



NEAPOLIS UNIVERSITY PAFOS

SCHOOL OF ARCHITECTURE, ENGINEERING, LAND AND ENVIRONMENTAL SCIENCES

CLARIFICATIONS TO THE EXTERNAL EVALUATION REPORT ON UNDERGRADUATE BACHELOR OF SCIENCE PROGRAM IN CIVIL ENGINEERING (BScCE)

July 2017

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INTRODUCTION

The present document has been prepared within the framework of the External Evaluation Report for the Undergraduate Bachelor of Science Program in Civil Engineering (BScCE), as completed by the External Evaluation Committee 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 2016” [N. 136 (I)/2015] and submitted to the Cyprus Agency of Quality Assurance and Accreditation in Higher Education. The evaluation of the aforementioned undergraduate program took place on the 9th of May 2017 at the Premises of Neapolis University.

Consequently the present document aims to clarify the content of the proposed program and respond effectively to the comments of the External Evaluation Committee.

RESPONSES TO THE COMMENTS OF THE EXTERNAL EVALUATION COMMITTEE ON BSc CIVIL ENGINEERING PROGRAM

1. EFFECTIVENESS IN TEACHING WORK – AVAILABLE RESOURCES

Comment: The course material is generally brought up-to-date, however new concepts in the design of structures, practices, textbooks and other teaching aids may have to be considered. Moreover, there should be a more uniform curriculum update process through the department.

Response: This is taken care of as follows:

- Emphasis to the structural design has been given in most of the core courses as shown in related syllabi in ANNEX A: DESIGN COURSES DESCRIPTION.
- New concepts in structural design have been brought forward through high-tech engineering design software (comprising live animation and virtual reality techniques), video presentations, laboratory demonstrations, engineering programming, electronic resources and contemporary literature.
- To maintain a uniform curriculum update, the School of Architecture, Engineering, Land and Environmental Sciences follows the University's Quality Improvement Planning as presented in ANNEX E: INTERNAL QUALITY ASSURANCE SYSTEM.

Comment: With reference to the academic/teaching personnel, there are 15 faculty members and it is notable that at the moment Civil Engineers are underrepresented. The high quality of the faculty members is appreciated; nevertheless more members having a first diploma in Civil Engineering would help towards an enhanced Civil Engineering education.

Response: This is taken care of as follows:

- The existing two (2) full-time faculty members with a PhD degree in Civil/Structural Engineering will be promoted: Dr. Bellos from Assistant Professor to Associate Professor and Dr. Bakas from Lecturer to Assistant Professor.
- Positions for five (5) new faculty members, one (1) Professor/Associate Professor as Program Director and four (4) Assistant Professors or Lecturers, have already been announced at the University's site (see ANNEX H: PROFESSOR OR ASSOCIATE PROFESSOR POSITION IN CIVIL ENGINEERING and ANNEX I: LECTURER OR ASSISTANT PROFESSOR POSITIONS IN CIVIL ENGINEERING¹). They must have a PhD degree in Civil Engineering and must be expertise respectively in the fields of Coastal and Offshore Engineering, Soil Mechanics/Foundation design, Road Engineering/Transportation planning, Fluid Mechanics/Hydraulics/Hydrology and Engineering Chemistry.
- Positions for two (2) new faculty members: a) Lecturer in GIS and Environmental Modelling and b) Lecturer in Environmental Engineering with emphasis on

¹ <http://www.nup.ac.cy/the-university/vacancies-at-nup/>

Environmental Impacts Assessment, have already been announced at the University's site² for the postgraduate program MSc in Environmental Impacts Assessment and Sustainability, and will be utilized in the Civil Engineering program as well.

In this way, the full-time academic personnel possessing a PhD degree in Civil/Structural Engineering will be raised up to nine (9) (60% of the teaching staff), while the overall full-time academic personnel will be raised up to twelve (12) (80% of the teaching staff).

Comment: Courses for the design of structures included in the program could be widened in the near future: the curriculum could include a number of courses to improve the ability of the students in the design of structures and permit them properly comprehend the respective structural materials.

Response: As reported previously, since structural design is one of the main pillars of contemporary engineering education, special care has been taken for implementing it in most of the core modules, such as in Building Technology (CE 100), Highway Engineering (CE 300), Transportation Planning (CE 340), Foundation Engineering (CE 330), Reinforced Concrete Design I and II (CE 320, CE 420), Steel Design I and II (CE 360, CE 440), Earthquake Engineering (CE 370), Coastal and Offshore Engineering (CE 470), etc (see related syllabi in ANNEX A: DESIGN COURSES DESCRIPTION). The design courses account for 25% of the curriculum. Furthermore, the provided materials courses, such as Engineering Materials (CE 240) and Strength of Materials (CE 200) (see related syllabi in ANNEX B: MATERIAL COURSES DESCRIPTION), along with related material laboratories are to contribute to better understanding structural materials and promote research in the area.

1.1.3.2. The disclosure of the program's curricula to the students, and their implementation by the teaching personnel.

Comment: It would be an asset for the curricula to include formative and/or summative tests during the semester.

Response: This suggestion has been applied. Formative and/or summative tests take place during the semester where applicable (see highlighted Assessment fields in ANNEX A: DESIGN COURSES DESCRIPTION and ANNEX B: MATERIAL COURSES DESCRIPTION). According to the University's policy, the instructors are permitted to set midterm exams or coursework or both, as long as they declare clearly the grading process and the weighting factors on the submitted course syllabus at the beginning of the semester. Electronic quizzes through MOODLE (University's electronic Learning Management System) provide another possibility of regular testing during the semester. Two grades must be submitted per course along with their weighted factors: The Midterm/Coursework Grade and the Final Exam Grade. The overall course grade is calculated by the system as the weighted average of those two grades.

² <http://www.nup.ac.cy/the-university/vacancies-at-nup/>

1.1.3.5. The procedures for the conduct and the format of the examinations and for student assessment.

Comment: It is recommended, a maximum number of years of studies to be set.

Response: The recommendation for setting maximum number of years of studies seems reasonable and is appreciated. The additional number of years of studies beyond the original are set to 4. Thus the maximum total number of years of studies are set to eight.

1.1.4.1. Facilities

Comment: Laboratories are important for Civil Engineering both for studies and research. Computational lab is well established, but materials and structures lab is under development/construction. It is imperative, this lab be operational during the first year of the new Program. It is recommended, a testing setup for reinforced concrete and steel members to be included.

Response: The materials and structures laboratory is established according to the plan provided in ANNEX 4 – INFRASTRUCTURE of the proposed program and is fully constructed. This is assured by the following:

- The attached contractor's statement declaring that the laboratory construction have been concluded (see ANNEX J: CONTRACTOR'S STATEMENT) along with the related photos (see ANNEX K: ENGINEERING LAB PHOTOS), the fire department permit, the planning permit application to pafos municipality and the preliminary permit of the technical services of the ministry of education and culture (see ANNEX M: APPLICATIONS AND PERMITS OF AUTHORITIES)
- The attached quotations and invoices, signed agreements, delivery dates, bank guarantees and advanced payment receipts of the ordered equipment (see ANNEX L: LAB EQUIPMENT ORDERS AND DOCUMENTS).

Furthermore, the recommendation for setting reinforced concrete and steel members testing has already been taken into account.

1.1.4.2. Library

Comment: A number of Important International Civil Engineering journals in hard copies to be ordered and displayed. Also recent books (e.g. on Eurocodes) should be purchased.

Response: This is taken care of as follows:

- Through the participation of the NUP Library in Cyprus Academic Libraries Consortium (CALC), there is a profound access to the same electronic resources as the rest of public and private universities in Cyprus and, hence, to significant international journals in Civil Engineering.
- Quotations by certain providers in Cyprus hard copies of books and journals have been acquired (see ANNEX F: CIVIL ENGINEERING BOOKS and ANNEX G: CIVIL ENGINEERING JOURNALS). Apparently, the first book order already

covers a wide range of Civil Engineering subjects. It is noticeable that several of these books involve Eurocode implementation in structural design (see highlighted rows on table ANNEX F: CIVIL ENGINEERING BOOKS).

- University's policy is that the instructors should declare all necessary books to be purchased by the library three (3) months in advance. In this respect, the required Civil Engineering bibliography (in both Greek and English) is expected to increase gradually and according to the actual needs of teachers and students.

1.1.6. The teaching personnel, for each course, provide timely and effective feedback to the students.

Comment: It is an important issue and yet, not clearly elaborated: maximum time for feedback from staff to the student should be defined.

Response: According to the University instructions, each member of the teaching staff should declare office hours to provide effective feedback to the students. These have been set for two (2) hours a week per course and must be posted on the instructor's office door and on the top of the respective module of the MOODLE (University's electronic Learning Management System). Feedback is also provided to the students either via the MOODLE (News Forum or Messaging System for each course) or via the University's Email services.

1.2.7. Teaching materials meet the requirements set by the methodology of the program's individual courses, and are updated regularly.

Comment: Additional bibliography should be proposed to students including literature in Eurocodes (not only BS) and books in Greek.

Response: As clarified in 1.1.4.2 and justified by ANNEX F: CIVIL ENGINEERING BOOKS the attached quotation by certain provider in Cyprus, indicates our desire to equip our library with the appropriate Civil Engineering literature. It is noticeable that several of the books ordered involve Eurocode implementation in structural design (see highlighted rows).

1.3.1. The number of full-time academic personnel, occupied exclusively at the institution, and their fields of expertise, adequately support the program of study.

Comment: The full-time academic personnel should be at least 50% of Civil Engineering background (preferably licensed Civil Engineers), whereas in the present plan Civil Engineers-staff is underrepresented.

Response: As reported previously, positions for five (5) new faculty members have already been announced (see ANNEX H: PROFESSOR OR ASSOCIATE PROFESSOR POSITION IN CIVIL ENGINEERING and ANNEX I: LECTURER OR ASSISTANT PROFESSOR POSITIONS IN CIVIL ENGINEERING³). In this way, the full-time academic personnel holding

³ <http://www.nup.ac.cy/the-university/vacancies-at-nup/>

a PhD degree in Civil Engineering will be raised up to nine (9) (60% of the teaching staff), while the overall full-time academic personnel will be raised up to twelve (12) (80% of the teaching staff).

1.3.2.2. Publications within the discipline.

Comment: It is expected that the number of publications related to Civil Engineering (in prominent journals) will be increased in the near future.

Response: Significant publications in well-known engineering journals have been achieved so far along with participation in major European research projects in the field of Computational Mechanics. As the number of talented academics involved in the program will increase, the publications in other fields of Civil Engineering are expected to increase substantially.

1.3.3. The specializations of Visiting Professors adequately support the program of study.

Comment: A shortcoming for the program is the fact that is mainly based on visiting professors.

Response: As reported previously, positions for five (5) new faculty members have already been announced (see ANNEX H: PROFESSOR OR ASSOCIATE PROFESSOR POSITION IN CIVIL ENGINEERING and ANNEX I: LECTURER OR ASSISTANT PROFESSOR POSITIONS IN CIVIL ENGINEERING⁴). In this way, the full-time academic personnel holding a PhD degree in Civil Engineering will be raised up to nine (9) (60% of the teaching staff), while the overall full-time academic personnel will be raised up to twelve (12) (80% of the teaching staff).

1.3.11. The program's Coordinator has the qualifications and experience to efficiently coordinate the program of study.

Comment: Taking into account the heavy academic management load of the Program Coordinator, the appointment of a lead with strong Civil Engineering background and vision would be an asset for the program.

Response: A position of Program Coordinator has already been announced and the applications are currently under evaluation (see ANNEX H: PROFESSOR OR ASSOCIATE PROFESSOR POSITION IN CIVIL ENGINEERING).

2. PROGRAM OF STUDY AND HIGHER EDUCATION QUALIFICATIONS

⁴ <http://www.nup.ac.cy/the-university/vacancies-at-nup/>

2.1.4. The program's content, the methods of assessment, the teaching materials and the equipment, lead to the achievement of the program's purpose and objectives and ensure the expected learning outcomes.

Comment: The methods of assessment, the teaching materials and the equipment fully support the program, except for the fact that the material and structure lab is under development.

Response: As reported previously, the material and structure lab is fully constructed. This is supported by the attached contractor's statement (see ANNEX J: CONTRACTOR'S STATEMENT) along with the related photos (see ANNEX K: ENGINEERING LAB PHOTOS) and the attached quotations, signed agreements, delivery dates, bank guarantees and advanced payment receipts of the ordered lab equipment (see ANNEX L: LAB EQUIPMENT ORDERS AND DOCUMENTS).

2.4. Management of the program of study.

Comment: The management of the program of study seems to be meticulously planned. Practical training should be included in a higher semester as a discrete module corresponding to ECTS credits and having assessment by the staff.

Response: On the 7th semester, the 6 ECTS Free Elective course (GENE 400) becomes a 3 ECTS Free Elective course, thus leaving space for a 3 ECTS Practical Training discrete module (ENGR 420) assessed by faculty members (see highlighted section in updated TABLE 2: DISTRIBUTION OF COURSES (PER SEMESTER), related syllabus in ANNEX C: PRACTICAL TRAINING COURSE DESCRIPTION and guidelines in ANNEX D: PRACTICAL TRAINING GUIDELINES). The School has come to an agreement in principle with several construction and design companies in the Paphos district that could provide practical training to students of the program. Furthermore, it is emphasized that the Cyprus Technical Chamber also requires at least one year of practical training for its candidate members after completion of their degree.

2.6.1. The procedures applied, so that the program conforms to the scientific and professional activities of the graduate, are adequate and effective.

Comment: The design-related modules should be enhanced.

Response: As reported previously, strong emphasis to structural design has been given in most of the core courses, such as in Building Technology (CE 100), Highway Engineering (CE 300), Transportation Planning (CE 340), Foundation Engineering (CE 330), Reinforced Concrete Design I and II (CE 320, CE 420), Steel Design I and II (CE 360, CE 440), Earthquake Engineering (CE 370), Coastal and Offshore Engineering (CE 470), etc (see related syllabi presented in ANNEX A: DESIGN COURSES DESCRIPTION). Although so far the design courses account for 25% of the curriculum, they will be further added as the program evolves and new specialty fields develop.

3. RESEARCH WORK AND SYNERGIES WITH TEACHING

Comment: As this is a new Program, research activities on Civil Engineering topics should be planned in the near future. In addition, a research laboratory for structures and materials should be also in near future developed. This way, the synergy in research and education related projects and dissertations will be established and enhanced.

Response: The establishment and the development of the engineering laboratories promote engineering research to the benefit of the local community and the academic community. Therefore, the establishment of the Concrete Technology Lab, the Building Materials Lab and the Earthquake Engineering Lab promote the synergy between education and research via dissertations and research projects.

4. ADMINISTRATION SERVICES, STUDENT WELFARE AND SUPPORT AND TEACHING WORK

4.2.1. There are suitable books and reputable journals supporting the program.

Comment: A number of Important International Civil Engineering journals in hard copies to be ordered and displayed. Also recent books (e.g. on Eurocodes) should be purchased.

Response: This is taken care of as follows:

- Through the participation of the NUP Library in Cyprus Academic Libraries Consortium (CALC), there is a profound access to the same electronic resources as the rest of public and private universities in Cyprus and, hence, to significant international journals in Civil Engineering.
- Quotations by certain providers in Cyprus hard copies of books and journals have been acquired (see ANNEX F: CIVIL ENGINEERING BOOKS and ANNEX G: CIVIL ENGINEERING JOURNALS). Apparently, the first book order will cover a wide range of Civil Engineering subjects. It is noticeable that several of these books involve Eurocode implementation in structural design (see highlighted rows on table ANNEX F: CIVIL ENGINEERING BOOKS).
- University's policy is that the instructors should declare all necessary books to be purchased by the library three (3) months in advance. In this respect, the required Civil Engineering bibliography (in both Greek and English) is expected to increase gradually and according to the actual needs of teachers and students

4.2.3. The facilities are adequate in number and size.

4.2.4. The equipment used in teaching and learning are quantitatively and qualitatively adequate.

Comment: Laboratories are important for Civil Engineering both for studies and research. Computational lab is well established, but materials and structures lab is under development/construction. It is imperative, this lab be operational during the first year of the new Program. It is recommended, a testing setup for reinforced concrete and steel members to be included.

Response: As reported previously, the materials and structures laboratory is fully constructed. This is supported by the attached contractor's statement (see ANNEX J: CONTRACTOR'S STATEMENT) along with the related photos (see ANNEX K: ENGINEERING LAB PHOTOS) and the attached quotations, signed agreements, delivery dates, bank guarantees and advanced payment receipts of the ordered lab equipment (see ANNEX L: LAB EQUIPMENT ORDERS AND DOCUMENTS). Furthermore, the recommendation for reinforced concrete and steel members testing has already been taken into account.

CONCLUSIONS AND SUGGESTIONS OF THE EXTERNAL EVALUATION COMMITTEE

Comment: It is vital for the future of the Program to enrich itself by attracting talented faculty members with a Civil Engineering background and strong relevant vision.

Response: Indeed, the BSc in Civil Engineering program is planned to further evolve and enrich itself by providing motives to attract talented, top rank academics with strong Civil Engineering background, capable to offer highly scientific services to the University and to the local community in general. This is supported by the announcement for new academic positions in Civil Engineering (see ANNEX H: PROFESSOR OR ASSOCIATE PROFESSOR POSITION IN CIVIL ENGINEERING and ANNEX I: LECTURER OR ASSISTANT PROFESSOR POSITIONS IN CIVIL ENGINEERING⁵).

⁵ <http://www.nup.ac.cy/the-university/vacancies-at-nup/>

TABLE 2: DISTRIBUTION OF COURSES (PER SEMESTER)

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
1st Semester								
1.	Compulsory	Calculus I	MATH 110	3	55 mins	13	39	6
2.	Compulsory	Professional Engineering	ENGR 100	2	55 mins	13	26	3
3.	Compulsory	Programming I	ENGR 110	3	55 mins	13	39	6
4.	Compulsory	Engineering Physics	ENGR 120	3	55 mins	13	39	6
5.	Compulsory	Technical Drawing	ENGR 160	3	55 mins	13	39	6
6.	Compulsory	Principles of Economics	GENE 100	2	55 mins	13	26	3
2nd Semester								
7.	Compulsory	Linear Algebra and Analytic Geometry	MATH 120	3	55 mins	13	39	6
8.	Compulsory	Principles of Ecology and Environmental Chemistry	ENGR 130	3	55 mins	12	39	6
9.	Compulsory	Computer Aided Design	ENGR 140	2	55 mins	13	26	3
10.	Compulsory	Technical Reports	ENGR 150	2	55 mins	13	26	3
11.	Core/Compulsory	Building Technology I	CE 100	3	55 mins	13	39	6
12.	Core/Compulsory	Land Surveying	CE 110	3	55 mins	13	39	6

3 rd Semester								
13.	Compulsory	Calculus II	MATH 200	3	55 mins	13	39	6
14.	Compulsory	Programming II	ENGR 210	3	55 mins	13	39	6
15.	Compulsory	Fluid Mechanics	ENGR 220	3	55 mins	13	39	6
16.	Core/Compulsory	Strength of Materials	CE 200	3	55 mins	13	39	6
17.	Core/Compulsory	Structural Analysis I	CE 210	3	55 mins	13	39	6
4 th Semester								
18.	Compulsory	Probability and Statistics	MATH 210	3	55 mins	13	39	6
19.	Core/ Compulsory	Structural Analysis II	CE 220	3	55 mins	13	39	6
20.	Core/ Compulsory	Engineering Geology	CE 230	3	55 mins	13	39	6
21.	Core/ Compulsory	Engineering Materials	CE 240	3	55 mins	13	39	6
22.	Elective	Free Elective *	GENE 200	3	55 mins	13	39	6
5 th Semester								
23.	Core/Compulsory	Highway Engineering	CE 300	3	55 mins	13	39	6
24.	Core/Compulsory	Soil Mechanics	CE 310	3	55 mins	13	39	6
25.	Core/Compulsory	Reinforced Concrete Design I	CE 320	3	55 mins	13	39	6
26.	Core/Compulsory	Structural Dynamics	CE 350	3	55 mins	13	39	6
27.	Core/Compulsory	Hydraulics	CE 380	3	55 mins	13	39	6

6 th Semester								
28.	Core/Compulsory	Foundation Engineering	CE 330	3	55 mins	13	39	6
29.	Core/Compulsory	Transportation Planning	CE 340	3	55 mins	13	39	6
30.	Core/Compulsory	Steel Design I	CE 360	3	55 mins	13	39	6
31.	Core/Compulsory	Earthquake Engineering	CE 370	3	55 mins	13	39	6
32.	Core/Compulsory	Engineering Hydrology	CE 390	3	55 mins	13	39	6
7 th Semester								
33.	Core/Compulsory	Environmental Engineering	CE 410	3	55 mins	13	39	6
34.	Core/Elective	Specialization Elective **		3	55 mins	13	39	6
35.	Core/Elective	Specialization Elective **		3	55 mins	13	39	6
36.	Core/Elective	Specialization Elective **		3	55 mins	13	39	6
37.	Elective	Free Elective	GENE 400	2	55 mins	13	26	3
38.	Compulsory	Practical Training	ENGR 420					3
8 th Semester								
39.	Research	Dissertation	CE 400					21
40.	Compulsory	Construction Project Management	ENGR 400	3	55 mins	13	39	6
41.	Compulsory	Construction Law and Practice	ENGR 410	2	55 mins	13	26	3

* Either one (1) course of 6 ECTS or two (2) courses of 3 ECTS each can be chosen as general education free electives

** Three (3) courses should be chosen from the proper core electives category

ANNEX A: DESIGN COURSES DESCRIPTION

Course Type	REINFORCED CONCRETE DESIGN I				
Course Code	CE 320				
Course Type	Core/Compulsory				
Level	Undergraduate				
Year / Semester	Year 3 / Semester 5				
Teacher's Name	Nikolaos Bakas				
ECTS	6	Lectures / week	2	Laboratories / week	1
Course Purpose and Objectives	The module aims to introduce the principles for proportioning and detailing design of indeterminate reinforced concrete structures as those encountered in RC buildings taking into account local and international regulations as well as architectural and practical considerations.				
Learning Outcomes	On completion of the course students should be able to understand the basis of analysis of various types of cross sections of reinforced concrete (rectangular, T, L). Apply the rules laid out in the design codes and specify the size and arrangement of reinforcement and concrete specifications required.				
Prerequisites	CE 200, CE 240		Required	None	
Course Content	The following topics will be covered in the lectures: - Introduction to reinforced concrete (RC) design. - Loads and load effects. - Design limit states, ultimate and serviceability limit states. - Design in bidirectional bending with or without normal load. - Design in axial loading. - Design of rectangular, T and L beams. - Capacity design of beams in shear. - Ductility. - Design of columns. - Capacity design of columns in bending and shear. - Design of Slabs in buckling, bending and shear. - Detailing and specifications, minimum covers, durability, distance of bars, permissible curvatures, reinforcement percentages. - Anchorage of steel bars, bond, anchorage types and hooks, basic development length. - Regional design codes and regulations, Eurocode 2. - Laboratory experiments and computer applications.				
Teaching Methodology	The course will be delivered through lectures, held in class and construction sites, as well as through computer laboratory demonstrations and discussions.				

Bibliography	Konstantinidis, A. (2008), Earthquake Resistant Buildings made of Reinforced Concrete: The Art of Construction and Detailing, Vol A, Alta Grafico SA. Konstantinides, A. and Bellos, J. (2013), Earthquake Resistant Buildings made of Reinforced Concrete: Static and Dynamic Analysis according to Eurocodes, Vol B, Alta Grafico SA. Reynolds, C.E., Steedman, J.C. and Threlfall, A.J. (2007), Reinforced Concrete Designer's Handbook, 11th Edition, CRC Press. Wang, C.K., Salmon, C.G. and Pincheira, J.A. (2007), Reinforced Concrete Design, 7th Edition, Addison-Wesley. Nilson, A.H., Darwin, D. and Dolan, C.W. (2010), Design of Concrete Structures, 14th Edition, McGraw Hill. Mosley, W.H, Hulse, R. and Bungey, J.H. (2012), Reinforced Concrete Design: to Eurocode 2, 7th Edition, Palgrave Macmillan. Wight, J.K. and MacGregor, J.G. (2011), Reinforced Concrete: Mechanics and Design, 6th Edition, Prentice Hall. IstructE (2006), Manual for the design of concrete building structures to Eurocode 2. IstructE (2006), Standard Method of Detailing Structural Concrete, 3rd Edition.
Assessment	The course will be assessed by coursework assignments, a midterm examination and a final examination.
Language	English/Greek

Course Type	REINFORCED CONCRETE DESIGN II				
Course Code	CE 420				
Course Type	Core/Elective				
Level	Undergraduate				
Year / Semester	Year 4 / Semester 7				
Teacher's Name	Carlo-Andrea Castiglioni				
ECTS	6	Lectures / week	2	Laboratories / week	1
Course Purpose and Objectives	The module aims to introduce the students to advanced reinforced concrete design, precast and prestressed concrete design and other special topics.				
Learning Outcomes	During the course students should obtain skills for the conception, analysis, and design of RC structures as buildings, bridges and shells. They are expected to evolve to earthquake conscious engineers with self-confidence, eager to ask critical questions about reinforced concrete structures and seek the appropriate answers.				
Prerequisites	CE 320	Required	None		

Course Content	The following topics will be covered in the lectures: - Design of two way slabs, flat slabs, non-rectangular slabs. - Design of footings. - Design of deep beams and corbels. - Design of slender columns. - Design of shear walls. - Design of frames. - Design in combined compression, buckling and torsion. - Design in punching and cracking. - Equivalent frame method. - Yield line analysis. - High temperatures and fire resistance design. - Seismic design and RC structures modelling. - Repair and strengthening of reinforced concrete structures. - Introduction to precast and prestressed concrete. - Materials, prestressing systems and anchorages. - Partial losses due to friction, anchorage slip, creep, shrinkage and relaxation. - Prestressed concrete technology and detailing. - Prestressed concrete structures design. - Ultimate limit state design. - Surveillance and certification of production control.
Teaching Methodology	The course will be delivered through lectures, held in class and construction sites, as well as through computer laboratory demonstrations and discussions.
Bibliography	Konstantinides, A. and Bellos, J. (2013), Earthquake Resistant Buildings made of Reinforced Concrete: Static and Dynamic Analysis according to Eurocodes, Vol B, Alta Grafico SA. Wang, C.K., Salmon, C.G. and Pincheira, J.A. (2007), Reinforced Concrete Design, 7th Edition, Addison-Wesley. McCormac, J.C. and Brown, R.H. (2008), Design of Reinforced Concrete, 8th Edition, Wiley. Nilson, A. H., Darwin, D., and Dolan, C.W. (2010), Design of Concrete Structures, 14th Edition, McGraw Hill. Wight, J.K. and MacGregor, J.G. (2011), Reinforced Concrete: Mechanics and Design, 6th Edition, Prentice Hall.
Assessment	The course will be assessed by coursework assignments, a midterm examination and a final examination.
Language	English/Greek

Course Type	STEEL DESIGN I
Course Code	CE 360
Course Type	Core/Compulsory
Level	Undergraduate
Year / Semester	Year 3 / Semester 6

Teacher's Name	Carlo-Andrea Castiglioni				
ECTS	6	Lectures / week	2	Laboratories / week	1
Course Purpose and Objectives	The module aims to introduce the students into the analysis and design of steel frame structures based on local codes, Eurocodes and international codes.				
Learning Outcomes	On completion of the course students should be able to correctly identify and apply loads on steel structures, use previous knowledge to analyse and to define the design values of axial and lateral forces and moments. The student should be able to correctly design steel sections for columns and beams and specify suitable rivets, bolt and weld connections.				
Prerequisites	CE 200, CE 210, CE 220	Required	None		
Course Content	The following topics will be covered in the lectures: - Metallurgy of iron, steel technology, steel properties, fastening, toughness, fatigue. - Classification of steel structures, structural forms, modern steel structures. - Fabrication, erection, maintenance of steel structures, advantages and disadvantages, methods of welding. - Steel frames and trusses, auxiliary columns, bracing, sheeting, foundation. - Ultimate and serviceability limit states, factors of safety, cross section classification, net area, single and compound cross sections. - Metal joining methods using rivets, welding and bolting, beam-column joints, beam-beam joints, column bases, eccentric connections, efficiency of joints. - Bearing-type bolts, high tension bolts, slip-resistant bolts, eye-bars, bolted connections. - Steel weldability, welding technology, destructive and non-destructive welding methods, welding parameters and welding consumables, welded connections. - Loads and load combinations. - Members under tension, compression, shear, bending, torsion and their combinations. - Biaxial bending of steel members under axial load, flexural and torsional buckling of steel members, slenderness ratio. - Static and dynamic, elastic and plastic analysis of steel frame structures. - Seismic design of single storey industrial buildings. - Design criteria, design of steel structures and steel connections. - Up-to-date steel design codes.				
Teaching Methodology	The module uses a variety of learning means such as lectures on the analysis and design of steel structures, practical laboratory exercises on bolting, welding control, column-beam joint erection, loading and lateral buckling of steel beams and visits to worksites of steel frame buildings.				
Bibliography	Trahair, N.S., Bradford, M.A., Nethercot, D. and Gardner, L. (2007), The Behaviour and Design of Steel Structures to EC3, 4th Edition, CRC Press.				

	British Standards (2007), Extracts from the Structural Eurocodes for students of structural design, PP1990:2007. Brettell, M. (2008), Steel Building Design: Worked Examples Open Sections, P364, Steel Construction Institute. Brettell, M. (2008), Steel Building Design: Worked Examples Hollow Sections, P374, Steel Construction Institute. Brown, D., Iles, D. and Andzio, E. (2009), Steel Building Design: Medium Rise Braced Frames, P365, Steel Construction Institute. Arya, C. (2009), Design of Structural Elements: Concrete, Steelwork, Masonry and Timber Designs to British Standards and Eurocodes, 3rd Edition, CRC Press. Davison, B., Graham W. and Owens, G.W. (2012), Steel Designers' Manual SCI, 7th Edition, Steel Construction Institute, Wiley-Blackwell.
Assessment	The course will be assessed by coursework assignments, a midterm examination and a final examination.
Language	English/Greek

Course Type	STEEL DESIGN II				
Course Code	CE 440				
Course Type	Core/Elective				
Level	Undergraduate				
Year / Semester	Year 4 / Semester 7				
Teacher's Name	Carlo-Andrea Castiglioni				
ECTS	6	Lectures / week	2	Laboratories / week	1
Course Purpose and Objectives	The course deals with the advanced analysis, design and detailing of structural components of multipart, multi-storey, spatial steel structures, based on local codes, Eurocodes and international codes.				
Learning Outcomes	On completion of the course students should be able to formulate mathematical models of complex steel structures, to apply loadings including wind and snow loads and to deal with fire and fatigue issues. Furthermore, they should know how to correctly select, analyse, design and draw detailing of steel sections, joints, trusses, plate girders, tension splices, side coverings, purlins, bases, decking and more.				
Prerequisites	CE 360	Required		None	
Course Content	The following topics will be covered in the lectures: - Multi-storey steel frame buildings, irregular geometry steel structures, hollow sections, cable supported roofs, complex spatial trusses, steel cranes, fuel storage tanks. - Special actions and loads, wind and snow loads.				

	- Finite element analysis of steel structures. - Fire and fatigue design of steel structures. - Seismic design of multi story steel buildings, capacity design. - Design of laterally supported and unsupported steel members. - Design of compression members. - Design of lacing and battening type columns. - Design of intermediate and bearing stiffeners. - Design of tension splices, lug angles, shear lags. - Design of plate girders. - Design of bolted, riveted and welded joints. - Design of column bases, gusseted bases. - Design of roof trusses, side coverings, purlins, gantry girders.
Teaching Methodology	The module uses a variety of learning means such as lectures on steel design and detailing, practical laboratory exercises on assembling small steel structures and visits to worksites of steel frame buildings.
Bibliography	Lothers, J.E. (1960), Advanced Design in Structural Steel, Prentice Hall. Trahair, N.S., M.A. Bradford, M.A., Nethercot, D. and Gardner, L. (2007), The Behaviour and Design of Steel Structures to EC3, 4th Edition, CRC Press. Li, Gou-Qiang and Li, Jin-Jin (2007), Advanced Analysis and Design of Steel Frames, 1st Edition, Wiley. Brett M. (2008), Steel Building Design: Worked Examples Open Sections, P364, Steel Construction Institute. Brett M. (2008), Steel Building Design: Worked Examples Hollow Sections, P374, Steel Construction Institute. Brown, D., Iles, D. and Andzio, E. (2009), Steel Building Design: Medium Rise Braced Frames, P365, Steel Construction Institute. Arya, C. (2009), Design of Structural Elements: Concrete, Steelwork, Masonry and Timber Designs to British Standards and Eurocodes, 3rd Edition, CRC Press. Davison, B., Graham W. and Owens, G.W. (2012), Steel Designers' Manual SCI, 7th Edition, Steel Construction Institute, Wiley-Blackwell.
Assessment	The course will be assessed by coursework assignments, a midterm examination and a final examination.
Language	English/Greek

Course Type	EARTHQUAKE ENGINEERING				
Course Code	CE 370				
Course Type	Core/Compulsory				
Level	Undergraduate				
Year / Semester	Year 3 / Semester 6				
Teacher's Name	Nikolaos Bakas				
ECTS	6	Lectures / week	2	Laboratories /	1

				week	
Course Purpose and Objectives	The module aims to: - introduce fundamental and advanced topics related to earthquake engineering, - master the knowledge in seismic response of structures, - teach causes of earthquake, wave propagation, earthquake intensity and scales, - overview earthquake effects on structures, - provide solid theoretical background for an earthquake-proof design and introduce professional practice and design codes.				
Learning Outcomes	On successful completion of this course, it is expected that students should be able to: - demonstrate a systematic understanding of the dynamic response of structures subject to harmonic, impulse and arbitrary loading, - know the principles of seismology, why earthquakes occur, how they are measured and categorized and the effect they may have on civil engineering structures, - understand the concepts of seismic forces and how they relate to structural dynamics, - distinguish between earthquake magnitude and earthquake damage, - employ the response spectrum method for the earthquake analysis of civil engineering structures, - learn fundamental principles on seismic design of structures according to Eurocodes, - design practical means for seismic isolation and critically estimate damping, - use software tools for the design and analysis of civil engineering structures.				
Prerequisites	None		Required	None	
Course Content	The following topics will be covered in the lectures: - Basic concepts and terms, dynamic response of simple structures, time response, frequency response, impulse response. - Basic seismology, earthquakes causes, characteristics of earthquake ground motions, ground excitation, earthquake waves, earthquake monitoring and assessment, earthquake magnitude and intensity measurement. - Soil Dynamic behaviour, wave propagation in geological structures, significance of soil/foundations on structural response. - Derivation of elastic response spectra, earthquake design spectra, earthquake design criteria, ground types, seismic risk, structural types, structural ductility, seismic Behaviour factor. - Seismic loads, random eccentricities, seismic load cases, space frame dynamic model. - Modal analysis, free and forced vibration analysis of frame structures, modal superposition methods, Square Root of Sum of Squares method (SRSS), Complete Quadratic Combination method (CQC), equivalent static lateral force method (Quasi-Static). - Principles of static and dynamic non-linear analysis. - Basics on modeling of structures for seismic analysis and design. - Design codes, design applications, damping mechanisms and				

	vibration isolation.
Teaching Methodology	The essential concepts are introduced and developed in lectures. Appropriate module materials and handouts will support these. Tutorial sessions, combined with computer laboratory demonstrations and discussions, provide the basis for further in-depth discussion and exploration.
Bibliography	Wiegel, R.L. (1970), Earthquake engineering, Prentice-Hall. Lindeburg, M.R. and McMullin, K.M. (2008), Seismic Design of Building Structures: A Professionals Introduction to Earthquake Forces and Design Details, 9th Edition, Professional Publications. Elnashai, A. and Di Sarno, L. (2008), Fundamentals of Earthquake Engineering, 1st Edition, Wiley. Erdey, C.K. (2009), Earthquake Engineering: Application to Design, 1st Edition, Wiley. Chopra, A.K. (2011), Dynamics of Structures: Theory and Applications to Earthquake Engineering, 4th Edition, Prentice-Hall.
Assessment	Students will carry out projects, concerning detailed earthquake analysis of RC buildings, with the use of commercial engineering software installed on computer laboratory, as well as selective verification of the results by hand calculations. The course assessment will be completed with a midterm examination and a final examination.
Language	English/Greek

Course Type	FOUNDATION ENGINEERING				
Course Code	CE 330				
Course Type	Core/Compulsory				
Level	Undergraduate				
Year / Semester	Year 3 / Semester 6				
Teacher's Name	Georgios Belokas				
ECTS	6	Lectures / week	2	Laboratories / week	1
Course Purpose and Objectives	The course aims to introduce the students into the foundations analysis and design, for a variety of buildings and cases, and the design of earth retaining structures.				
Learning Outcomes	On completion of the course students should be able to investigate the site conditions and use geotechnical data to correctly analyze. Identify and design the required foundations, and earth retaining structures for a particular project.				
Prerequisites	CE 200, CE 210, CE 220	Required		None	

Course Content	The following topics will be covered in the lectures: - Soil investigation and bearing capacity. - Factors to consider in foundation design, in-situ tests, selection of foundation type. - Analysis and design, spread-footing design, combined footing design, mat foundations, retaining wall design, sheet-pile wall design, single pile foundation, and pile group foundation design. - Caissons and cofferdams. - Introduction to seismic isolation systems, and control systems.
Teaching Methodology	The course will be delivered through lectures, seminars and computer laboratory demonstrations and discussions.
Bibliography	Tomlinson, M.J. (2001), Foundation Design and Construction, 7th Edition, Prentice Hall. Curtin, W.G., Shaw, G., Parkinson G., Golding, J. and Seward N. (2006), Structural Foundation Designers' Manual, 2nd Edition Wiley-Blackwell. Smith, I. (2006), Smith's Elements of Soil Mechanics, 8th Edition, Wiley-Blackwell. Chapman, T. et. al. (2012), ICE Manual of Geotechnical Engineering Vol 1: Geotechnical Engineering Principles, Problematic Soils and Site Investigation, ICE Publishing. Chapman, T. et. al. (2012), ICE Manual of Geotechnical Engineering Vol 2: Geotechnical Design, Construction and Verification, ICE Publishing. Mosley, W.H., Hulse, R. and Bungey, J.H. (2012), Reinforced Concrete Design: to Eurocode 2, 7th Edition, Palgrave Macmillan.
Assessment	The course will be assessed by coursework assignments, a midterm examination and a final examination.
Language	English/Greek

Course Type	COASTAL AND OFFSHORE ENGINEERING				
Course Code	CE 470				
Course Type	Core/Elective				
Level	Undergraduate				
Year / Semester	Year 4 / Semester 7				
Teacher's Name	Apostolos Michopoulos				
ECTS	6	Lectures / week	3	Laboratories / week	N/A
Course Purpose and Objectives	The course deals with the basic parameters involved in the analysis and design of coastal and offshore structures, such as breakwaters and quay walls for ports and harbours, seawalls and jetties for coastal protection, platforms and rigs for oil exploitation beneath sea bed. The sea waves are also analysed in detail since their influence on the design of maritime structures is of greatest importance.				

Learning Outcomes	On completion of the course students should know about the hydrodynamic of coastal and offshore structures and their static and dynamic behaviour. They should also be familiar with the wave generation, transformation and propagation and the effects on coastal lines and sea beds. Furthermore, the students should be very capable of designing wave crush barriers, coastal dikes, underwater pipe systems, offshore structures and of dealing with matters such as beach nourishment and harbour tranquillity.		
Prerequisites	None	Required	None
Course Content	The following topics will be covered in the course - Coastal and offshore structures hydrodynamics. - Hydrostatic stability of floating structures. - Wave generation and deformation mechanisms, statistical properties and spectra of waves, wave breaking, theory of radiation stresses, wave generated currents, interaction of sea waves and solid objects. - Coastal sediments, sample collection, statistical parameters, sea bed shear stress and roughness, wave friction coefficient. - Sediment motion activation, sediment suspension and transportation, transport rate, neutral line, sediment accumulations, monitoring techniques, CERC method. - Coastal line change and coastal reconnaissance, coastal obstacles and works, prediction and control of coastline evolution, coastal protection works, beach nourishment, harbour tranquillity. - Morrison's formula, large volume compact objects, MacCammy and Fychs cylinders, wave action loads on thin cylindrical elements, vertical cylindrical elements through sea surface or sea bed. - The catenaries, mooring buoys, floating moorings, rigid moorings, mooring systems, wave action loads, operational loads. - Design of structures parallel and perpendicular to the coastline. - Design of vertical breakwaters, coastal dikes and sea walls. - Design of underwater pipes, hydrodynamic loads, underwater pipe stability, design and lying.		
Teaching Methodology	The module will be delivered through lectures, seminars and practical examples. Visits on proper coastal line worksites will be arranged as well.		
Bibliography	Graff, W.J. (1981), Introduction to Offshore Structures: Design, Fabrication, Installation, Gulf Publishing Co. Sorensen, R.M. (1993), Basic Wave Mechanics: For Coastal and Ocean Engineers, 1st Edition, Wiley-Interscience. Sorensen, R.M. (2005), Basic Coastal Engineering, 3rd Edition, Springer. Chakrabarti, S. (2005), Handbook of Offshore Engineering, 2-volume set, 1st Edition, Elsevier Science. Hudspeth, R.T. (2006), Waves and Wave Forces on Coastal and Ocean Structures, World Scientific Pub Co Inc. Gerwick, B.C., Jr (2007), Construction of Marine and Offshore Structures, 3rd Edition, CRC Press. Sarpkaya, T. (2010), Wave Forces on Offshore Structures, 1st Edition, Cambridge University Press. Goda, Y. (2010), Random Seas and Design of Maritime Structures, 3rd Edition, World Scientific Publishing Company. Kamphuis, J.W. (2010), Introduction to Coastal Engineering and Management, 2nd Edition, World Scientific Publishing Company.		

Assessment	The course will be assessed by coursework assignments and a final examination or project.
Language	English/Greek

Course Type	BUILDING TECHNOLOGY				
Course Code	CE 100				
Course Type	Core/Compulsory				
Level	Undergraduate				
Year / Semester	Year 1 / Semester 2				
Teacher's Name	Dimitris Antoniou				
ECTS	6	Lectures / week	2	Laboratories / week	1
Course Purpose and Objectives	The course attempts an overall review of building materials and the way they are utilized in the design and structure process. The aim of the course is to inform students of the construction details, while it also insists on the quality of the overall results arising from any choice of material or construction method. The course deals with construction details of both load-bearing and architectural structural elements.				
Learning Outcomes	Student will be able to appreciate the properties of building materials and the way they co-exist with other material and be acquainted with the materials available in the market and their different use. Students will be able to represent and symbolize different materials in plans, sections and facades and to understand the significance of material choices to the aesthetic result of their project.				
Prerequisites	None		Required	None	
Course Content	The course refers to the construction details of simple buildings. The following topics will be covered in the lectures: - Selecting construction materials (material properties, strength, resistance, embodied energy, cost of extraction, fabrication and manufacturing, texture and colour, volume and mass, malleability and plasticity). - Selecting a building construction system (open and closed systems, traditional and industrial construction, constraints, information resources, recurring concerns) - Selecting a load-bearing reinforced concrete structure. - Columns, beams and shear walls. - Foundation, footings, footing beams, connecting beams, raft foundation.. - Slabs and roofs (flat, single pitch, double pitch, multiple ridges).				

	- Staircases. - Floors and ceilings (concrete slab, metal framing, wood-framing). - Internal and external masonry, curtain walls, light partitions. - Internal and external door and window frames. - General insulation against heat, water and sound. - Waterproofing of exposed ceilings and underground structures. - Plastering and tiling. - Rooms and utilities. - The human scale and ergonomic design. - Introduction to bioclimatic design.
Teaching Methodology	The module uses a variety of learning means such as lectures on special topics of construction and construction details, practical laboratory exercises on construction and measure drawing and visits to worksites in different phases of construction.
Bibliography	Allen, E. and Iano, J. (1990), Fundamentals of Building Construction: Materials and Methods, Wiley. Merritt, F/S., and Ricketts, J.T. (2000), Building Design and Construction Handbook, 6th Edition, McGraw-Hill. Kibert, C.J. (2005), Sustainable Construction: Green Building Design and Delivery, John Wiley & Sons. Ballard Bell, V. and Rand, P. (2006), Materials for Architectural Design, Lawrence King. Chudley, R. and Greeno R., (2010), Building Construction Handbook. Elsevier. Lyons, A. (2007), Materials for Architects and Builders, 3rd Edition, Butterworth-Heinemann.
Assessment	The course will be assessed by coursework assignments and a final examination or project.
Language	English/Greek

Course Type	HIGHWAY ENGINEERING				
Course Code	CE 300				
Course Type	Core/Compulsory				
Level	Undergraduate				
Year / Semester	Year 3 / Semester 5				
Teacher's Name	Michael Kalafatas				
ECTS	6	Lectures / week	3	Laboratories / week	N/A
Course Purpose and Objectives	This course aims to educate the students on the various aspects of road and highway engineering. It exposes them to urban road and highway design and planning and introduces them to rigid and flexible pavements design and engineering surveying for road alignment. The students become familiar with the materials used and the various practices adopted for				

	construction and they develop environmental concerns.		
Learning Outcomes	On completion of the course students will be able to: - demonstrate knowledge on road geometry, - appreciate materials and construction processes, - compute equivalent wheel loads, - perform strength tests and spatial design, - implement pavements design, - decide for appropriate maintenance and rehabilitation, - make earthworks computations and calculate costs (Bruckner), - evaluate road safety rules, - learn and use road and highway engineering software applications.		
Prerequisites	None	Required	None
Course Content	The following topics will be covered in the lectures - Dynamic motion of vehicles. - Road types and categories. - Road geometry. - Road materials and construction practice. - Road design (horizontal and vertical alignment). - Road cross section. - Equivalent wheel loads. - Strength tests. - Flexible and rigid pavement design. - Monitoring, maintaining, and rehabilitating flexible and rigid pavement systems. - Earthworks computations and costs. - Road safety.		
Teaching Methodology	The course will be delivered through lectures, individual tutorials and through practical examples.		
Bibliography	Rogers, M. (2008), Highway Engineering, 2nd Edition, Blackwell.		
Assessment	The course will be assessed by coursework assignments, a midterm examination and a final examination.		
Language	English/Greek		

Course Type	TRANSPORTATION PLANNING				
Course Code	CE 340				
Course Type	Core/Compulsory				
Level	Undergraduate				
Year / Semester	Year 3 / Semester 6				
Teacher's Name	Michael Kalafatas				
ECTS	6	Lectures / week	3	Laboratories / week	N/A

Course Purpose and Objectives	The course aims to reveal urban transportation problems, to emphasize the influencing factors, to provide an understanding of travel demand forecasting and to present the appropriate planning techniques for designing future transportation systems.		
Learning Outcomes	On completion of the course students should develop an understanding of factors underlying traveler choices of mode of travel and have a full knowledge of data required for transportation planning. They should be able to develop and interpret transportation plans, to determine the steps that are necessary to complete a long-range transportation plan, to account for the impact of federal rules and regulations for transportation planning, to evaluate the validity and source of information that comes from a sequence of travel forecasting models and to make trade-offs with multiple factors in project planning and design.		
Prerequisites	None	Required	None
Course Content	The following topics will be covered in the lectures - Introduction to transportation planning, characteristics and techniques. - Transportation systems design, land use, accessibility, demand analysis, infrastructure supply analysis, aggregate and disaggregate demand, economic aspects, cost models. - Transportation models, simulation methods, multiple linear regression analysis, factors underlying the choice of mode. - Demand-supply equilibration and network equilibria. - Travel characteristics, data collection, forecasting. - Trip assignment, modeling and evaluation techniques, trip generation, modal split, trip distribution, route assignment analysis. - Traffic assignment and management, traffic signals, pedestrians, accidents. - Freight planning, characteristic and forecasting. - Transit characteristics and design.		
Teaching Methodology	The course will be delivered through lectures, tutorials and practical examples.		
Bibliography	Papacostas C.S. and Prevedouros P.D. (2000), Transportation Engineering and Planning, 3rd Edition, Prentice Hall. Hanson S. and Giuliano G. (2004), The Geography of Urban Transportation, Guilford Press. Bruun, E., Schiller, P.L.L. and Litman, T. (2012), An Introduction to Sustainable Transportation: Policy, Planning and Implementation, Kindle Edition, Routledge.		
Assessment	The course will be assessed by coursework assignments, a midterm examination and a final examination.		
Language	English/Greek		

ANNEX B: MATERIAL COURSES DESCRIPTION

Course Type	ENGINEERING MATERIALS				
Course Code	CE 240				
Course Type	Compulsory				
Level	Undergraduate				
Year / Semester	Year 2 / Semester 4				
Teacher's Name	Natia Anastasi				
ECTS	6	Lectures / week	2	Laboratories / week	1
Course Purpose and Objectives	The aim of this course is to introduce the students into the principles of materials science at their molecular and atomic level, and explain their behaviour resulting from manipulations at that level.				
Learning Outcomes	On completion of the course students should be able to understand the reasons for the limitations of using various materials in engineering, thus bringing a knowledge base decision making process in their hands, rather than simply following design code requirements. Students will have the foundation knowledge to proceed to more advance subjects, such as a materials specialization.				
Prerequisites	None		Required	None	
Course Content	The following topics will be covered in the lectures – Fundamental concepts of materials science including the molecular crystalline structure and properties of materials and their relationship to material selection and system design. – Internal structures of several types of metals especially steel alloys, ceramics, and polymers are examined. – Mechanical, electrical, physical, and chemical properties. – Dislocations, defects, heat treatment. – Phase transformations. – Strain hardening, fatigue, corrosion, environmental degradation. – Laboratory demonstrations and experiments.				
Teaching Methodology	The course will be delivered through lectures, seminars and laboratory work.				
Bibliography	Callister, W.D. Jr., Rethwisch, D.G. (2008), Fundamentals of Materials Science and Engineering: An Integrated Approach, 3rd Edition, John Wiley & Sons. Ashby, M.F., Shercliff, H., Cebon, D. (2009), Materials: Engineering, Science, Processing and Design, 2nd Edition, Butterworth-Heinemann. Callister, W.D. (2010), Materials Science and Engineering, 8th Edition, John Wiley & Sons.				

	Fulay, P., Wright, W., Askeland, D.A. (2011), The Science and Engineering of Materials, 6th Revised Edition, Nelson Engineering.
Assessment	The course will be assessed by laboratory reports, a midterm examination and a final examination.
Language	English/Greek

Course Type	STRENGTH OF MATERIALS				
Course Code	CE 200				
Course Type	Core/Compulsory				
Level	Undergraduate				
Year / Semester	Year 2 / Semester 3				
Teacher's Name	Nikolaos Bakas				
ECTS	6	Lectures / week	2	Laboratories / week	1
Course Purpose and Objectives	The aim of this course is to introduce the students to the relationships of load and strength of materials, stresses and strains, and the geometrical properties of sections. It is also a stepping-stone course for more advance subjects.				
Learning Outcomes	On completion of this course students should also be able to analyze the stresses in the cross sections of beams and columns under normal, parallel or combined loading conditions on a plane surface, and any orientation, in two- and three-dimensional space. They should be able to optimize a selection of a load bearing cross section, based on properties of sections.				
Prerequisites	None		Required	None	
Course Content	The following topics will be covered in the lectures - Tensile and compressive stresses. - Normal and shear stresses. - Stress-strain relationship. - Shear stresses in bending. - Temperature stresses. - Ductile and brittle materials, strength properties of materials. - Section properties, centroids and moments of inertia. - Shear flow in thin-walled members, shear centroids. - Strain energy conservation, energy methods, principle of virtual work, Castigliano theorems, Betti-Maxwell theorems. - Circular load, creep, fatigue. - Eccentric loading. - Elementary beam theory, pure bending, skew bending, bending with axial force. - Analysis of stress and strain, principle stresses, principle directions.				

	Mohr's circle. - Combined stresses. - Two- and three-dimensional systems. - Strain energy of distortion. - Torsion theory, torsion of beams and shafts. - Buckling theory. - Elastoplastic behaviour of solids, yield criteria of Tresca.
Teaching Methodology	The course will be delivered through lectures and laboratory work.
Bibliography	Popov, E.P. (1978), Mechanics of Materials, SI Version, 2nd Edition, Prentice Hall. Timoshenko, S.P. and Gere, J.M. (1989), Theory of Elastic Stability, 2nd Edition, Dover. Ross, C.T.F., Case, J. and Chilver, A.H. (1999), Strength of Materials and Structures, Butterworth-Heinemann. Timoshenko, S.P. (2004), Strength of Materials, Elementary Theory and Problems, 3rd Edition, CBS Publishers & Distributors. Megson, T.H.G. (2005), Structural and Stress Analysis, 2nd Revised Edition, ButterHeinem. Gere, J.M. (2008), Mechanics of Materials, SI Edition, 7th Edition, Nelson Engineering.
Assessment	The course will be assessed by laboratory reports, a midterm examination and a final examination.
Language	English/Greek

ANNEX C: PRACTICAL TRAINING COURSE DESCRIPTION

Course Type	PRACTICAL TRAINING				
Course Code	ENGR 420				
Course Type	Compulsory				
Level	Undergraduate				
Year / Semester	Year 4 / Semester 7				
Teacher's Name	Member of Faculty (Practical Training Director)				
ECTS	3	Lectures / week	N/A	Laboratories / week	N/A
Course Purpose and Objectives	For engineering training purpose, it is required that students work in industrial firms, governmental organizations, or research centers involved in design and construction, for the acquisition of direct professional experience in engineering. They are required to apply and consolidate their knowledge acquired during their studies and to develop initiatives in areas where the combination of theoretical and practical knowledge is needed. Their work will be monitored by supervisors of the industry/organization and the University. Students should keep a working calendar and present their work in the form of a technical report and a hands-on presentation. The overall course objective is to expose students to work environment of engineering. In this respect, practical training is intended to: - Provide students with valuable practical work experience - Improve their team working skills and their communication skills - Expose students to the actual working culture and industrial practice - Allow students to extend their theoretical knowledge into practice, thus enhancing their understanding of engineering issues - Enable students to learn more about career fields - Enhance the students' engineering knowledge acquired in class through field experience - Allow students to acquire new technical skills and useful tools - Motivate students to practice the right working attitudes and professionalism to increase their employment potential - Help students gain self-confidence with on-the-job success - Give the training organizations an idea about the quality of future human resources - Enhance the relationship between the Engineering School and public and private sectors				
Learning Outcomes	On completion of the course, students should be able to: - Explain the importance of the practical working processes in building and construction projects - Gain knowledge of the building process and constructive planning and its execution at public authorities and/or construction companies				

	and/or engineering companies - Gain insight into technical and organizational relations within the company and/or public authorities - Explain the roles of the technicians and labors in building and construction projects - Apply the basic engineering knowledge to the construction processes - Use and expand the theoretical and practical knowledge and abilities so far acquired. - Apply appropriate hands-on methods in various working procedures related to construction engineering		
Prerequisites	None	Required	None
Course Content	Several of the following topics and tasks should be covered during training: - Participation in the constructive planning - Invitation to tender and award of contract - Preliminary construction - Financial planning - Cost and economics calculation - Job planning and scheduling - Plant engineering - Assignment of machinery - Construction assistance - Site management - Assignment of workers and machines - Control and acceptance of building works - Site measuring and accounting		
Teaching Methodology	The course will be delivered through introduction and briefing sessions in industry/organization, demonstrations regarding working processes in engineering projects and on-site trainings regarding practical construction process		
Bibliography	N/A		
Assessment	The course will be assessed with respect to: - Skills and tools introduced and methods learned during training - Technical report writing and hands-on presentation		
Language	English/Greek		

ANNEX D: PRACTICAL TRAINING GUIDELINES

PRACTICAL TRAINING DURATION

The qualifying student should spend at least 72 hours within a semester, that is at least six (6) hours per week for a period of twelve (12) weeks, in industrial firms, governmental organizations, or research centers involved in design and construction, for the acquisition of direct professional experience in engineering.

PRACTICAL TRAINING DIRECTOR

Practical training course is administered by a director who is a faculty member of the School of Architecture, Engineering, Land and Environmental Sciences with the following duties:

- Nominating eligible students for the training
- Receiving the evaluation reports from employers
- Planning and scheduling students' training
- Identifying suitable organizations, companies or otherwise, for student training
- Applying for the training placement on behalf of students
- Evaluating students' performance during training and reporting the final grade (on a 100% basis) to course office.

PRACTICAL TRAINING EVALUATION

The director/examiner will evaluate the students based on:

- Skills and tools introduced and methods learned during training
- Technical report writing and hands-on presentation

The director/examiner should take into consideration any delay by the student in submitting any of the required documents and may penalize the student for that delay.

PLACEMENT OF TRAINEES

It is the responsibility of the School of Architecture, Engineering, Land and Environmental Sciences to contact organizations within Cyprus and create training opportunities for eligible students. All nominated engineering students must contact the School Secretary and/or the Practical Training Director to finalize the required administrative procedures.

DELIVERABLES

Upon the completion of training, the student is required to submit two copies of his final technical report to the Practical Training Director at least one week before the student's scheduled presentation which must be before end of the final examination period of the current semester.

OBLIGATIONS OF TRAINING ORGANIZATIONS

Training organizations are kindly requested to do the following:

- Provide a well-structured training schedule for the whole training period before a student commences his training
- Utilize the trainee in a job related to the different fields of engineering in the different aspects of interests
- Provide the university with a filled evaluation form for each trainee at the end of the training period
- Allow and arrange for the university officials to visit the trainee(s) as and when required.

OBLIGATIONS OF TRAINEES

Students have to make sure that the following requirements are fully satisfied:

- They are well prepared for the work assignment and writing a quality report
- They keep the telephone number of the Practical Training Director as well as the telephone, fax numbers, and the e-mail of the School Secretary
- They have the following needed official documents from the School:
 - Official letter addressed to the training organization;
 - Contact information within the organization to use in case of major problems during training;
 - Evaluation form to be handed to the training supervisor at the organization.
- Spend at least 72 hours with the organization within a semester, that is at least six (6) hours per week for a period of ten (10) weeks
- Refrain from transferring to any other organization without written approval by both the University and the organization
- Send their contact address of the training firm to the University not later than the end of the second week of the beginning of training
- Ask for a training schedule from the training organization detailing the activities that will be performed during the training
- Abide by and obey all organization's effective rules and regulations
- Collect all information related to writing the final technical report
- Contact the Practical Training Director at the end of their training period to schedule a date for completing their final technical report within the specified deadline
- Complete their final technical report and prepare for the hands-on presentation immediately after their training period so that their personal experiences will be expressed efficiently

ANNEX E: INTERNAL QUALITY ASSURANCE SYSTEM

Process of a Program Evaluation

Every 3 to 5 years program coordinators organize a self-assessment based on the Basic Program Quality scan of PROSE, and produce an extensive Program Self-Assessment Report (P-SAR). Administrative units also produce a SAR, but on the basis of a selected list of thematic questionnaires in the PROSE system. In a SAR, descriptive elements are limited. The focus is on evaluation of strong and weak points. Key criteria are:

- Description of the program and course units
 - % of course units for which all course descriptions according to the Bologna declaration (learning outcomes, teaching methods, assessment criteria) are adequately present in the consulting section of the program, both from the viewpoint of the (potential) student and the educational expert.
- Validation of the program and course units
 - The extent to which the goals and methods are validated by internal and external experts/peers.
 - The adequacy with which the program has changed in the past 3 to 5 years.
 - The successful implementation of requirements formulated by a previous check-up or audit.
- Student attraction and student admission
 - Success of the program in relation to similar programs in other institutions
 - Validation of previously acquired competences
- Curriculum design
 - flexibility of the program
 - coherence of the program
- Teaching and learning methods
 - adequacy of teaching methods
 - innovative approaches
 - quality of teaching/tutoring practice
- Assessment
 - adequacy of assessment methods
 - innovative approaches
 - quality of assessment practice
- Study load and study progress
 - retention rates
 - passing rates
 - performance outcomes (performance of students who pass)
 - adequacy of study load and study duration
- Quality management
 - adequacy of the quality control in the program
 - quality of diagnostics and the improvement plans
 - performance of the improvement projects
- Organization
 - adequacy of academic staff in number and competence

- working conditions and opportunities for academic staff
- evaluation and support for academic staff
- adequacy of setting and equipment for teaching and learning

Quality Improvement Planning

On the basis of the self-assessment and review reports (in which intended improvement goals are identified), and on the basis of results of questionnaires, observations and measurements, the Quality Management unit coordinates and supports the quality improvement planning by making an inventory of plans, creating links between improvement projects, and accentuating progress and outcomes.

For this purpose, use is made of the PRIOR method in setting priorities for improvement plans (and by using the prioritizing suggestions in PODS (PROSE Online Diagnostics System). PODS is also used for elaborating project plans that contain 5 to 15 actions that have to be coordinated.

PROSE Online Diagnostics (PODS) is implemented in the operational management of Neapolis. The quality manager is the Online Account Manager (OAM) of PODS. Unit managers can have an access as online diagnostics managers, to activate and manage online consultations/questionnaires. The diagnostics result automatically in reports, ready to be used in consensus meetings or for decision-making.

PROSE Diagnostics are based on the involvement of many participants through the PODS online tool, and the discussion in a consensus group based on the questionnaire results. The system gives the opportunity to involve all teaching and administrative staff online, and then have a consensus meeting on the basis of the results. In this discussion, use is also made of satisfaction questionnaires. The consensus meeting produces the final scores (thus yielding the quality indicators based on self-assessment) and also the priorities for improvement.

Teaching staff can use PODS for organizing anonymous feedback from students. For this purpose, the Quality Management unit delivers a one-page guideline and a temporary access to the system. For certain purposes or units the anonymous survey option can be used, which allows users to generate custom-made questionnaires that can be filled out online by huge numbers of respondents without access limitations.

Indicators

Quality indicators are based in part on self-assessment by staff, which in their turn rely largely on feedback from respondents. Besides the quality indicators based on self-assessment, there are also indicators based on objective measurements. The set of indicators is revised at least every three years.

Neapolis chooses for a set of indicators that are essentially linked to quality issues. For example, the number of typographical errors in brochures may tell something about the printing process, but not about the quality of the content. It is dangerous to pin down the multidimensional quality of things to one element of it.

ANNEX F: CIVIL ENGINEERING BOOKS ORDER

PERIZITO CYPRUS LTD.

KENTAYPOY 42 Telephone 22349937

ΑΓΛΑΝΤΖΙΑ ,2113 ΛΕΥΚΩΣΙΑ Fax 22349938

VAT Registration No. : 10285811J E-mail perizitocypus@gmail.com

ORDER**14/06/2017**

ISBN	TITLE	PRICE (EURO)
9780415345026	Kirkman, J. (2006). Good Style - Writing for Science and Technology, 2nd Edition, Routledge.	53.00
9780070419995	Merritt, F/S., and Ricketts, J.T. (2000), Building Design and Construction Handbook, 6th Edition, McGraw-Hill	399.00
9781856694803	Ballard Bell, V. and Rand, P. (2006), Materials for Architectural Design, Lawrence King.	38.00
	Chudley, R. and Greeno R., (2010), Building Construction Handbook. Elsevier.	79.00
	Bannister, A., Stanley R. and Baker R. (1998), Surveying, 7th Edition, Prentice Hall.	65.00
9780230221574	Uren, J. and Price, W.F. (1994), Surveying for Engineers, 3rd Revised Edition, Palgrave Macmillan	59.00
	Irvine, W. and MacLennan, F. (2005), Surveying For Construction, McGraw-Hill.	55.00
	Ross, C.T.F., Case, J. and Chilver, A.H. (1999), Strength of Materials and Structures, Butterworth-Heinemann	104.00
	Timoshenko, S.P. (2004), Strength of Materials, Elementary Theory and Problems, 3rd Edition, CBS Publishers & Distributors	99.00
	Gere, J.M. (2008), Mechanics of Materials, SI Edition, 7th Edition, Nelson Engineering	99.00
9780471355564	West, H.H. and Geschwindner, L.F. (2002), Fundamentals of Structural Analysis, 2nd Edition, John Wiley & Sons	265.00
9780486472072	Timoshenko, S.P. and Gere, J.M. (1989), Theory of Elastic Stability, 2nd Edition, Dover	19.00
9780333677605	Williams, M.S. and Todd, J.D. (2000), Structures: Theory and Analysis, Palgrave Macmillan	65.00
9780471355564	West, H.H. and Geschwindner, L.F. (2002), Fundamentals of Structural Analysis, 2nd Edition, John Wiley & Sons.	265.00
9780080999364	Megson, T.H.G. (2005), Structural and Stress Analysis, 2nd Revised Edition, ButterHeinem	55.00
9780495295679	Kassimali, A. (2010), Structural Analysis, SI Edition, 4th Edition, CL-Engineering.	83.00
9781111426224	Kassimali, A. (2011), Matrix Analysis of Structures, 2nd Edition, CL-Engineering.	108.00
9780470990179	Neal, B.G. (1977), Plastic Methods of Structural Analysis, 3rd Revised Edition, Chapman and Hall	109.00
9783642069529	Fertis, D.G. (2010), Nonlinear Structural Engineering: With Unique Theories and Methods to Solve Effectively Complex Nonlinear Problems, Springer	189.00

9781119249252	Callister, W.D. Jr., Rethwisch, D.G. (2008), Fundamentals of Materials Science and Engineering: An Integrated Approach, 3rd Edition, John Wiley & Sons	54.00
9780080977737	Ashby, M.F., Shercliff, H., Cebon, D. (2009), Materials: Engineering, Science, Processing and Design, 2nd Edition, Butterworth-Heinemann.	54.00
9781305077102	Fulay, P., Wright, W., Askeland, D.A. (2011), The Science and Engineering of Materials, 6th Revised Edition, Nelson Engineering	73.00
9781118378151	Rogers, M. (2008), Highway Engineering, 2nd Edition, Blackwell.	43.00
	Papacostas C.S. and Prevedourous P.D. (2000), Transportation Engineering and Planning, 3rd Edition, Prentice Hall.	239.00
9781844076659	Bruun, E., Schiller, P.L.L. and Litman, T. (2012), An Introduction to Sustainable Transportation: Policy, Planning and Implementation, Kindle Edition, Routledge.	50.00
9783540292494	Freitas, M. (2009), Engineering Geology, Springer-Verlag Berlin Heidelberg.	85.00
9781111576776	Das, B. J. (1997), Principles of Geotechnical Engineering, 4th Edition, 712 pp, PWS-Kent Publishing Company, Boston, Massachusetts	87.00
9780070067493	Bowles, J.E. (1996), Foundation Analysis and Design, 5th Edition, 1004 pp, McGraw-Hill	80.00
9780130311801	Tomlinson, M.J. (2001), Foundation Design and Construction, 7th Edition, Prentice Hall.	69.00
9781405130448	Curtin, W.G., Shaw, G., Parkinson G., Golding, J. and Seward N. (2006), Structural Foundation Designers' Manual, 2nd Edition Wiley-Blackwell.	165.00
9780230302853	Mosley, W.H., Hulse, R. and Bungey, J.H. (2012), Reinforced Concrete Design: to Eurocode 2, 7th Edition, Palgrave Macmillan.	66.00
9780419258308	Reynolds, C.E., Steedman, J.C. and Threlfall, A.J. (2007), Reinforced Concrete Designer's Handbook, 11th Edition, CRC Press.	71.00
	Nilson, A.H., Darwin, D. and Dolan, C.W. (2010), Design of Concrete Structures, 14th Edition, McGraw Hill.	220.00
9781292106007	Wight, J.K. and MacGregor, J.G. (2011), Reinforced Concrete: Mechanics and Design, 6th Edition, Prentice Hall.	70.00
9781292042718	Thomson, W.T. (1997), Theory of Vibration with Applications, 5th Edition, Prentice Hall.	73.00
	Craig, R.R. and Kurdila, A.J. (2006), Fundamentals of Structural Dynamics, 2nd Edition, Wiley.	165.00
9780273774242	Chopra, A.K. (2011), Dynamics of Structures: Theory and Applications to Earthquake Engineering, 4th Edition, Prentice-Hall.	59.00
9781591264705	Lindeburg, M.R. and McMullin, K.M. (2008), Seismic Design of Building Structures: A Professionals Introduction to Earthquake Forces and Design Details, 9th Edition, Professional Publications.	230.00
9781118678923	Elnashai, A. and Di Sarno, L. (2008), Fundamentals of Earthquake Engineering, 1st Edition, Wiley.	95.00
9780470048436	Erdey, C.K. (2009), Earthquake Engineering: Application to Design, 1st Edition, Wiley.	140.00

9780415418669	Trahair, N.S., Bradford, M.A., Nethercot, D. and Gardner, L. (2007), The Behaviour and Design of Steel Structures to EC3, 4th Edition, CRC Press.	55.00
9780580694547	British Standards (2007), Extracts from the Structural Eurocodes for students of structural design, PP1990:2007.	255.00
9781119249863	Davison, B., Graham W. and Owens, G.W. (2012), Steel Designers' Manual SCI, 7th Edition, Steel Construction Institute, Wiley-Blackwell.	73.00
9780891169420	Shames, I. (1996), Energy and Finite Element Methods in Structural Mechanics: SI Units, Subsequent Edition, CRC Press.	135.00
9780486411811	Hughes, T.J.R. (2000), The Finite Element Method: Linear Static and Dynamic Finite Element Analysis, Dover Publications.	30.00
9781856176330	Zienkiewicz, O.C., Taylor, R.L. and Zhu, J.Z. (2005), The Finite Element Method: Its Basis and Fundamentals, 6th Edition, Butterworth-Heinemann.	107.00
9780415508780	Douglas, J. and Ransom, B. (2007), Understanding Building Failures, Taylor & Francis.	143.00
9781873394687	Robson P. (1999), Structural Appraisal of Traditional Buildings, Donhead Publishing. 7	55.00
9781402016257	Wasti, S.T. and Özcebe, G. (2003), Seismic Assessment and Rehabilitation of Existing Buildings, [NATO Science Series: IV: Earth and Environmental Sciences], 1st Edition, Springer.	129.00
9789048169214	Ansari, F. (2010), Sensing Issues in Civil Structural Health Monitoring, Springer.	199.00
9780071270113	Franzini, J.B. and Finnemore, J.E. (2001), Fluid Mechanics with Engineering Applications, 10th Edition, McGraw-Hill.	65.00
9780415672450	Chadwick, A., Morfett, J. and Borthwick, M. (2004), Hydraulics in Civil and Environmental Engineering, 4th Edition, CRC Press.	60.00
9780071831451	Ranald, G.V., Evett, J. and Liu, C. (2009), Fluid Mechanics and Hydraulics, 3rd Edition, McGraw-Hill.	25.00
	Subramanya, K. (2000), Engineering Hydrology, Tata McGraw-Hill.	229.00
9780872016941	Graff, W.J. (1981), Introduction to Offshore Structures: Design, Fabrication, Installation, Gulf Publishing Co.	152.00
9789812386120	Hudspeth, R.T. (2006), Waves and Wave Forces on Coastal and Ocean Structures, World Scientific Pub Co Inc.	229.00
9780849330520	Gerwick, B.C., Jr (2007), Construction of Marine and Offshore Structures, 3rd Edition, CRC Press.	143.00
9789814282406	Goda, Y. (2010), Random Seas and Design of Maritime Structures, 3rd Edition, World Scientific Publishing Company.	78.00
9781118741498	Mihelcic, J.R. and Zimmerman, J.B. (2009), Environmental Engineering: Fundamentals, Sustainability, Design, 1st Edition, Wiley.	189.00
9781439820629	Ukaga, O., Maser, C. and Reichenbach, M. (2010), Sustainable Development: Principles, Frameworks, and Case Studies (Social Environmental Sustainability), CRC Press.	83.00

9781466552166	Maser, C. (2012), Decision-Making for a Sustainable Environment: A Systemic Approach (Social Environmental Sustainability), CRC Press.	83.00
9780071141031	Canter, L.W. (1996), Environmental Impact Assessment, 2nd Edition, McGraw-Hill	265.00
9781566703697	Bregman, J.I. (1999), Environmental Impact Statements, 2nd Edition, CRC Press.	189.00
9789058095732	Stephenson, D. (2003), Water Resources Management, Taylor & Francis.	165.00
9781844076505	Lenton, R. and Muller, M. (2009), Integrated Water Resources Management in Practice: Better Water Management for Development, 1st Edition, Routledge.	55.00
9780470178522	Swamee, P.K. and Sharma, A.K. (2008), Design of Water Supply Pipe Networks, 1st Edition, Wiley-Blackwell.	142.00
9788461314775	Arnalich, S., Fortin, M. and Jimenez, A. (2011), Epanet and Development. How to Calculate Water Networks by Computer, Arnalich, Water and Habitat.	39.00

Total 7768.00

ANNEX G: CIVIL ENGINEERING JOURNALS ORDER
Provider: Interoptics

ISSN	Title Name	Format	Publisher Name	Total
0162-4075	Concrete International	Print	American Concrete Institute	194.57
0899-1561	Journal of Materials in Civil Engineering	Print	American Society of Civil Engineers	1,596.12
0733-9445	Journal of Structural Engineering	Print	American Society of Civil Engineers	2,449.15
0098-8847	Earthquake Engineering & Structural Dynamics	Print	John Wiley & Sons	5,754.62
1090-0241	Journal of Geotechnical and Geoenvironmental Engineering	Print	American Society of Civil Engineers	2,052.32
0733-9429	Journal of Hydraulic Engineering	Print	American Society of Civil Engineers	2,262.28
1084-0699	Journal of Hydrologic Engineering	Print	American Society of Civil Engineers	1,488.40
2473-2907	Journal of Transportation Engineering, Part A: Systems	Print	American Society of Civil Engineers	1,595.03
0733-9372	Journal of Environmental Engineering	Print	American Society of Civil Engineers	2,052.32
0733-950X	Journal of Waterway, Port, Coastal, and Ocean Engineering	Print	American Society of Civil Engineers	826.64

Totals 20,271.44

ANNEX H: PROFESSOR OR ASSOCIATE PROFESSOR POSITION IN CIVIL ENGINEERING

Neapolis University Pafos announces one academic position in the rank of Professor or Associate Professor in Civil Engineering

Neapolis University Pafos will launch a new undergraduate program in Civil Engineering and is seeking to recruit a Professor or Associate Professor in Civil Engineering, who will play a leading role in the development and teaching of the program in the specific subject area.

For the post of Professor or Associate Professor, candidates should have a Ph.D. in Civil Engineering, with at least 10 years or 6 years of teaching and/or research experience at a University, respectively. Substantial experience in the industry is a prerequisite. Preference will be given to the candidates who have served in senior administrative and university management positions. The post holder and the ideal candidate will be expected to provide considerable management academic and research leadership.

An internationally competitive remuneration package is offered according to qualifications and experience.

For an application pack [click here](#), tel.: +357 26843300, or email: hrd@nup.ac.cy

All applications should be addressed to Ms. Demetria Sofroniou by email. Applications should include a cover letter and Curriculum Vitae.

CLOSING DATE: 2nd December, 2016

JOB DESCRIPTION

Job Title: Professor /Associate Professor
Contacts Internal: Academic colleagues and administrative staff in the Department, School and University. External: Academic community in Engineering and professional bodies
Major Duties: • Be actively involved in the development of undergraduate and postgraduate programmes in Civil Engineering. • To teach undergraduate and/or postgraduate courses offered by the Department in both Greek and English. • To undertake administrative duties as may be required. • To teach on associated programmes offered by the School. • To be actively involved in research, that will result in publication in highly-rated journals. • To participate in R&D projects funded by the EU/local institutions. • To represent the School at seminars and conferences. • To promote the image of the School in the wider academic and business communities. • To supervise and guide research students.

- To enhance teaching innovation and contribute new research ideas.
- Expected to travel for potential marketing purposes.

PERSONAL SPECIFICATION ATTRIBUTES

	Professor	Associate Professor
PhD in Civil Engineering	Essential	Essential
Demonstrate a visionary and innovative personality	Essential	Essential
Previous university lecturing and teaching experience	Essential	Essential
Organisational and administrative skills	Essential	Essential
Ability to teach the programmes in both Greek and English	Essential	Essential
Ability to teach across a range of programmes, with evidence of teaching excellence	Essential	Essential
Ability to supervise doctorate thesis	Essential	Essential
Actively involved in research, with publications in journals	Essential	Essential
Ability to contribute to the Research strategy of the School	Essential	Essential
Be able to work in cooperation with colleagues and undertake appropriate administrative and managerial duties	Essential	Essential
Willingness to relocate and associate with the local community	Essential	Essential
Ability to contribute towards the School's teaching and research plans	Essential	Essential
Willingness for continuous personal and academic development	Essential	Essential
Actively demonstrate leadership skills	Essential	Desirable
Ability to communicate in Russian, Chinese or Arabic	Desirable	Desirable
Ability to adapt to change and be prepared to undertake a wide variety of responsibilities	Desirable	Desirable

ANNEX I: LECTURER OR ASSISTANT PROFESSOR POSITIONS IN CIVIL ENGINEERING

Neapolis University Pafos announces the following academic positions in the rank of Lecturer or Assistant Professor in Civil Engineering:

- 1. One academic positions with specialization in Soil Mechanics and Foundation design**
- 2. One academic positions with specialization in Road Engineering and Transportation planning**
- 3. One academic positions with specialization in Fluid Mechanics, Hydraulics and Hydrology**
- 4. One academic positions with specialization in Engineering Chemistry**

Neapolis University Pafos launches a new undergraduate programme in Civil Engineering and is seeking to recruit Lecturers and Assistant Professors in Civil Engineering for the development and teaching of the programme.

For the post of Lecturer or Assistant Professor candidates should have a PhD in Civil Engineering. In addition, for the post of Assistant Professor at least 3 years of teaching/research experience at a University are required. For both posts, academic experience, research record, scientific contribution, involvement in teaching and development of high quality undergraduate curricula will be considered. Experience in administration and in construction industry will also be an asset.

An internationally competitive remuneration package is offered according to qualifications and experience.

For an application pack [click here](#), tel.: +357 26843300, or email: hrd@nup.ac.cy

All applications should be addressed to Ms. Demetria Sofroniou by email. Applications should include a cover letter and Curriculum Vitae.

CLOSING DATE: 31st July, 2017

JOB DECSRIPTION

Job Title: Lecturer /Assistant Professor
Contacts Internal: Academic colleagues and administrative staff in the Department, School and University. External: Academic community in Engineering and professional bodies
Major Duties: • To teach courses offered by the Programme. • To teach on associated programmes offered by the School. • To be actively involved in research, that will result in publication in highly-rated journals. • To undertake administrative duties as may be required. • To participate in R&D projects funded by the EU/local institutions. • To represent the School at seminars and conferences. • To promote the image of the School in the wider academic and business communities.

- To supervise and guide research students.
- To enhance teaching innovation and contribute new research ideas.
- Expected to travel for potential marketing purposes.

PERSONAL SPECIFICATION ATTRIBUTES

	Lecturer	Assistant Professor
PhD in Civil Engineering	Essential	Essential
Demonstrate a visionary and innovative personality	Essential	Essential
Previous university lecturing and teaching experience	Essential	Essential
Organisational and administrative skills	Essential	Essential
Ability to teach the programmes in both Greek and English	Essential	Essential
Ability to teach across a range of programmes, with evidence of teaching excellence	Essential	Essential
Ability to supervise doctorate thesis	Essential	Essential
Actively involved in research, with publications in journals	Essential	Essential
Ability to contribute to the Research strategy of the School	Essential	Essential
Be able to work in cooperation with colleagues and undertake appropriate administrative and managerial duties	Essential	Essential
Willingness to relocate and associate with the local community	Essential	Essential
Ability to contribute towards the School's teaching and research plans	Essential	Essential
Willingness for continuous personal and academic development	Essential	Essential
Actively demonstrate leadership skills	Desirable	Desirable
Ability to communicate in Russian, Chinese or Arabic	Desirable	Desirable
Ability to adapt to change and be prepared to undertake a wide variety of responsibilities	Desirable	Desirable

Lecturer in GIS and Environmental Modelling

The Postgraduate Programme MSc in Environmental Impacts Assessment and Sustainability announces one academic position in the rank of Lecturer in GIS and Environmental Modelling.

Candidates should have a PhD in GIS and Environmental Modelling. The candidate's years of academic experience, research record and scientific contribution, involvement in teaching and development of high quality undergraduate and postgraduate curricula will be considered. An internationally competitive remuneration package is offered according to qualifications and experience.

For an application pack [click here](#), tel.: +357 26843300, or email: hrd@nup.ac.cy
All applications should be addressed to the Human Resources Department, by email at hrd@nup.ac.cy. Applications should include a cover letter and Curriculum Vitae.

CLOSING DATE: 31st July, 2017

JOB DESCRIPTION

Job Title: Lecturer in GIS and Environmental Modelling
Contacts Internal: Academic colleagues and administrative staff in the Programme, School and University. External: Academic community in Environmental Sciences and professional bodies
Major Duties: ▪ To teach courses offered by the Programme. ▪ To teach on associated programmes offered by the School. ▪ To be actively involved in research, that will result in publication in highly-rated journals. ▪ To undertake administrative duties as may be required. ▪ To participate in R&D projects funded by the EU/local institutions. ▪ To represent the School at seminars and conferences. ▪ To promote the image of the School in the wider academic and business communities. ▪ To supervise and guide research students. ▪ To enhance teaching innovation and contribute new research ideas. ▪ Expected to travel for potential marketing purposes.

Lecturer in GIS and Environmental Modelling	Essential / Desirable
PhD in GIS and Environmental Modelling	Essential
Demonstrate a visionary and innovative personality	Essential
Previous university lecturing and teaching experience	Essential
Organisational and administrative skills	Essential
Ability to teach the programme in both Greek and English	Essential
Ability to teach across a range of programmes, with evidence of teaching excellence	Essential
Ability to supervise doctorate thesis	Essential
Actively involved in research, with publications in journals	Essential
Ability to contribute to the Research strategy of the School	Essential
Be able to work in cooperation with colleagues and undertake appropriate administrative and managerial duties	Essential
Willingness to relocate and associate with the local community	Essential
Ability to contribute towards the School's teaching and research plans	Essential
Willingness for continuous personal and academic development	Essential
Actively demonstrate leadership skills	Desirable
Ability to communicate in Russian, Chinese or Arabic	Desirable
Ability to adapt to change and be prepared to undertake a wide variety of responsibilities	Desirable

Lecturer in Environmental Engineering with Emphasis on Environmental Impacts Assessment

The Postgraduate Program MSc in Environmental Impacts Assessment and Sustainability Management announces one academic position at the rank of Lecturer.

Candidates should have a PhD in Environmental Engineering or Civil Engineering or a related field. The candidate's years of academic experience, research record and scientific contributions, involvement in teaching and in the development of high quality undergraduate and graduate curricula will be considered.

An internationally competitive remuneration package is offered according to qualifications and experience.

All applications, including a cover letter and a Curriculum Vitae should be sent by email to the Human Resources Department at hrd@nup.ac.cy.

For an application click [here](#), tel: +357 26843300, or email: hrd@nup.ac.cy

CLOSING DATE: 30 July, 2017

JOB DESCRIPTION

Job Title: Lecturer in Environmental Engineering with Emphasis on Environmental Impacts Assessment
Department/School: Postgraduate MSc Program in Environmental Impacts Assessment and Sustainability Management
Contacts Internal: Academic colleagues and administrative staff in the Program and University. External: Academic community in Environmental Impacts Assessment and professional bodies.
Major Duties ☐ To teach postgraduate courses offered by the Program. ☐ Participation in PhD supervising Committees. ☐ To be actively involved in research, that will result in publication in highly-rated journals. ☐ To participate in R&D projects funded by the EU/local institutions. ☐ To develop the course material as needed. ☐ To undertake administrative duties as assigned by the Head of the Program. ☐ To represent the Program at seminars and conferences. ☐ To promote the image of the Program in the wider academic and business communities. ☐ To supervise and guide research students. ☐ To enhance teaching innovation and contribute to new research ideas.

Environmental Engineering with Emphasis on Environmental Impacts Assessment	Essential/ Desirable
PhD in Environmental Engineering or Civil Engineering or a related field	Essential
Previous university lecturing and teaching experience	Essential
Ability to teach in both Greek and English	Essential
Ability to communicate in Russian, Chinese or Arabic	Desirable
Ability to supervise doctorate thesis	Desirable
Participation in International Academic Networks and Fora	Essential
Ability to teach across a range of programmes, with evidence of teaching excellence	Essential
Actively involved in research, with publications in journals	Essential
Ability to contribute to the Research strategy of the department	Essential
Be able to work in cooperation with colleagues and undertake appropriate administrative and managerial duties	Essential
Willingness to relocate and associate with the local community	Essential
Ability to contribute towards the department's teaching and research plans	Essential
Organisational and administrative skills	Essential
Willingness for continuous personal and academic development	Essential
Actively demonstrate leadership skills	Desirable
Ability to adapt to change and be prepared to undertake a wide variety of responsibilities	Desirable

ANNEX J: CONTRACTOR'S STATEMENT

From: Costas Hadjimarkos <CostasH@LeptosEstates.com>
Date: 17 Jul 2017 10:21 AM
Subject: Neapolis University Civil engineering lab
To: Moleskis Andreas <a.moleskis@nup.ac.cy>
Cc: Linos Chrysostomou <Linus.Chrysostomou@neapolis.com>

Dear Andreas good morning

I would like to inform you that the Neapolis University civil engineering Lab has been completed.

Thank you

Best Regards

Costas Hadjimarcou
Construction manager

ANNEX K: ENGINEERING LAB PHOTOS

1. View from the parking area



2. Broad inside view



3. Strength of Materials and Concrete Technology Lab area



4. Natural and Artificial Lighting and Ventilation



5. Environmental Research & Fluid Mechanics Lab area



6. Antiseismic Technology Lab area – Emergency exit

ANNEX L: LAB EQUIPMENT ORDERS AND DOCUMENTS**ΣΥΜΦΩΝΙΑ Αρ. SPRC-055/17**

Μεταξύ της Εταιρείας Neapolis Academic Enterprises Ltd με την Εμπορική Επωνυμία Neapolis University Pafos (στα παρακάτω ο Αγοραστής) και της Εταιρείας Sprel Ltd (στα παρακάτω ο Πωλητής) που έγινε σήμερα Πέμπτη 29 Ιουνίου 2017,

Μαρτυρεί τα ακόλουθα

Ο Αγοραστής δέχεται να αγοράσει από τον Πωλητή προϊόντα (στα παρακάτω ο Εξοπλισμός), με τα οποία θα εξοπλίσει το:

1. Εργαστήριο Αντοχής Υλικών
2. Εργαστήριο Τεχνολογίας Σκυροδέματος
3. Εργαστήριο Αντισεισμικής Τεχνολογίας

σύμφωνα με τους ακόλουθους όρους και τιμές μονάδος:

1. Προϊόντα

No.	DESCRIPTION	TOTAL
1	Εξοπλισμός (καινούργιος και όχι μεταχειρισμένος)	
	1. Εργαστήριο Αντοχής Υλικών – ως το συνημμένο ΠΑΡΑΡΤΗΜΑ Α	€19.116,00
	2. Εργαστήριο Τεχνολογίας Σκυροδέματος – ως το συνημμένο ΠΑΡΑΡΤΗΜΑ Β	€12.622,00
	3. Εργαστήριο Αντισεισμικής Τεχνολογίας – ως το συνημμένο ΠΑΡΑΡΤΗΜΑ Γ	€34.307,00
	Ο Εξοπλισμός των εργαστηρίων Αντοχής Υλικών (α) και Τεχνολογίας Σκυροδέματος (β) είναι Ευρωπαϊκής κατασκευής και προέλευσης (Ηνωμένο Βασίλειο). Ο Εξοπλισμός του εργαστηρίου Αντισεισμικής Τεχνολογίας (γ) είναι Αμερικανικής κατασκευής και προέλευσης.	
2	Total	€66.045,00
3	VAT 19%	€12.548,55
4	Amount Payable	€78.593,55

2. Τιμές

Οι πιο πάνω συμφωνηθείσες τιμές αντιπροσωπεύουν τις τιμές κόστη (εργατικά, μεταφορικά, εκτελωνιστικά, κ.α.) όλου του **Εξοπλισμού** παραδοτέου και εγκατεστημένου στο **Neapolis University Pafos** και έτοιμου προς χρήση. Οι πιο πάνω τιμές περιλαμβάνουν ακόμη:

- Την εκπαίδευση του προσωπικού ως προς την χρήση του **Εξοπλισμού**.
- Όλα τα manuals για το software και hardware σε έντυπη και/ή ψηφιακή μορφή.
- Όλες τις αναβαθμίσεις (updates) σε software / firmware καθόλη τη διάρκεια που ο **Εξοπλισμός** θα βρίσκεται εντός εγγύησης

Η παράδοση του **Εξοπλισμού** θα γίνει σε συγκεκριμένο χώρο στη Πάφο που θα υποδείξει ο **Αγοραστής** στον **Πωλητή**. Ο **Πωλητής** δεσμεύεται να υποδείξει άμεσα στον **Αγοραστή** όλες τις απαραίτητες υποδομές και πιθανές εργασίες που απαιτούνται για την εγκατάσταση και ορθή χρήση του **Εξοπλισμού**.

3. Παράδοση

Σαν τελευταία ημερομηνία παράδοσης του **Εξοπλισμού** στο χώρο του **Αγοραστή** στη Πάφο και εκπαίδευσης των χειριστών που θα υποδείξει ο **Αγοραστής** προς τον **Πωλητή**, ορίζεται η **30^η Σεπτεμβρίου 2017 ή ενωρίτερα.**

4. Παραγγελθείσες ποσότητες

Ο **Πωλητής** αναλαμβάνει την υποχρέωση να παραδώσει τον **Εξοπλισμό** εντός του πιο πάνω συμφωνηθέντος χρονοδιαγράμματος. Τμηματική παράδοση μέρους του **Εξοπλισμού** επιτρέπεται μόνο κατόπιν γραπτής συνεννοήσεως του **Πωλητή** με τον **Αγοραστή**. Σε περίπτωση τμηματικής παράδοσης μέρους του **Εξοπλισμού** στο **Neapolis University Pafos** πριν την **20^η Ιουλίου 2017**, ο **Αγοραστής** θα καλύψει το επιπρόσθετο κόστος μεταφοράς το οποίο θα πρέπει να έχει συμφωνηθεί εκ των προτέρων μεταξύ **Πωλητή** και **Αγοραστή**. Σε περίπτωση κατά την οποία εξ' υπαιτιότητας του **Πωλητή** ο **Εξοπλισμός** δεν βρίσκεται παραδοτέος και πλήρως εγκατεστημένος στο **Neapolis University Pafos**, έτοιμος για χρήση, μέχρι το πιο πάνω συμφωνηθέν χρονοδιάγραμμα (σημείο 3 – Παράδοση), ο **Αγοραστής**, έχει το δικαίωμα να καταγγείλει την παρούσα συμφωνία και να διεκδικήσει νομικά όλα τα δικαιώματά του.

5. Ασφάλεια των προϊόντων

Ο Πωλητής αναλαμβάνει την υποχρέωση να παραδώσει στον Αγοραστή τον Εξοπλισμό και όλα τα απαραίτητα για τη χρήση του εξαρτήματα με ασφάλεια, χωρίς καταστροφές, ή άλλες ζημιές ή ελαττώματα.

6. Τρόπος πληρωμής

Ο Αγοραστής αναλαμβάνει την υποχρέωση να πληρώσει στον Πωλητή:

- ποσό **€39.296,77** (Ευρώ τριάντα εννέα χιλιάδες διακόσια ενενήντα έξι και 77/100 μόνο), συμπεριλαμβανομένου του ΦΠΑ, σαν προκαταβολή έναντι σχετικού τιμολογίου, με την υπογραφή της παρούσας συμφωνίας. Ο Πωλητής θα παραδώσει στον Αγοραστή Εγγυητική Επιστολή αντίστοιχου ποσού (ως συνημμένο δείγμα), προς όφελος του Αγοραστή, από αναγνωρισμένο Χρηματοπιστωτικό Ίδρυμα της Κύπρου, για την άνευ όρων κάλυψη/εγγύηση της πληρωμής αυτής και με λήξη την 30^η Οκτωβρίου 2017. Η Εγγυητική Επιστολή αποτελεί αναπόσπαστο μέρος της παρούσας Συμφωνίας.
- ποσό **€23.578,06** (Ευρώ είκοσι τρεις χιλιάδες πεντακόσια εβδομήντα οκτώ και 06/100 μόνο), συμπεριλαμβανομένου του ΦΠΑ, με την εγκατάσταση του Εξοπλισμού και την ετοιμασία του για χρήση από τους εξουσιοδοτημένους αντιπροσώπους του Αγοραστή.
- ποσό **€15.718,72** (Ευρώ δεκαπέντε χιλιάδες εφτακόσια δεκαοκτώ και 72/100 μόνο), συμπεριλαμβανομένου του ΦΠΑ, με το οποίο θα εξοφλείται πλήρως η οφειλή του Αγοραστή προς τον Πωλητή για την αξία του Εξοπλισμού, σε 30 μέρες από την ημερομηνία παράδοσης του Εξοπλισμού.
- Οποιοδήποτε ποσό που παραμένει απλήρωτο μετά την εξάντληση των πιο πάνω ημερομηνιών για λόγο που δεν οφείλεται στον Αγοραστή θα φέρει τόκο 9%.

7. Προδιαγραφές

Ο Εξοπλισμός θα πρέπει απαραίτητα να ικανοποιεί τις συγκεκριμένες προδιαγραφές που έχουν ζητηθεί από τον Αγοραστή και να συνάδει πλήρως με την προσφορά του

4

Πωλητή προς τον Αγοραστή με αριθμό Q2K1706123-NUP ημερομηνίας 22/06/2017 η οποία επισυνάπτεται και αποτελεί αναπόσπαστο μέρος της παρούσας Συμφωνίας.

8. Εγγύηση

Ο Εξοπλισμός θα καλύπτεται από την εγγύηση των κατασκευαστών, διάρκειας 1 (ενός) χρόνου, η οποία επεξηγείται στην προσφορά του Πωλητή προς τον Αγοραστή με αριθμό Q2K1706123-NUP ημερομηνίας 22/06/2017. Η εγγύηση του Πωλητή προς τον Αγοραστή περιλαμβάνει την δωρεάν αντικατάσταση προβληματικού Εξοπλισμού ή/και εξαρτημάτων του και όλα τα εργατικά που απαιτούνται για την αποκατάσταση βλαβών. Κατά τη διάρκεια της εγγύησης ο Πωλητής υποχρεούται να παρέχει δωρεάν στον Αγοραστή full maintenance και όλες τις προβλεπόμενες από τον κατασκευαστή συντηρήσεις του Εξοπλισμού.

9. Διατήρηση του τίτλου

Τα παραδοθέντα προϊόντα παραμένουν στην ιδιοκτησία του Πωλητή μέχρις ότου καταβληθεί στο ακέραιο το ποσό όπως περιγράφεται στο σημείο 6 – Τρόπος Πληρωμής παραπάνω. Ο Πωλητής διατηρεί το δικαίωμα να ανακαλέσει όλα τα παραδοθέντα προϊόντα και να απαιτήσει αποζημίωση για τυχόν απώλειες.

Οι Συμβαλλόμενοι

Οι Μάρτυρες

.....
1. Για το Neapolis University Pafos

.....
2. Για την Sprel Ltd

.....
2.



Sprel Ltd.
Resources for Education & Instrumentation

04 July 2017

Mr. Costas Loizides BA, LL.M
(Leptos Group Purchasing Manager)
Neapolis University of Paphos
Department of Engineering,
Tel. +357 26880415, Fax. +357 26880422,
Mob. +357 99647690
Costas.Loizides@leptosestates.com

Sub: Delivery times for the CIVIL Engineering Laboratory Equipments .
Contact Number SPRC-055/17 and Quotation Q2K1706123-NUP

Dear Mr. Loizides,

Thank you very much for choosing our company as your partner for this project.

With reference of the contact and quote, mentioned above and after consultation with the manufacturers (Placing the orders) , we are in position to estimate better delivery times as noted below:

1. Strength of materials Laboratory

Manufacturer: TecQuipment UK

Dispatch Date :01 September 2017 –Estimated delivery to your labs 15 September 2017

2. Concrete Technology Laboratory

Manufacturer: ELE International Ltd UK

Dispatch Date :11 August 2017 –Estimated delivery to your labs 1 September 2017

3. Earthquake Engineering Laboratory

Manufacturer: Quanser Inc. Canada

Dispatch Date : :04 September –Estimated delivery to your labs 12 September 2017

We keep trying to get better delivery dates from all manufacturers and find the faster route to Cyprus.

As soon as we can get better delivery date we shall let you know

Your Faithfully

Michael Souropetsis

Offices: 29, 29A Evagoras Pallikarides Str. Lykavitos CY1071 Nicosia - Postal Address: P.O.Box 28284 CY2092 Nicosia.
Tel: +357 22377159, +357 22375231 Fax: +357 22377284 - Email: sprel@cytanet.com.cy . www.sprel.com.cy



Bank of Cyprus

ΚΕΝΤΡΟ ΕΜΠΟΡΙΚΩΝ ΣΥΝΑΛΛΑΓΩΝ Λ/ΣΙΑΣ
ΛΕΩΦ. ΑΡΧ. ΜΑΚΑΡΙΟΥ Γ 39
Τ.Κ. 21472, 1599 ΛΕΥΚΩΣΙΑ
ΤΗΛΕΦΩΝΟ: 22121210
ΤΗΛΕΟΜΟΙΟΤΥΠΟ: 22120193

ΗΜΕΡΟΜΗΝΙΑ: 3 ΙΟΥΛΙΟΥ 2017
ΑΡΙΘΜΟΣ ΕΓΓΥΗΤΙΚΗΣ: 00193-02-0459500
ΛΗΞΗ: 30 ΟΚΤΩΒΡΙΟΥ 2017 στα γραφεία μας

ΕΓΓΥΗΤΙΚΗ ΕΠΙΣΤΟΛΗ

ΑΙΤΗΤΗΣ

SPREL LTD
Τ.Θ. 28284
2092 ΤΑΧΥΔΡΟΜΙΚΟ ΓΡΑΦΕΙΟ ΣΤΡΟΒΟΛΟ
ΛΕΥΚΩΣΙΑ

ΔΙΚΑΙΟΥΧΟΣ

NEAPOLIS ACADEMIC ENTERPRISES LTD
ΛΕΩΦ. ΔΑΝΑΗΣ 2
8042 ΠΑΦΟΣ

ΠΟΣΟ

EUR 39.296,77 (Ευρώ ΤΡΙΑΝΤΑ ΕΝΝΙΑ ΧΙΛΙΑΔΕΣ
ΔΙΑΚΟΣΙΑ ΕΝΕΝΗΝΤΑ ΕΞΙ ΚΑΙ 77/100)

Εγγυητική Επιστολή Προκαταβολής

- Κατά παράκληση του/των κυρίου/ων SPREL LTD (από τώρα και στο εξής καλούμενος/οι 'ο αιτητής') κρατούμε στη διάθεσή σας το πιο πάνω ποσό ως εγγύηση, για την από μέρους σας προκαταβολή ποσού EUR 39.296,77 (Ευρώ ΤΡΙΑΝΤΑ ΕΝΝΙΑ ΧΙΛΙΑΔΕΣ ΔΙΑΚΟΣΙΑ ΕΝΕΝΗΝΤΑ ΕΞΙ ΚΑΙ 77/100) προς τον αιτητή σύμφωνα με τους όρους της μεταξύ σας Συμφωνίας αρ. SPRC-055/17 ημερομηνίας 29 Ιουνίου 2017 για την Προμήθεια και Εγκατάσταση Εξοπλισμού Εργαστηρίων Αντοχής Υλικών - Τεχνολογίας Σκυροδέματος - Αντισεισμικής Τεχνολογίας στο Πανεπιστήμιο Νεάπολης - Πάφος και Εκπαίδευση Προσωπικού, το οποίο αναλαμβάνουμε να σας πληρώσουμε χωρίς αναφορά στον αιτητή και ανεξάρτητα από οποιαδήποτε ένσταση από μέρους του, αμέσως με τη λήψη της γραπτής απαιτήσεως σας στην οποία πρέπει να αναφέρετε ότι ο αιτητής δεν έχει εκπληρώσει τις υποχρεώσεις του δυνάμει της πιο πάνω Συμφωνίας και ότι ζητάτε πληρωμή σύμφωνα με την εγγύηση αυτή.
- Η εγγύηση μας αυτή θα τεθεί σε ισχύ μετά τη λήψη από τη Τράπεζα μας για λογαριασμό του/των αιτητή/τών του πιο πάνω ποσού της προκαταβολής.
- Εννοείται πάντοτε ότι η συνολική υποχρέωση της Τράπεζας σύμφωνα με την εγγύηση αυτή περιορίζεται στο πιο πάνω ποσό.
- Η εγγύηση μας αυτή ισχύει μέχρι της πιο πάνω ημερομηνία λήξεως.
- Οποιαδήποτε απαίτηση σύμφωνα με την εγγύηση αυτή πρέπει να υποβληθεί σε μας γραπτώς και έγκαιρα ώστε να βρίσκεται στα χέρια της Τράπεζας μέχρι την πιο πάνω ημερομηνία λήξης. Μετά την ημερομηνία αυτή οποιαδήποτε υποχρέωση μας τερματίζεται και η εγγύηση μας θα θεωρείται άκυρη και χωρίς ισχύ είτε η παρούσα μας επιστραφεί για ακύρωση είτε όχι.
- Η Εγγυητική Επιστολή θα διέπεται από και θα ερμηνεύεται με βάση και σύμφωνα με τους νόμους της Κυπριακής Δημοκρατίας και θα εμπίπτει στη δικαιοδοσία των Κυπριακών Δικαστηρίων.

ΤΡΑΠΕΖΑ ΚΥΠΡΟΥ ΔΗΜΟΣΙΑ ΕΤΑΙΡΙΑ ΛΤΔ

Χαρτόσημο Πληρωμένο

Αριθμός Εγγυητικής Επιστολής: 00193-02-0459500

Page 1 of 1

001-01-1583 500.000φ 7.2015/249


Sprel Ltd.

Resources for Education - Test & Measurement

 29, 29A Evagoras Pallikarides Str.,
 Lykavitos, CY-1071 Nicosia
 P.O.Box 28284, 2092 Nicosia, Cyprus
 Tel: +357 22377159 / 22375231
 Fax: +357 22377284
 Email: spre1@cytanet.com.cy
 Web: www.sprel.com.cy

4888
ΑΠΟΔΕΙΞΗ ΕΙΣΠΡΑΞΕΩΣ - RECEIPT VOUCHER

V.A.T. 10040436 Η • Τ.Π.Ο. 12049430 Τ

 Ελήφθη από **NEAPOLIS UNIVERSITY**

Received from

 Το ποσό των Ευρώ **Τρίαντα εννέα χιλιάδες διακόσια οκτώ**

The sum of Euro

€ 39.296,77c

 Διά **€ 77 / 100 μόνο**

For

 Μετρητά ☐ **Επιταγή** ☒ **Τράπεζα** ☐

Cash

Cheque

Bank

 Αρ. Επιταγής **29315555**

Ch... N°

 Ημερομηνία **30/6/2017**

Date

ΠΑΡΑΡΤΗΜΑ Α - ΕΡΓΑΣΤΗΡΙΟ ΑΝΤΟΧΗΣ ΥΛΙΚΩΝ

	Model	Description	Qty	Unit Price
A/A	a.	Universal compressive and tensile strength testing machine (up to 100kN)		
1	SM1000	UNIVERSAL TESTING MACHINE:	1	€ 9,265.00
2	SM1000B	HAND OPERATED PUMP (included free of charge)	1	€ 0.00
3	TH4015	TENSILE SPECIMEN (M/S NORMALISED) set of 5:	1	€ 124.00
4	TH4035	TENSILE SPECIMEN (0.4% CARBON) set of 5:	1	€ 146.00
5	TH4010	TENSILE SPECIMEN (M/S AS DRAWN) set of 5:	1	€ 105.00
6	VDAS-B	VDAS (BENCH MOUNTED VERSION): recommended ancillaries	1	€ 854.00
	b.	Shearing Force and Bending Moment tester (Two units offered)		
7	STR2	BENDING MOMENTS IN A BEAM	1	€ 1,205.00
8	STR3	SHEAR FORCE IN A BEAM	1	€ 1,299.00
9	c.	Torsion tester		
	STR6	TORSION OF CIRCULAR SECTIONS	1	€ 2,203.00
	d.	Buckling tester		
10	STR12	BUCKLING OF STRUTS	1	€ 1,643.00
11	STR1	UNIVERSAL TEST FRAME	1	€ 750.00
12	STR1A	DIGITAL FORCE DISPLAY	1	€ 429.00
13	STR2000	AUTOMATIC DATA ACQUISITION UNIT	1	€ 1,093.00
14		TOTAL		€ 19,116.00

ΠΑΡΑΡΤΗΜΑ Β - ΕΡΓΑΣΤΗΡΙΟ ΤΕΧΝΟΛΟΓΙΑΣ ΣΚΥΡΟΔΕΜΑΤΟΣ (Concrete Technology Laboratory)

A/A	Model	DESCRIPTION		Qty	Unit Price	Total Price
		36-3280/01				
		Concrete Compression Tester Force Capacity 2000 Kn				
1	Description	ADR Touch 2000 BS EN Compression Machine with Digital Readout and Self Centring Platens		1	€ 11,570.00	€ 11,570.00
		Accessories:				
2	37-5120	Distance Piece to BS1881 50mm Effective Height		2	€ 243.00	€ 486.00
3	37-5170	Distance Piece to BS1881 80mm Effective Height		1	€ 260.00	€ 260.00
4	35-5180	Distance Piece to BS1881 100mm Effective Height		1	€ 306.00	€ 306.00
5		TOTAL				€ 12,622.00

ΠΑΡΑΡΤΗΜΑ Γ - ΕΡΓΑΣΤΗΡΙΟ ΑΝΤΙΣΕΙΣΜΙΚΗΣ ΤΕΧΝΟΛΟΓΙΑΣ (Earthquake Engineering Laboratory)

A/A	QUOTATION Model	Sprel Ltd		Qty	Unit Price	Total Price
		Shake Table II Workstation with 2x AMD	Description			
1	Shake Table II Experiment		This portable, bench-scale shake table moves along a single axis, however, two tables can be coupled for dual axis, x-y operation. Developed in cooperation with the University Consortium on Instructional Shake Tables (UCIST) and recommended by the Consortium to more than 100 institutional members. It offers a wide table-top surface which can accommodate several structures to increase the complexity of the experiment. Includes Laboratory Guide, User Manual, and pre-designed controllers.	1	€ 16,630.00	€ 16,630.00
2	AMPAQ-PWM Amplifier		A single channel pulse width modulated (PWM) current amplifier, Quick Start Guide and User Manual included	1	€ 5,859.00	€ 5,859.00
3	Q8-USB Data Acquisition Board		8 channel - USB Data Acquisition Board Quick Start Guide and User Manual included	1	€ 2,701.00	€ 2,701.00
4	QUARC for Windows - Single User License		QUARC for Windows - Single User License QUARC 2.5 - Real Time Control Software is a multifunctional rapid controls development and deployment environment for use with The Matlab/Simulink Software. Please see on-line documentation for full feature list, descriptions and compatibility.	1	€ 458.00	€ 458.00
5	AMD01 - Complete Active Mass Damper Experiment		Complete Active Mass Damper Experiment AMD01 - 1 Floor - building structure for vibration control with accelerometer, track and cart modules. Includes Instructor and Student Manuals, User Manual and pre-designed controllers.	2	€ 3,102.00	€ 6,204.00
6	VoltPAQ-X2 Amplifier		2 channel linear voltage-controlled amplifier. - Quick Start Guide and User Manual included.	1	€ 2,455.00	€ 2,455.00
7			TOTAL			€ 34,307.00


Spirel Ltd.
Resources for Education and Instrumentation

V.A.T. Reg. No.: CY10049436R
T.I.C. No.: 12049436T

QUOTATION

Attn: Costas Loizides BA, LL.M (Leptos Group Purchasing Manager)
Neapolis University of Paphos
Department of Engineering,
Tel. +357 26880415, Fax. +357 26880422, Mob. +357 99847690
Costas.Loizides@leptosstates.com

Your ref: E-mail request
Subject: CIVIL ENGINEERING LAB

22-Jun-2017
Q2K1706123-NUP

Dear Costas,
Following your request for Civil Engineering Training equipment, find below our proposal for your information.
In our proposal we have included systems that are suitable for University Level Laboratory Training, including Data acquisition units and teaching software.
(Computers are not included in this quote)
All systems are offered itemized, for you to make a selection. Data sheets are included within the links below.

Model	Description	Qty	Unit Price	Total Price
1	Εργαστήριο Αντοχής Υλικών (Strength of Materials Laboratory)			
A	Universal compressive and tensile strength testing machine (up to 100 kN)			€ 19,116.00
SM1000	SM1000 - UNIVERSAL TESTING MACHINE	1	€ 9,265.00	€ 9,265.00
	A versatile test machine, that with optional ancillaries, allows a range of destructive and non destructive material tests to be completed. Includes set of tensile test specimens of different grades of steel for comparison experiments. http://www.tecquipment.com/DataSheets/SM1000_1015.pdf			
	<i>Essential Ancils: SM1000B and some specimens</i>			
SM1000B	SM1000B - HAND OPERATED PUMP	1	€ 0.00	€ 0.00
TH4015	TH4015 - TENSILE SPECIMEN (M/S NORMALISED) set of 5	1	124.00 €	€ 124.00
	Tensile test specimen for use with the TecEquipment Universal Testing Machine (SM100 or SM1000) Material: 0.1% carbon steel Specification: 230M07 Condition: Normalised 900 deg. C			
TH4035	TH4035 - TENSILE SPECIMEN (0.4% CARBON) set of 5	1	146.00 €	€ 146.00

	Tensile test specimen for use with TecQuipment's Universal Testing Machine (SM100 or SM1000) Material: 0.4% carbon steel Specification: 212A42 Condition: Normalised 860 deg. C			
TH4010	TH4010 - TENSILE SPECIMEN (M/S AS DRAWN) set of 5	1	105.00 €	€ 105.00
	Tensile test specimen for use with TecQuipment's Universal Testing Machine (SM100 or SM1000) Material: 0.1% carbon steel Specification: 230M07 Condition: as drawn			
VDAS-B	VDAS-B - VDAS (BENCH MOUNTED VERSION) A bench mounting versatile data acquisition system (VDAS) to allow computer-based data capture for a wide range of TecQuipment products. <i>Optional Item</i>	1	€ 854.00	€ 854.00
SM1000A	SUPPORTING TABLE AND CUPBOARD Optional supporting table and cupboard specifically tailored for use with TecQuipment's SM1000 Universal Test Machine (To be provided by the University)	1		
B	Shearing Force and Bending Moment tester (Two units offered)			
STR2	BENDING MOMENTS IN A BEAM A simply supported beam apparatus to demonstrate and investigate the bending moments and forces within a structure. http://www.tecquipment.com/Datasheets/STR2_0516.pdf Essential Ancils: STR1, STR1A Recommended Ancils: STR2000	1	€ 1,205.00	€ 1,205.00
STR3	SHEAR FORCE IN A BEAM A simply supported beam apparatus to demonstrate and investigate the shear forces within a structure by use of a loaded beam designed to move in shear only. http://www.tecquipment.com/Datasheets/STR3_1115.pdf Essential Ancils: STR1, STR1A Recommended Ancils: STR2000	1	€ 1,299.00	€ 1,299.00
C	Torsion tester			
STR6	TORSION OF CIRCULAR SECTIONS An experimental apparatus to allow students to investigate the relationship between torque and deflection in the elastic region of solid sections in various materials and a single tubular section. http://www.tecquipment.com/Datasheets/STR6_1115.pdf Essential Ancils: STR1, STR1A Recommended Ancils: STR2000	1	€ 2,203.00	€ 2,203.00
D	Buckling tester			
STR12	BUCKLING OF STRUTS An experimental apparatus to allow students to investigate the deflection and stability of struts (slender columns). http://www.tecquipment.com/Datasheets/STR12_1115.pdf Essential Ancils: STR1, STR1A Recommended Ancils: STR2000 Essential Ancils (Quantities depends on the number of stations required- pls choose number of units) We have offered 3 stations	1	€ 1,643.00	€ 1,643.00

STR1	UNIVERSAL TEST FRAME	1	€ 750.00	€ 750.00
	A sturdy lightweight aluminium bench-mounting frame to provide rigid support for the interchangeable experimental modules in TecQuipment's Structures Range (STR2 - STR20).			
	http://www.tecquipment.com/Datasheets/STR1_1115.pdf			
STR1A	DIGITAL FORCE DISPLAY	1	€ 429.00	€ 429.00
	A hardware module to simultaneously measure and display the output of up to 4 force sensors mounted on experiments in TecQuipment's Structures Range (STR2 -STR20).			
	http://www.tecquipment.com/Datasheets/STR1a_1115.pdf			
	Recommended Ancils (Computer Aided experiment/ Data acquisition) - (Number of Units again depends on the actual stations required. Please select accordingly)			
STR2000	AUTOMATIC DATA ACQUISITION UNIT	1	€ 1,093.00	€ 1,093.00
	A computer interface module with ADA software that allows the hardware experiments in TecQuipment's Structures Range to be interfaced to a PC (not included).			
	http://www.tecquipment.com/Datasheets/STR2000_1115.pdf			
2	Εργαστήριο Τεχνολογίας Σκυροδέματος (Concrete Technology Laboratory)			€ 12,622.00
A	Concrete Compression Tester (Capacity 500 KN, cubes 50mm-100mm)			
	http://www.ele.com/Product/adr-touch-2000-bs-en-compression-machine-with-digital-readout-and-self-centring-platens-			
36-3280/01	ADR Touch 2000 BS EN Compression Machine with Digital Readout and Self Centring Platens. Accessories	1	€ 11,570.00	€ 11,570.00
37-5120	Distance Piece to BS1881 50mm Effective Height	2	€ 243.00	€ 486.00
37-5170	Distance Piece to BS1881 80mm Effective Height	1	€ 260.00	€ 260.00
37-5180	Distance Piece to BS1881 100mm Effective Height	1	€ 306.00	€ 306.00
3	Εργαστήριο Αντισεισμικής Τεχνολογίας (Earthquake Engineering Laboratory)			€ 34,307.00
	http://www.quanser.com/Products/shake_table			
A	Shake Table II Workstation with 2x AMC			
Shake Table II Experiment	Shake Table II Experiment This portable, bench-scale shake table moves along a single axis, however, two tables can be coupled for dual axis, x-y operation. Developed in cooperation with the University Consortium on Instructional Shake Tables (UCIST) and recommended by the Consortium to more than 100 institutional members. The Shake Table II offers a wide table-top surface which can accommodate several structures to increase the complexity of the experiment. This table has been used in outreach programs involving community services as well as K-12 education. Includes Laboratory Guide, User Manual, and pre-designed controllers.	1	€ 16,630.00	€ 16,630.00
AMPAQ-PWM Amplifier	AMPAQ-PWM Amplifier - A single channel pulse width modulated (PWM) current amplifier - Quick Start Guide and User Manual included	1	€ 5,859.00	€ 5,859.00

age 3

Q8-USB Data Acquisition Board	Q8-USB Data Acquisition Board - 8 channel - USB Data Acquisition Board - Quick Start Guide and User Manual included	1	€ 2,701.00	€ 2,701.00
QUARC for Windows - Single User License	QUARC for Windows - Single User License QUARC 2.5 - Real Time Control Software is a multi-functional rapid controls development and deployment environment for use with The Matlab/Simulink Software. Please see on-line documentation for full feature list, descriptions and compatibility.	1	€ 458.00	€ 458.00
AMD01 - Complete Active Mass Damper Experiment	AMD01 - Complete Active Mass Damper Experiment AMD01 - 1 Floor - building structure for vibration control with accelerometer, track and cart modules. Includes Instructor and Student Manuals, User Manual and pre-designed controllers.	2	€ 3,102.00	€ 6,204.00
VoltPAQ-X2 Amplifier	VoltPAQ-X2 Amplifier - 2 channel linear voltage-controlled amplifier. - Quick Start Guide and User Manual included.	1	€ 2,455.00	€ 2,455.00
Εργαστήριο Γεωδαισίας/Τοπογραφίας (Geodesic/Land Surveying Laboratory)				
A	One Auto Level		No offer	
B	One Total Station		No offer	
C	Two Laser Distance Meters		No offer	
TOTAL				€ 66,045.00
VAT (19%)				€ 12,548.55
Grand Total				€ 78,593.55

Prices: Prices quoted are in EURO, VAT is as shown
Validity: Validity of Quotation 30 days
Payment terms: 50% advanced payment 30% on delivery and 20% after Installation and Demonstration
Delivery time: ITEM 1: 10-12 weeks, upon receipt of your confirmed order
ITEM 2: 5-6 weeks, upon receipt of your confirmed order
ITEM 3: 10-12 weeks, upon receipt of your confirmed order
Warranty: One-Year (1) against poor workmanship and material / component failure during normal use of the unit.

If you have any questions concerning this quotation please contact our office for more information.
Look forward of receiving your order.

Best regards,

Accepted by:

Position:

Signature

Michael Souropetis
(Director)

Offices: 29, 29A Evagoras Pallikarides Str. Lykavitos CY1071 Nicosia - Postal Address: P.O.Box 28284 CY2092 Nicosia
Tel: +357 22377159 / 22375231 - Fax: +357 22377284 Email: sprel@cytanet.com.cy www.sprel.com.cy



Quotation

OUR REF.: GOF230617-1GB

TO: NEAPOLIS UNIVERSITY PAFOS
ATTN: MR. COSTA LOIZIDES

FROM: GEOSYSCO LTD

EMAIL: COSTAS.LOIZIDES@LEPTOSESTATES.COM

PAGES: 3

TEL: +357 26880415

DATE: 23/6/2017

SUBJECT: QUOTATION FOR TRIMBLE SURVEYING PRODUCTS

Dear Mr. Loizides

We thank you very much for your interest regarding Trimble products, which we represent in the market of Cyprus.

In the following pages you will find our quotation for the requested instruments.

We remain at your disposal for any additional information might needed.

Kind Re

GeoSys

Lazaros

Director



Geosysco Geoinformation Systems Company Ltd, VAT: CY10347676F, Registration Number: HE347676

17D Hytron Str, Nicosia, Cyprus, 1075, Tel.: 00357223232497, Url: www.geosysco.com.cy, email: info@geosysco.com.cy

1

Financial Data

Trimble M3 Mechanical TOTAL STATION

Part Number	Description	Item price w/o VAT
M3-01-5000	Trimble M3 DR 5" Total Station, w/Trimble Access, Optical Plummet <i>Accessories in BOM (Case, 2x Battery, Charger, Optical Plummet, EndLess Clamps)</i>	€ 6.100,00
ACC-7040-T	Telescopic pole 2.5m with carrying case (QTY : 2)	€ 164,00
PA-PT02	Prism with target and carrying case (QTY : 2)	€ 300,00
SEC-5402-12	Wooden tripod SECO	€ 100,00
SPH-QM95	Laser Spectra Precision QM95 200m (QTY : 2)	€ 600,00
SPL-AL24M	Auto Level AM24M	€ 250,00
SA-AGR5_0.5	Aluminum 5m Telescopic Staff with 0.5cm graduation, bubble and case.	€ 75,00
PA-TS75Q	Aluminum Tripod with clump	€ 70,00
ΣΥΝΟΛΟ		€ 7.659,00

17D Hytron Str, Nicosia, Cyprus, 1075, Tel.: 0035722222497, Url: www.geosysco.com.cy, email: info@geosysco.com.cy

Quotation Terms

Prices

The individually indicated prices do not include VAT.

Delivery

Typically within 10 working days after the reception of the down-payment.

Payment

40% with the order and the rest 60% + VAT NET 30.

Training

One day training is included at your premises.

Warranty

The Trimble M3 Total Station is covered by 24 months limited warranty by Trimble. This warranty covers every part and/or the whole unit in the case that they have proven to be faulty from the beginning or during the initial 24 months period after the procurement, subject that the usage instructions have been followed and the fault is not caused by improper use or drop. The Trimble Access field software is covered by 12 months warranty.

The Spectra Precision Auto Levels are covered by 12 months limited warranty. This warranty covers every part and/or the whole unit in the case that they have proven to be faulty from the beginning or during the initial 12 months period after the procurement, subject that the usage instructions have been followed and the fault is not caused by improper use or drop.

The Spectra Distance Laser are covered by 3 years limited warranty.

Manuals

Complete user manuals for software (field, office) and hardware offered in digital form.

Updates software/firmware

Any update about software/firmware is provided free of charge within the warranty period.

Quotation validation

This quotation is valid for one (1) month.

We remain at your disposal for any other further question or clarification.

Best Regards,

GeoSysCo LTD
Lazaros Ioannou
Director



GEOSYS CO GEOINFORMATION SYSTEMS LIMITED

 6th Kolokotroni Str, 1st floor, Office 6 • 1101 • NICOSIA • CYPRUS
 ☎ +35722232497 • www.geosysco.com.cy • info@geosysco.com.cy

INVOICE		DATE	Our Ref
		June 30 th , 2017	IN300617-NT-027
From: GEOSYS CO GEOINFORMATION SYSTEMS LIMITED 6th Kolokotroni Str, 1 st floor, Office 6, 1101, NICOSIA, CYPRUS TIN#: 12347676H VAT#: CY10347676F BANK DETAILS: EUROBANK CYPRUS Ltd IBAN Num.: CY04018000010000200100285610 SWIFT Code: ERBKY2N 41 Arch. Makarios III Avenue Nicosia, Cyprus For credit of: GEOSYS CO GEOINFORMATION SYSTEMS LIMITED		Bill To: Neapolis University Paphos A.F.M.: 12177501H 2 Danaïs Avenue, Paphos, 8042, Cyprus Tel: 00357 26 843 300, Fax: 00357 26 843 434 Ship To: Same as above Purpose: Sale of goods Currency: Euro	
PAYMENT TERMS	DELIVERY TERMS	DELIVERY TIME	SHIPMENT METHOD
40% in advance – 60% 30 Days NET		July 17 th 2017	
ITEM	DESCRIPTION	Serial Number	QTY
M3-01-5000	M3 DR 5" Total Station w/Trimble Access, Optical Plummet (incl. Case, 2 x battery, Charger, Optical Plummet, endless clumps)		1
ACC-7040-T	Telescopic Pole 2.5m with carrying case		2
PA-PT02	Prism with target and carrying case		2
SEC-5402-12	Wooden Tripod SECO		1
SPH-QM95	Laser Spectra Precision QM95 200m		2
SPL-AL24M	Auto Level AM-24M		1
SA-AGR5_0.5	Aluminium 5m telescopic staff w. bubble		1
PA-TS75Q	Aluminium tripod with clump		1
TOTAL			€ 7.659,00
DISCOUNT			€ 159,00
TOTAL after DISCOUNT			€ 7.500,00
VAT 19%			€ 1.425,00
Grand Total			€ 8.925,00

ANNEX M: APPLICATIONS AND PERMITS OF AUTHORITIES

ΚΥΠΡΙΑΚΗ ΔΗΜΟΚΡΑΤΙΑ
ΥΠΟΥΡΓΕΙΟ ΔΙΚΑΙΟΣΥΝΗΣ
ΚΑΙ ΔΗΜΟΣΙΑΣ ΤΑΞΕΩΣ

ΑΡΧΗΓΕΙΟ ΠΥΡΟΣΒΕΣΤΙΚΗΣ
ΥΠΗΡΕΣΙΑΣ ΚΥΠΡΟΥ
Τ.Θ.12206 – 2342 ΛΑΚΑΤΑΜΙΑ

Αρ. Φακ. Π.Υ.343/6/ΣΧ 2422
Αρ. Τηλ. 22802424
Αρ. Φαξ. 22321529
E-mail: cyprusfireservice@fs.gov.cy
www.fs.gov.cy

17 Ιουλίου 2017

Δήμαρχο Πάφου

Οικοδομή: Πανεπιστήμιο / Κολλέγιο (Αλλαγή χρήσης μέρους
Πανεπιστημίου σε Κολλέγιο και Προσθηκομετατροπές)

Αιτητής: MULIA ROCKS LTD

Αρ. Αιτ.: 89/2017, Πάφος

Αναφέρομαι στην επιστολή σας με αρ. Αιτ. 89/2017 ημερομηνίας 19.06.2017 και σας πληροφορώ ότι τα σχέδια της πιο πάνω οικοδομής εξετάστηκαν και παρατηρήθηκε ότι υπήρχε ανάγκη βελτίωσης των μέσων διαφυγής.

Κατόπιν τούτου και προς αποφυγή καθυστέρησης ενημερώθηκε ο αρχιτέκτονας / μελετητής ο οποίος ήρθε στο γραφείο μου, διόρθωσε και μονόγραψε τα σχέδια ώστε τα μέσα διαφυγής να κρίνονται ικανοποιητικά.

Με βάση τα πιο πάνω η έκδοση της ζητούμενης άδειας συστήνεται και οι απόψεις μου παραμένουν ως έχουν στην προηγούμενη μου επιστολή προς εσάς με τον ίδιο αρ. φακ. ημερομ. 26.01.2009 αντίγραφο της οποίας σας επισυνάπτεται.

(Χαράλαμπος Λιμναίτης Υπ/μος)
Υπεύθυνος
Τμήματος Πυροπροστασίας
Για Δ/ντη Πυροσβεστικής Υπηρεσίας

Κοιν.- Πυρ. Σταθμό Πάφου

ΘΗ

ΟΛΗ Η ΑΛΛΗΛΟΓΡΑΦΙΑ Ν' ΑΠΕΥΘΥΝΕΤΑΙ ΣΤΟ ΔΙΕΥΘΥΝΤΗ ΠΥΡΟΣΒΕΣΤΙΚΗΣ ΥΠΗΡΕΣΙΑΣ ΜΟΝΟ



ΚΥΠΡΙΑΚΗ ΔΗΜΟΚΡΑΤΙΑ
ΥΠΟΥΡΓΕΙΟ ΔΙΚΑΙΟΣΥΝΗΣ
ΚΑΙ ΔΗΜΟΣΙΑΣ ΤΑΞΕΩΣ

ΑΡΧΗΓΕΙΟ ΠΥΡΟΣΒΕΣΤΙΚΗΣ
ΥΠΗΡΕΣΙΑΣ ΚΥΠΡΟΥ
Τ.Θ.24028 - 1700 ΛΕΥΚΩΣΙΑ

Αρ. Φακ. Π.Υ.343/6/ ΣΧ2422

26 Ιανουαρίου, 2009

Αρ. Τηλ. 22802424
Αρ. Φαξ. 22321529
E-mail: cyprusfireservice@fs.gov.cy
www.fs.gov.cy

Δήμαρχο Πάφου,

Οικοδομή: Ιδιωτικό Πανεπιστήμιο
(αλλαγή χρήσης ξενοδοχείου)

Αιτητής: MULIA ROCKS LTD

Αρ. Αίτ.: 221/08, Πάφος

Αναφέρομαι στην επιστολή σας με αρ. Αίτ. 221/08 ημερομ. 23.1.2009 και σας πληροφορώ ότι τα νέα σχέδια που αφορούν αλλαγή χρήσης ξενοδοχείου σε ιδιωτικό πανεπιστήμιο εξετάστηκαν και παρατηρήθηκε ότι υπήρχε ανάγκη βελτίωσης των μέσων διαφυγής.

Κατόπιν τούτου και προς αποφυγή καθυστέρησης ενημερώθηκε ο αρχιτέκτονας / μελετητής ο οποίος ήρθε στο γραφείο μου, διόρθωσε και μονόγραψε τα σχέδια ώστε τα μέσα διαφυγής να κρίνονται ικανοποιητικά.

Με βάση τα πιο πάνω η έκδοση της ζητούμενης άδειας συστήνεται με τους πιο κάτω όρους:-

1. **Μέσα Διαφυγής**

- (1) Οι πιο κάτω θύρες να κατασκευαστούν με πυρίμαχα υλικά $\frac{1}{2}$ ώρας και να είναι αυτόματης επαναφοράς στην κλειστή θέση σύμφωνα με το συνημμένο Παράρτημα «Πυρίμαχη Θύρα»:-
 - (α) Οι θύρες εισόδου των κλιμακοστασίων και των προθαλάμων τους σε όλα τα επίπεδα.
 - (β) Οι θύρες που διαχωρίζουν τους κοινόχρηστους διαδρόμους σ' όλα τα επίπεδα. Η πυρίμαχη κατασκευή να συνεχίζεται μέχρι τη πλάκα του κάθε ορόφου.
 - (γ) Οι θύρες των αποθηκών που ανοίγουν μέσα στους κοινόχρηστους διαδρόμους σ' όλα τα επίπεδα.

- (δ) Οι θύρες που σημειώνονται στα σχέδια με τα κόκκινα γράμματα «F.R.S.C.».
- (2) Τα κλιμακοστάσια να διαθέτουν μόνιμο φυσικό αερισμό στο πιο ψηλό τους σημείο εμβαδού 1 τ.μ.
- (3) Όλα τα κλιμακοστάσια να διαθέτουν συνεχείς χειρολαβές και στις δυο τους πλευρές.
- (4) Πάνω από τις θύρες που σημειώνονται στα σχέδια με το κόκκινο γράμμα «Ε» να τοποθετηθούν πινακίδες εξόδου, κατάλληλα σηματοδοτημένες, που να φωτίζονται τόσο με το συνηθισμένο όσο και με το έκτακτο σύστημα φωτισμού.
- (5) Οι θύρες εξόδου που σημειώνονται στα σχέδια με τα κόκκινα γράμματα «Σ.Π.» να εφοδιαστούν με σύρτη πανικού μόνο.
- (6) Στην περίμετρο της οικοδομής να μην υπάρχουν ανοίγματα (θύρες / παράθυρα) σ' απόσταση μικρότερη των 2 μ. από τα παράθυρα των κλιμακοστασίων.

2. Κουζίνες / Υγραέριο

- (1) Οι θύρες εισόδου των κουζίνων που επικοινωνούν με τους υπόλοιπους χώρους της οικοδομής να κατασκευαστούν με πυρίμαχα υλικά $\frac{1}{2}$ ώρας και να είναι αυτόματης επαναφοράς στην κλειστή θέση σύμφωνα με το συνημμένο Παράρτημα «Πυρίμαχη Θύρα».
- (2) Σε περίπτωση χρήσης μαγειρικών συσκευών υγραερίου οι κύλινδροι να τοποθετηθούν έξω από το κτίριο, σ' ανοικτό χώρο και η παροχή υγραερίου προς τις συσκευές να γίνει με μεταλλικό σωλήνα εγκριμένου τύπου.
- (3) Μέσα στις κουζίνες να εγκατασταθεί ειδική συσκευή η οποία σε περίπτωση απώλειας υγραερίου να ενεργοποιείται και ν' αποκόπτει αυτόματα την παροχή υγραερίου προς τη μαγειρική συσκευή και επιπρόσθετα να θέτει σε λειτουργία σύστημα σήμανσης συναγερμού μέσα στις κουζίνες.

3. Έκτακτος Φωτισμός

Να γίνει εγκατάσταση συστήματος έκτακτου φωτισμού σύμφωνα με το συνημμένο Παράρτημα «Έκτακτος Φωτισμός».

4. Σύστημα Συναγερμού

Να γίνει εγκατάσταση συστήματος σήμανσης συναγερμού με το ποίο να ειδοποιούνται οι φοιτητές και το προσωπικό σε περίπτωση πυρκαγιάς. Το σύστημα να λειτουργεί με κουδούνια ή σειρήνες και να εργάζεται με ηλεκτρισμό τόσο από τη συνηθισμένη όσο και από ανεξάρτητη ηλεκτρική παροχή. Τα σημεία σήμανσης του συναγερμού να τοποθετηθούν κοντά στις εξόδους, σ' όλους τους ορόφους.

ΟΛΗ Η ΑΛΛΗΛΟΓΡΑΦΙΑ Ν' ΑΠΕΥΘΥΝΕΤΑΙ ΣΤΟ ΔΙΕΥΘΥΝΤΗ ΠΥΡΟΣΒΕΣΤΙΚΗΣ ΥΠΗΡΕΣΙΑΣ ΜΟΝΟ

5. **Ανιχνευτές Πυρκαγιάς**

Μέσα σε όλους τους χώρους να γίνει εγκατάσταση ανιχνευτών πυρκαγιάς οι οποίοι να λειτουργούν σε συνδυασμό με το σύστημα συναγερμού τόσο από τη συνηθισμένη όσο και από ανεξάρτητη ηλεκτρική παροχή. Το σύστημα συναγερμού και ανιχνευτών πυρκαγιάς να καταλήγει σε κεντρικό πίνακα στον οποίο να καθορίζονται οι ζώνες πυρκαγιάς του κτιρίου.

6. **Αγωγοί - Ducts**

Οι αγωγοί (Ducts) να διαχωριστούν εξ' ολοκλήρου από τους υπόλοιπους χώρους με πυρίμαχα υλικά 1 ώρας (τοιχοποιία). Οι θυρίδες ελέγχου να είναι της ίδιας αντοχής στην πυρκαγιά και να διατηρούνται μόνιμα στη κλειστή θέση.

7. **Λεβητοστάσιο / Πετρέλαιο**

- (1) Η κατασκευή του λεβητοστασίου και η εγκατάσταση του λέβητα να γίνουν σύμφωνα με το συνημμένο Παράρτημα "Πυροπροστασία σε λεβητοστάσια με καυστήρα πετρελαίου".
- (2) Για την αποθήκευση του πετρελαίου να ζητηθούν οι απόψεις της Αρμόδιας Αρχής.

8. **Πυροσβεστικός εξοπλισμός**

(1) **Τυλκίτηρες νερού**

Να γίνει εγκατάσταση τυλκίτηρων νερού που να καλύψει όλους τους ορόφους σύμφωνα με το συνημμένο παράρτημα "Τυλκίτηρας Νερού".

(2) **Φορητοί πυροσβεστήρες**

Για τον ακριβή αριθμό, τον τύπο και την εγκατάσταση των φορητών πυροσβεστήρων επιφυλάσσω τις απόψεις μου όταν το κτίριο θα είναι έτοιμο να λειτουργήσει.

(Π. Χατζηβασίλειου Υπ/μος)
Υπεύθυνος
Τμήματος Πυροπροστασίας
Για Δ/ντη Πυροσβεστικής Υπηρεσίας

Κοιν:- Πυρ. Σταθμό Πάφου
ΦΚ/

ΟΛΗ Η ΑΛΛΗΛΟΓΡΑΦΙΑ Ν' ΑΠΕΥΘΥΝΕΤΑΙ ΣΤΟ ΔΙΕΥΘΥΝΤΗ ΠΥΡΟΣΒΕΣΤΙΚΗΣ ΥΠΗΡΕΣΙΑΣ ΜΟΝΟ

ΠΥΡΟΣΒΕΣΤΙΚΗ ΥΠΗΡΕΣΙΑ ΚΥΠΡΟΥ

ΠΑΡΑΡΤΗΜΑ

ΠΥΡΙΜΑΧΗ ΘΥΡΑ ½ ΩΡΑΣ

Η θύρα πυρίμαχης αντοχής για ½ ώρα πρέπει να είναι κατασκευασμένη σύμφωνα με τα διεθνή πρότυπα και προδιαγραφές και να πληρεί τουλάχιστον τα πιο κάτω:-

1. Να είναι ξύλινη και να έχει τις πιο κάτω διαστάσεις:-
 - (α) Πλάτος 0,80 - 0,95 μέτρα
 - (β) Ύψος 2,00 - 2,15 μέτρα
 - (γ) Πάχος 45 χλμ. (Συμπαγής θύρα με σκληρή ξυλεία)
2. Να είναι εφαρμοσμένη σε σκελετό αντοχής στην πυρκαγιά για 1 ώρα.
3. Η εφαρμογή της να είναι τέτοια που να μην επιτρέπει τη διέλευση του καπνού και των θερμών αερίων.
4. Να διαθέτει μηχανισμό αυτόματης επαναφοράς στην κλειστή θέση και ν' ανοίγει με απρόωξιμο αντίστοιχου βάρους 20 κιλών.
5. Η τοποθέτηση πυρίμαχου γυαλιού πάνω στη θύρα επιτρέπεται με τις πιο κάτω προϋποθέσεις:
 - (α) Η ξύλινη κατασκευή γύρω από το γυαλί να έχει πλάτος τουλάχιστον 155 χλμ. και η εφαρμογή του να γίνει με ξύλο (πατούδα) διατομής τουλάχιστον 25X25 χλμ και στις δυο πλευρές της θύρας.
 - (β) Το γυαλί να έχει ελάχιστο πάχος 6 χλμ και να είναι οπλισμένο εσωτερικά με συρμάτινο πλέγμα όχι αραιότερο από 12 χλμ και με ελάχιστη διάμετρο σύρματος 26 g.
 - (γ) Το γυαλί να διαχωρίζεται σε πλαίσια των οποίων το εμβαδόν να μην υπερβαίνει το 0,40 τ.μ. και το συνολικό εμβαδόν τους να μην υπερβαίνει τα 1,20 τ.μ.
6. Στις δυο πλευρές της θύρας και σε ύψος 1,50 μ. περίπου από το δάπεδο να τοποθετείται σήμα διαμέτρου 8 εκ. με τις λέξεις "ΠΥΡΙΜΑΧΗ ΘΥΡΑ ΠΑΝΤΑ ΚΛΕΙΣΤΗ" όπως το σήμα που φαίνεται πιο κάτω. Τα γράμματα να είναι άσπρα σε μπλε πλαίσιο.

ΠΥΡΙΜΑΧΗ ΘΥΡΑ
ΠΑΝΤΑ ΚΛΕΙΣΤΗ

FIRE DOOR
KEEP SHUT

ΠΥΡΟΣΒΕΣΤΙΚΗ ΥΠΗΡΕΣΙΑ ΚΥΠΡΟΥ

ΠΑΡΑΡΤΗΜΑ

ΕΚΤΑΚΤΟΣ ΦΩΤΙΣΜΟΣ

1. Ο έκτακτος φωτισμός πρέπει να φωτίζει όλους τους κοινόχρηστους χώρους, τα κλιμακοστάσια, τους διαδρόμους, τις θύρες εξόδου, τις πινακίδες εξόδου, τα βέλη που δείχνουν την κατεύθυνση των εξόδων, τους χώρους υγιεινής και να είναι ικανοποιητικός ώστε να βοηθά τους ενοίκους / θαμώνες να εγκαταλείπουν με ασφάλεια το κτίριο σε περίπτωση πυρκαγιάς ή άλλης έκτακτης ανάγκης.
2. Η ανεξάρτητη παροχή ενέργειας / ηλεκτροδότησης να επιτυγχάνεται με τα πιο κάτω συστήματα:
 - (α) Ηλεκτρική γεννήτρια
 - (β) Συσκευές αυτοδύναμες με ενσωματωμένο συσσωρευτή
3. Το σύστημα του έκτακτου φωτισμού να τίθεται σε λειτουργία αμέσως και αυτόματα όταν διακοπεί η συνηθισμένη ηλεκτρική παροχή. Σε περίπτωση τμηματικής διακοπής κατά την οποία δεν τίθεται αυτόματα σε λειτουργία η ανεξάρτητη παροχή ενέργειας (γεννήτρια), να λαμβάνεται πρόνοια για εγκατάσταση ικανοποιητικού αριθμού αυτοδύναμων μονάδων έκτακτου φωτισμού (SELF CONTAINED UNITS).
4. Το σύστημα του έκτακτου φωτισμού κρίνεται ικανοποιητικό εφόσον προσφέρει φωτισμό για περίοδο τουλάχιστον 2 ωρών.

ΠΥΡΟΣΒΕΣΤΙΚΗ ΥΠΗΡΕΣΙΑ ΚΥΠΡΟΥ

ΠΑΡΑΡΤΗΜΑ

ΠΥΡΟΠΡΟΣΤΑΣΙΑ ΣΕ ΛΕΒΗΤΟΣΤΑΣΙΑ ΜΕ ΚΑΥΣΤΗΡΑ ΠΕΤΡΕΛΑΙΟΥ

1. Το λεβητοστάσιο (λέβητας, καυστήρας, κυκλοφορητής, κλειστό δοχείο διαστολής κλπ εξαρτήματα) τοποθετείται σε ανεξάρτητο χώρο της οικοδομής με είσοδο / έξοδο προς ελεύθερο χώρο.
2. Η δεξαμενή πετρελαίου τοποθετείται επίσης σε ανεξάρτητο χώρο της οικοδομής, πλησίον του λεβητοστασίου, με είσοδο / έξοδο προς ελεύθερο χώρο.
3. Επιβάλλεται ο επαρκής φυσικός εξαερισμός των χώρων του λεβητοστασίου και δεξαμενής πετρελαίου με άνοιγμα προς τον ελεύθερο χώρο του κτιρίου και όχι προς κοινόχρηστους χώρους διαδρόμων, κλιμακοστασίου ή φρεσίου ανεγκυστήρα, έτσι ώστε σε περίπτωση πυρκαγιάς ή δυσλειτουργίας του καυστήρα ο σχηματιζόμενος καπνός να απόγεται εκτός του κτιρίου.
4. Μπρος από την είσοδο του λεβητοστασίου να κτιστεί στεγανό κατώφλι ύψους τουλάχιστον 15 εκ. για συγκράτηση του πετρελαίου σε περίπτωση διαρροής. Γύρω από τη δεξαμενή πετρελαίου να κτιστεί στεγανό περιτοιχισμα ικανό να συγκεντρώσει ολόκληρη την ποσότητα του πετρελαίου συν 10%.
5. Ο λέβητας και η δεξαμενή πετρελαίου δεν μπορεί να βρίσκονται στον ίδιο χώρο.
6. Τοποθετείται διακόπτης (βάνα), που διακόπτει τη ροή πετρελαίου από τη δεξαμενή προς τον καυστήρα, σε ασφαλές και προσεγγίσιμο μέρος και κυρίως πλησίον της δεξαμενής καυσίμου. Ο διακόπτης μπορεί να τοποθετηθεί και με το σύστημα φουρκέτας το οποίο να βρίσκεται εκτός του χώρου και σε σημείο που δεν θα κατακλύζεται από καπνούς.
7. Το σύστημα λέβητα και καυστήρα τοποθετείται σε επιφάνεια από σκυρόδεμα, ύψους 20 εκατοστών, πάνω από το δάπεδο του λεβητοστασίου, έτσι ώστε σε περίπτωση διαρροής νερού, αυτό να αποχετευτεί χωρίς κίνδυνο δημιουργίας βραχυκυκλώματος.
8. Η διάταξη του χώρου, των μηχανημάτων και των ουσιαστών εξαρτημάτων του λεβητοστασίου πρέπει να σχεδιασθούν απλά σε κάτοψη και να δοθεί από ένα αντίγραφο σε όλους τους ενοίκους έτσι ώστε απ' ενός να ξέρουν πώς να διακόψουν την παροχή καυσίμου αφετέρου να είναι γενικώς ενήμεροι για να δύνανται να βοηθούν το έργο των πυροσβεστών όταν απαιτείται.
9. Πρέπει να γίνεται έλεγχος καλής λειτουργίας, καθαρισμός και ρύθμιση των συστημάτων του λεβητοστασίου από ειδικευμένο (αδειούχο) τεχνίτη τουλάχιστον μία φορά το χρόνο.
10. Πρέπει να γίνεται έλεγχος των σημείων ενώσεων της καπνοδόχου και γενικά του αγωγού για την διαπίστωση τυχόν ρωγμών καθώς τακτικός καθαρισμός της από την αθάλη, με συχνότητα που καθορίζεται από το είδος του χρησιμοποιούμενου καυσίμου.
11. Δεν πρέπει να τοποθετούνται μέσα στο λεβητοστάσιο καύσιμες ύλες ούτε να χρησιμοποιείται ο χώρος για αποθήκευση.
12. Το λεβητοστάσιο να διατηρείται καθαρό και σε τάξη.
13. Σε περίπτωση βλάβης και πριν από την επιδιόρθωση της, να αποφεύγεται η επαναλειτουργία του καυστήρα.
14. Σε περίπτωση που χυθεί στο δάπεδο καύσιμο, (εύφλεκτο υγρό) να καλύπτεται με χώμα και άμμο και ποτέ με πριονίδια, εφημερίδες, σκουπίδια ή ανάλογα υλικά.
15. Να τοποθετείται ηλεκτρομαγνητική βαλβίδα διακοπής πετρελαίου μαζί με την χειροκίνητη βάνα.
16. Να τοποθετείται αυτόματος πυροσβεστήρας αροφής ξηρής σκόνης τουλάχιστο των 6 κιλών ή άλλα εγκεκριμένα σύστημα αυτόματης πυρόσβεσης κατάλληλα για πυρκαγιές εύφλεκτων υγρών.

ΠΥΡΟΣΒΕΣΤΙΚΗ ΥΠΗΡΕΣΙΑ ΚΥΠΡΟΥ

ΠΑΡΑΡΤΗΜΑ

ΤΥΛΙΚΤΗΡΑΣ ΝΕΡΟΥ

1. ΕΛΑΣΤΙΚΟΣ ΣΩΛΗΝΑΣ

Ο ελαστικός σωλήνας να έχει μήκος μέχρι 30 μ.

2. ΤΟΠΟΘΕΤΗΣΗ

- (1) Ο τυλικτήρας να τοποθετηθεί σε εμφανή και προσιτή θέση σε κάθε επίπεδο του κτιρίου, κοντά στις εξόδους, μέσα στους διαδρόμους ή τις διαδρομές διαφυγής και να καλύπτει όλους τους χώρους, λαμβάνοντας υπόψη και τα εμπόδια που μπορεί να υπάρχουν / τοποθετηθούν. Η τοποθέτηση του τυλικτήρα να μην εμποδίζει τα μέσα διαφυγής.
- (2) Σε περίπτωση που θα τοποθετηθούν θυρίδες, αυτές να ανοίγουν 180 μοίρες και να μην κλειδώνονται. Πάνω στις θυρίδες να τοποθετηθεί άσπρη πινακίδα με την επιγραφή «ΤΥΛΙΚΤΗΡΑΣ ΝΕΡΟΥ» με κόκκινα γράμματα μεγέθους 5 εκ.
- (3) Οι τυλικτήρες να τοποθετούνται με τον άξονα τους σε ύψος μεταξύ 75 εκ. και 125 εκ. από το δάπεδο. Σε ανοικτούς χώρους (χώρους στάθμευσης κ.α) μπορεί να τοποθετηθούν πιο ψηλά με την προϋπόθεση ότι το ακροφύσιο, ο οδηγός του ελαστικού σωλήνα και η βαλβίδα εισαγωγής του νερού να βρίσκονται σε ύψος 90 εκ. από το δάπεδο.

3. ΠΡΟΜΗΘΕΙΑ ΝΕΡΟΥ

- (1) Η προμήθεια νερού προς τους τυλικτήρες να γίνεται με τέτοιο τρόπο ώστε να εξασφαλίζεται νερό ανεξάρτητα από οποιαδήποτε προμήθεια νερού της οικοδομής. Η ποσότητα του νερού να μην είναι λιγότερη από 1125 λίτρα.
- (2) Η προμήθεια νερού να είναι τέτοια ώστε να ικανοποιεί την ταυτόχρονη λειτουργία δύο τουλάχιστον τυλικτών του πιο ψηλού επιπέδου / ορόφου. Οι τυλικτήρες να έχουν βολή νερού μήκους τουλάχιστον 6 μ. και απόδοση όχι λιγότερη από 30 λίτρα το λεπτό. Η διάμετρος του σωλήνα προμήθειας να μην είναι μικρότερη από 5 εκ.
- (3) Οι τυλικτήρες πρέπει να λειτουργούν με 3 Μπαρς πίεση. Όπου η στατική πίεση δεν μπορεί να εξασφαλίσει τα 3 Μπαρς, θα πρέπει να τοποθετηθεί μία κυρίως και μία εφεδρική αντλία. Τάσο οι κινητήρες των αντλιών όσο και οι αντλίες να τοποθετηθούν σε πυροσβεστικούς χώρους και η ηλεκτρική εγκατάσταση να είναι πυροπροστατευμένη.
- (4) Οι αντλίες να τίθενται σε λειτουργία αυτόματα όταν χαμηλώσει η πίεση μέσα στους σωλήνες ή όταν υπάρξει ροή νερού από οποιοδήποτε ακροφύσιο. Οι θάλαμοι των αντλιών πρέπει να είναι συνέχεια γεμάτοι με νερό.
- (5) Εκτός από το αυτόματο σύστημα λειτουργίας, οι αντλίες να διαθέτουν και ηλεκτρικό διακόπτη για να μπορεί εύκολα κάποιος να τις θέσει σε λειτουργία. Η εφεδρική αντλία να μπορεί να λειτουργήσει αυτόματα μόλις η κυρίως αντλία παρουσιάσει οποιοδήποτε πρόβλημα και δεν μπορεί να στείλει νερό. Σε προκαθορισμένη θέση να τοποθετηθεί πίνακας που να δείχνει (οπτικά και ακουστικά) ότι το σύστημα έχει τεθεί σε λειτουργία.

4. ΠΙΝΑΚΙΔΕΣ ΛΕΙΤΟΥΡΓΙΑΣ

Ο κάθε τυλικτήρας να διαθέτει πινακίδα που να αναγράφονται εμφανώς οι οδηγίες χρήσης.

ΔΗΜΟΣ ΠΑΦΟΥ
 ΠΟΛΕΟΔΟΜΙΚΗ ΑΡΧΗ

 (Ε.Α. 5)
ΤΕΧΝΙΚΕΣ ΥΠΗΡΕΣΙΕΣ
 ΛΕΩΦ. ΕΛΛΑΔΟΣ 15, 8020 ΠΑΦΟΣ
 Τ.Κ. 60032, 8100 ΠΑΦΟΣ
 ΤΗΛ. 26 822555, ΦΑΞ: 26 910121

Αρ. Φακ.

Πάφος

Ο περί Πολεοδομίας και Χωροταξίας Νόμος

ΑΙΤΗΣΗ ΓΙΑ ΠΟΛΕΟΔΟΜΙΚΗ ΑΔΕΙΑ
 — ΑΛΛΑΓΗ ΧΡΗΣΕΩΣ ΑΚΙΝΗΤΗΣ ΙΔΙΟΚΤΗΣΙΑΣ —
 (Να συμπληρωθεί σε τετραπλούν)

(Σε περίπτωση που η αλλαγή χρήσεως συνεπάγεται και οικοδομικές εργασίες θα πρέπει να συμπληρωθεί και το έντυπο [Ε.Α])

ΓΙΑ ΕΠΙΣΗΜΗ ΧΡΗΣΗ

Αρ. αίτησας 89117 Ημ. λήψεως 2.6.17 Δικαιώματα ΕΣΙΟ

(Να συμπληρωθεί με κεφαλαία γράμματα)

 1. ΑΙΤΗΤΗΣ/ΕΣ MULLA ROCC LIMITED
 ΑΝΤΙΠΡΟΣΩΠΟΣ (αν υπάρχει)
 ΤΑΧΥΔΡΟΜΙΚΗ ΔΙΕΥΘΥΝΣΗ Πεοφ. ΔΑΝΑΗΣ Τ.Κ. 191 ΤΗΛ. 26880279

2. Είδος αίτησας (Να σημειωθεί X στα κατάλληλα τετράγωνα):

- (α) Πολεοδομική άδεια ☐
- (β) Έγκριση θεμάτων που διαφυλάχθηκαν με την επιβολή όρων στην έκδοση πολεοδομικής άδειας ☐
- (γ) Απαλλαγή όρων με βάση τους οποίους εκδόθηκε πολεοδομική άδεια ☐
- (δ) Έγκριση τροποποιημένων σχεδίων σε σχέση με πολεοδομική άδεια που εκδόθηκε ☒

Σημ. 1. Για το (β), (γ) ή (δ) παρακαλώ συμπληρώστε ανάλογα τα πιο κάτω:

 Αρ. πολεοδομικής άδειας/αίτησας 6441 Ημ. εκδόσεως 17/02/2009
 Αρ. όρου αδειας σε σχέση με (β)
 Αρ. όρου αδειας σε σχέση με (γ)

Σημ. 2. Για το (β), (γ) ή (δ) να μην συμπληρωθούν τα μέρη 4, 6, 7 και 8 του εντύπου

3. Χαρακτηριστικά τεμαχίου στο οποίο αναφέρεται η αίτηση. (Το τεμάχιο να περιγραφισθεί με κόκκινο χρώμα στο χωρομετρικό σχέδιο).

(α)	Οδός Αριθμός Ταχυδρ. τομέας	Διοικητική Περιοχή	Τοποθεσία Ενορία	Αρ. τεμαχίου/ων	Φύλλο/Σχέδιο
	<u>Πεοφ. ΔΑΝΑΗΣ</u> <u>Τ.Κ. 191</u>	<u>Κ. Πάφος</u>	<u>Δανάης</u>	<u>397</u> <u>244</u>	<u>51/190402</u>

(β) Αν υπάρχουν τεμάχια που συνορεύουν με το τεμάχιο της αίτησης τα οποία ανήκουν στον αιτητή δηλώστε τους αριθμούς τους. (Τα τεμάχια να περιγραφισθούν με μπλε χρώμα στο χωρομετρικό σχέδιο).

Σε περίπτωση που επιθυμείτε να διορίσετε αντιπρόσωπο για προώθηση της αίτησης, επικοινωνήστε σχετικά δήλωση.

4. (α) Αριθμός και ημερομηνία οικοδομικής άδειας υφιστάμενης οικοδομής K5985
 (β) Αριθμός και ημερομηνία πολεοδομικής άδειας υφιστάμενης χρήσης 5441 - 17/03/2009

5. Σύνοψη περιγραφή προπθέμενης χρήσης: αποχριστόμενα χώροι όπως αυτοί υποδεικνύονται με κοκκινό χρώμα θα είναι αναψυκτικό διακινητή χρήση από 20 καρέφιν.

6. Αν η ανάπτυξη αποτελεί μέρος ευρύτερου σχεδίου για το οποίο δεν ζητείται τώρα πολεοδομική άδεια, παρακαλώ δώστε σχετικές πληροφορίες: Ο σχεδιασμός των οφιστικών κτιρίων και των αυτοκινήτων θα πραγματοποιηθούν από κοινού

7. (α) Εμβαδό τεμαχίου 14930 τ.μ.
 (β) Εμβαδό υφιστάμενης χρήσης που καταργείται τ.μ.
 (γ) Εμβαδό προπθέμενης χρήσης 200 τ.μ.

8. Άλλες πληροφορίες (Να σημειωθεί Χ στα κατάλληλα τετράγωνα)

(α) Παρούσα χρήση οικοδομής / γης Πανεπιστήμιο
 (β) Αν είναι κενή δηλώστε την τελευταία χρήση
 (γ) Δηλώστε αν η οικοδομή είναι διατηρητέα
 (δ) Δηλώστε κατά πόσο η ανάπτυξη αφορά και την εκκοπή δέντρων
 (ε) Δηλώστε το συνολικό αριθμό χώρων στάθμευσης οχημάτων για την νέα χρήση
 (στ) Υδατοπρομήθεια: ☐ (ζ) Προσέλευση: ☐

9. Πολεοδομική Αρχή.
 Δυνάμει του άρθρου 21 (ή του άρθρου 27 στη περίπτωση αίτησης για απαλλαγή όρων) του περί Πολεοδομίας και Χωροταξίας Νόμου του 1972, ζητώ/ούμε άδεια, για την οποία λεπτομέρειες αναφέρονται πιο πάνω.

2. Επισυνάπτω/ουμε τα ακόλουθα έγγραφα όπως προνοείται από τη σχετική νομοθεσία.

(1) * (α) Πιστοποιητικό/ά Εγγραφής αρ. 2157 21450 στο όνομα μου/μας.
 * (β) Πιστοποιητικό ότι η περιουσία είναι υποθηκευμένη και δήλωση του δανειστή ότι δεν έχει ένσταση.
 (2) Σχέδια και διαγράμματα σε τέσσερα αντίγραφα που καθορίζονται στο παράρτημα.

Υπογραφή αιτητού/τών/εξουσιοδοτημένου αντιπροσώπου

 Ονομα/τα

Ημερομηνία 30/05/17

(*Να διαγραφεί ό,τι δεν εφαρμόζεται)

Σημ. Όταν η αίτηση αφορά αλλαγή σε βιομηχανική και/ή αποθηκευτική χρήση να συμπληρωθεί και το έντυπο «ΠΡΟΣΘΕΤΕΣ ΠΛΗΡΟΦΟΡΙΕΣ»

ΠΑΡΑΡΤΗΜΑ

1. Για αλλαγή εγκεκριμένης χρήσης -

- (α) Χωρομετρικό Σχέδιο στη μεγαλύτερη διαθέσιμη κλίμακα Κυβερνητικού Χωρομετρικού Σχεδίου που να δείχνει τη θέση της υφιστάμενης οικοδομής.
- (β) Σχέδιο κατόψεως που να δείχνει -
 - (i) Την εγκεκριμένη χρήση
 - (ii) Την προτεινόμενη χρήση
- (γ) Σχέδιο που να δείχνει το χώρο στάθμευσης και την προσέλαση σ' αυτόν.
- (δ) Αρχιτεκτονικό σχέδιο που να δείχνει εξωτερικές αλλαγές στην οικοδομή, αν υπάρχουν, στην κλίμακα 1:50/1:100/1:200.

2. Για κατεδάφιση οικοδομής -

- (i) Ολόκληρης οικοδομής Χωρομετρικό Σχέδιο που να δείχνει το τεμάχιο που βρίσκεται η οικοδομή.
- (ii) Για κατεδάφιση μέρους οικοδομής και επανοικοδόμηση ισχύει η παράγραφος 1(γ).

* Ο τίτλος (ii) πολεοδομικής άδειας προτείνεται
όπως διαφοροποιήθη σε Πανεπιστήμιο/Κολέγιο.



ΚΥΠΡΙΑΚΗ ΔΗΜΟΚΡΑΤΙΑ
ΥΠΟΥΡΓΕΙΟ
ΠΑΙΔΕΙΑΣ ΚΑΙ ΠΟΛΙΤΙΣΜΟΥ

Αρ. Φακ.: 7.14.13.3.3
Αρ. Τηλεφ: 22800990
Αρ. Τηλεομ: 22800835

ΤΕΧΝΙΚΕΣ ΥΠΗΡΕΣΙΕΣ

29 Ιουνίου 2017

Δημοτικό Μηχανικό
Δήμου Πάφου
Πολεοδομική Αρχή
Λεωφ.Ελλάδος 15
8020 Πάφος

Θέμα: Αλλαγή χρήσης μέρος πανεπιστημίου σε κολλέγιο με προσθηκομετατροπές
Αρ. Αίτ. 89/17 ημερ.02/6/2017

Αναφορικά με το πιο πάνω θέμα το ΥΠΠ δεν φέρει ένσταση στην πιο πάνω ανάπτυξη.

(Ρ. Στεφάνου)
Για Γενική Διευθύντρια

-----Σχέδια και άλλα έγγραφα που σχετίζονται με την ανάπτυξη σας επιστέφονται.

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