, adult education and new technologies.</td>
</tr>
<tr>
<td>3.12</td>
<td>Feedback processes for teaching staff in regard to the evaluation of their teaching work, by the students, are satisfactory.</td>
</tr>
</tbody>
</table>

No definiteness are identified. The teaching staff complies with the standards and contributes added value to the School and Programme.

Minor Comment: Ensuring added complementary expertise in the particular areas of risk and vulnerability assessment, may be advantageous.

Please circle one of the following for:

Teaching Staff

- Non-compliant
- Partially compliant
- Substantially compliant
- Fully compliant
4. **Students (ESG 1.4, 1.6, 1.7)**

**Standards**

- Pre-defined and published regulations regarding student admission, progression, recognition and certification are in place.
- Access policies, admission processes and criteria are implemented consistently and in a transparent manner.
- Information on students, like 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, is collected, monitored and analysed.
- 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.
- 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.
- Student support is provided covering the needs of a diverse student population (such as mature, part-time, employed and international students, as well as students with disabilities).
- A formal procedure for student appeals is in place.
- Students are involved in evaluating the teaching staff.
- Students’ mobility is encouraged and supported.

**Findings**

The admission requirements for the study programme comply with the European and International standards.

**Strengths**

In terms of participation in Exchange programs, NUP is Erasmus Charter signatory with Erasmus agreements with 65 Universities and MOUs with several international institutions.

Welfare and Pastoral support is ensured via:

- Students’ Clubs
- Recreation activities
- Individual Tutor allocation
- Center for Special Education Needs & Disabilities
- Centre for Psychological Support and Evaluation (SKEPSIS)

The high faculty to student ratio ensures a flexible structure, and the possibility for interpersonal communication.
Areas of improvement and recommendations

In terms of student support and communications, as aforementioned, a clear policy should be specified in terms of interaction (formal allocation of teaching/consultation hours) and communication with the students.

Students recruited from abroad, are likely not to have a working contract, as is the norm for the current attendees of the preceding BSc program. It should be ensured that these students are engaged in activities throughout their study program, as for instance the possibility for an internship, organized group study activities, journal clubs, voluntary project-work.

In terms of prior preparation of admitted students, as discussed in Section 1: Admission requirements in the form of prerequisites should be defined, in the case of students who lack the necessary background knowledge. This could apply in the case of Bachelor’s student recruited from international programs. Examples of such prerequisites could be a course on structural dynamics and/or advanced analysis. Conditional admission could be an option, whereby the student can be admitted with the obligation to register to a pertinent Bachelors course.

Mark from 1 to 10 the degree of compliance of each quality indicator/criterion

1 – 4: Non-compliant
5 or 6: Partially compliant
7 or 8: Substantially compliant
9 or 10: Fully compliant

<table>
<thead>
<tr>
<th>Quality indicators/criteria</th>
<th>1 - 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 The student admission requirements for the programme of study are based on specific regulations and suitable criteria that are favourably compared to international practices.</td>
<td>8</td>
</tr>
<tr>
<td>4.2 The award of the higher education qualification is accompanied by the diploma supplement which is in line with European and international standards.</td>
<td>9</td>
</tr>
<tr>
<td>4.3 The programme’s evaluation mechanism, by the students, is effective.</td>
<td>9</td>
</tr>
<tr>
<td>4.4 Students’ participation in exchange programmes is compared favourably to similar programmes across Europe.</td>
<td>9</td>
</tr>
<tr>
<td>4.5 There is a student welfare service that supports students in regard to academic, personal problems and difficulties.</td>
<td>9</td>
</tr>
<tr>
<td>4.6 Statutory mechanisms, for the support of students and the communication with the teaching staff, are effective.</td>
<td>8</td>
</tr>
<tr>
<td>4.7 Mentoring of each student is provided and the number of students per each permanent teaching member is adequate.</td>
<td>8</td>
</tr>
</tbody>
</table>
4.8 Flexible options / adaptable to the personal needs or to the needs of students with special needs, are provided.  

4.9 Students are satisfied with their learning experiences.  

<table>
<thead>
<tr>
<th>The identified deficiencies are summarized as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Admission requirements in the form of prerequisites should be defined.</td>
</tr>
<tr>
<td>2. A clear policy should be specified in terms of interaction with the students.</td>
</tr>
<tr>
<td>3. It should be ensured that full-time students recruited from abroad are engaged in activities throughout their study program (e.g. internship, organized group study activities, journal clubs, voluntary project-work).</td>
</tr>
</tbody>
</table>

Please circle one of the following for:  

Students  

Non-compliant  Partially compliant  substantially compliant  Fully compliant
5. Resources (ESG 1.6)

**Standards**

- Adequate and readily accessible resources (teaching and learning environments, teaching materials, teaching aids and equipment, financial, physical and human support resources*) are provided to students and support the achievement of objectives in the study programme.
  * Physical resources: premises, libraries, study facilities, IT infrastructure, etc.
  * Human support resources: tutors/mentors, counsellors, other advisers, qualified administrative staff
- 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.
- Teaching staff is involved in the management of financial resources regarding the programme of study.

**Findings**

The existing laboratories are adequate for the purposes of dynamics demonstrations, while the computer labs offer the possibility to work on coding and computing for associated student projects.

**Strengths**

The infrastructure, IT support and electronic library resources seem suitable to ensure a seamless learning experience.

**Areas of improvement and recommendations**

Point of improvement could lie in:

- Improvement of the limited current capacity of the library via extension of available textbook/reference book titles (hardcopies).
- Extension of electronic subscriptions for related publishers, such as Elsevier (which at the moment is not in the list of subscriptions).
- the availability of in-class demonstration tools that promote iterative learning (Mola Kit)

Mark from 1 to 10 the degree of compliance of each quality indicator/criterion

1 – 4: Non-compliant
5 or 6: Partially compliant
7 or 8: Substantially compliant
9 or 10: Fully compliant

<p>| Quality indicators/criteria | 1 - 10 |</p>
<table>
<thead>
<tr>
<th></th>
<th>Adequate and modern learning resources are available to the students.</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>The library includes the latest books and material that support the programme.</td>
<td>8</td>
</tr>
<tr>
<td>5.2</td>
<td>The library loan system facilitates students’ studies.</td>
<td>9</td>
</tr>
<tr>
<td>5.3</td>
<td>The laboratories adequately support the programme.</td>
<td>8</td>
</tr>
<tr>
<td>5.4</td>
<td>Student welfare services are of high quality.</td>
<td>9</td>
</tr>
<tr>
<td>5.5</td>
<td>Statutory administrative mechanisms for monitoring and supporting students are sufficient.</td>
<td>8</td>
</tr>
<tr>
<td>5.6</td>
<td>Suitable books and reputable journals support the programme of study.</td>
<td>8</td>
</tr>
<tr>
<td>5.7</td>
<td>An internal communication platform supports the programme of study.</td>
<td>10</td>
</tr>
<tr>
<td>5.8</td>
<td>The equipment used in teaching and learning (laboratory and electronic equipment, consumables etc.) are quantitatively and qualitatively adequate.</td>
<td>8</td>
</tr>
<tr>
<td>5.9</td>
<td>Teaching materials (books, manuals, scientific journals, databases) are adequate and accessible to students.</td>
<td>8</td>
</tr>
<tr>
<td>5.10</td>
<td>Teaching materials (books, manuals, scientific journals, databases) are updated regularly with the most recent publications.</td>
<td>8</td>
</tr>
<tr>
<td>5.11</td>
<td><strong>Identified deficiencies.</strong> Possible points of improvement lie in**</td>
<td></td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>• adoption of in-class demonstration tools that promote iterative learning (Mola Kit)</td>
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</tbody>
</table>

Please circle one of the following for:

**Resources**

<table>
<thead>
<tr>
<th>Non-compliant</th>
<th>Partially compliant</th>
<th>substantially compliant</th>
<th>Fully compliant</th>
</tr>
</thead>
</table>
6. Additional for distance learning programmes (ALL ESG)

**Standards**

- The distance learning methodology is appropriate for the particular programme of study.
- A pedagogical planning unit for distance learning, which is responsible for the support of the distance learning unit and addresses the requirements for study materials, interactive activities and formative assessment in accordance to international standards, is established.
- Feedback processes for students in relation to written assignments are set.
- A specific plan is developed to ensure student interactions with each other, with the teaching staff, and the study material.
- Teacher training programmes focusing on interaction and the specificities of distance learning are offered.
- A complete assessment framework is designed, focusing on distance learning methodology, including clearly defined evaluation criteria for student assignments and the final examination.
- Expected teleconferences for presentations, discussion and question-answer sessions, and guidance are set.
- A study guide for each course, fully aligned with distance learning methodology and the need for student interaction with the material is developed. The study guide should include, for each course week / module, the following:
  - Clearly defined objectives and expected learning outcomes of the programme, of the modules and activities in an organised and coherent manner
  - Presentation of course material, on a weekly basis, in a variety of ways and means (e.g. printed material, electronic material, teleconferencing, multimedia)
  - Weekly outline of set activities and exercises and clear instructions for creating posts, discussion, and feedback
  - Self-assessment exercises and self-correction guide
  - Bibliographic references and suggestions for further study
  - Number of assignments/papers and their topics, along with instructions and additional study material
  - Synopsis

**This section is not applicable**

**Findings**

N/A

**Strengths**

N/A

**Areas of improvement and recommendations**
7. Additional for doctoral programmes (ALL ESG)

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
- 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 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.
- The process of submitting the dissertation to the university library is set.

This section is not applicable

Findings
N/A

Strengths
N/A

Areas of improvement and recommendations
8. Additional for joint programmes (ALL ESG)

**Standards**

- The joint programme is offered in accordance with legal frameworks of the relevant national higher education systems.
- 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.
- 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
- 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.

**This section is not applicable**

**Findings**
N/A

**Strengths**
N/A

**Areas of improvement and recommendations**
N/A
C. Conclusions and final remarks
The proposed program meets the requirements in terms of teaching and learning objectives, capacity of staff and resources. The proposed program is well-suited to cover a highly specialized, yet timely topic, that is rarely available among international civil engineering programs. We see this as an added value to the School and the University in general. The major recommendations of the committee have been summarized in the corresponding sections of this document.

D. Signatures of the EEC

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Chair) Yong Lu</td>
<td></td>
</tr>
<tr>
<td>(Member) Eleni Chatzi</td>
<td></td>
</tr>
<tr>
<td>(Member) Dimitrios Lignos</td>
<td></td>
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<tr>
<td>(Member) Ms. Ioanna Nicolaou</td>
<td></td>
</tr>
</tbody>
</table>

Date: 28/05/2019