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# **Accreditation Report** for the Undergraduate Study Programme (Integrated Master) of:

# **Architecture**

**Institution: Technical University of Crete** 

Date: 7 May 2023





Unde	rgraduate St	el appointed by udy Programm sity of Crete fo	ne (Integrated	d Master) of <b>A</b>	rchitecture the

# **Abbreviations**

TUC	Technical University of Crete
ECTS	European Credit Transfer System
EEAP	External Evaluation & Accreditation Panel
EDIP	Laboratory Teaching Staff
EER2013	External Evaluation Report of 2013
ETEP	Laboratory Technicians
НАНЕ	Hellenic Authority for Higher Education
HNARIC	Hellenic National Recognition and Information Centre
ΙQΑЅ (ΕΣΔΠ)	Internal Quality Assurance System
ARCH/TUC	School of Architecture at Technical University of Crete
MODIP	Quality Assurance Unit (ΜΟΔΙΠ)
OMEA	Internal Evaluation Groups/School's Internal Evaluation Committee
QA	Quality Assurance

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# PART A: BACKGROUND AND CONTEXT OF THE REVIEW

### I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the Undergraduate Study Programme (Integrated Master) of **Architecture** of the **Technical University of Crete** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

#### 1. Professor Loukas N. Kalisperis (Chair)

Pennsylvania State University, University Park, Pennsylvania, USA

#### 2. Professor Marios C. Phocas

University of Cyprus, Nicosia, Cyprus

#### 3. Ms. Dimitra Chatzipavli

Department of Architecture, University of Thessaly Student Representative

#### 4. Assoc. Professor Marilena Kourniati

École Nationale Supérieure d'Architecture Paris – La Villette, Paris, France

# 5. Dr. Olga Venetsianou

Representative of the Technical Chamber of Greece, Athens, Greece

#### II. Review Procedure and Documentation

The External Evaluation & Accreditation Panel (EEAP) reviewed the material submitted by the School of Architecture (ARCH) of the Technical University of Crete (TUC) in advance of its *on-site visit*. Additionally, the members of the EEAP reviewed HAHE's mission and standards, as well as the guidelines for the review process and the national framework of the higher education institution in Greece. The EEAP after its arrival on 1 May 2023, met in private, on the morning of Tuesday, 2 May 2023, to discuss the program review report for the School of Architecture of the Technical University of Crete, allocate tasks and list the issues for the site visit.

The visit was conducted on site, for the first time by the EEAP in person, and took place on 2 and 3 of May 2023. The EEAP wrote the report in the following days (4-6 May 2023) though in-person collaborative meetings, held on-site at the hotel and the Centre of Mediterranean Architecture (CAM), which was kindly provided by the Township of Chania. The Panel is grateful for the opportunity to conduct discussions and complete the report in the excellent facilities of the historic *Arsenali* building.

The EEAP would like to express its appreciation for the efforts of the School's academic staff, administrative staff, students, alumni and HAHE so that the *on-site visit* could be a productive and effective experience. The EEAP was able to collect enough information for an understanding of the program, and the *on-site visit* was **very effective and rewarding** experience, much better than the previous virtual visits. The EEAP is grateful that HAHE resumed in-situ visits.

EEAP met initially with the Architecture Chair and the Vice-Rector of Academic Affairs of the **Technical University of Crete**, on 2 May 2023, for an in-depth introductory meeting in which initial presentations of the Technical University of Crete and the Architecture School took place. The School's Chair and the Vice-Rector of Academic Affairs gave an overview of the University and the School, regarding its history, vision, mission, status, strengths, and academic profile. Further presentations provided useful information about the School of Architecture strengths and areas of concern. The afternoon meetings continued with an in-depth presentation by representatives of the Quality Assurance Unit (MODIP) and the Internal Evaluation Group (OMEA), followed by comprehensive discussion with all MODIP & OMEA members, during which the EEAP received additional information about the program, the various activities of the School regarding the curriculum, academic and administrative/support staff, student body, and research activities. During this meeting the EEAP was given the opportunity to ask detailed questions, to better facilitate the EEAP's understanding of the curriculum, internal evaluation review process, adequacy of resources and possible areas of strengths and weaknesses. The EEAP received further documentation and supporting material related to the presentations given by MODIP & OMEA that facilitated our discussions.

The meeting continued with the teaching staff members during the afternoon of 2 May 2023. During the meeting with the academic staff, the EEAP was given the opportunity to ask detailed questions to enable a better understanding of the curriculum, internal evaluation review process, adequacy of resources and possible areas of strengths and weaknesses.

At the end of the day, the EEAP reflected on the discussions and prepared for the next day's sessions of the visit. The first day of the visit concluded with a brief meeting of the EEAP in order

to evaluate the accomplishments of the day and plan the activities and meetings of the following day.

The second day of the visit, 3 May 2023, started with a meeting with the student representatives selected by the School. The students provided the members of the EEAP with valuable information about their study experience, curriculum, and campus facilities. They discussed their priority issues concerning student life, mobility, research, and career opportunities. The students were very hospitable, enthusiastic, and helpful. They conducted themselves admirably.

The day continued with a tour and detailed presentation of the facilities with a subsequent discussion, to address any EEAP members' questions. Following the brief *in-situ* visit to the facilities and all the individual laboratories, the tour concluded with an extensive discussion between the EEAP and the School's staff and academic/teaching personnel, in order to further elucidate some of the concerns and points that EEAP was interested in pursuing in their subsequent discussions.

After a short break, the second day continued with a teleconference of EEAP with alumni of the School of Architecture to assess their experiences and identify how well their studies are serving them in their current work environment. The alumni with whom we spoke, many of whom work abroad and some in academic positions in other universities, spoke highly of the value of their experiences, noting that in addition to architectural design the program prepared them for other design-related career paths. The graduates of the School of Architecture highly appreciated the close working relationship that they had with the academic staff and the pluralism that existed within the School.

The EEAP continued their meetings with representatives from employers, social partners, and external stakeholders, representing very impressive professional offices and organizations, enterprises, national and local authorities. During the meetings the EEAP was able to hear their experiences either during their studies at the School of Architecture and/or their relations with the School, as well as aiming to address the readiness of the graduates for the market and identify areas of cooperation between the School of Architecture and employers. All participants spoke very enthusiastically of the School of Architecture and their affiliation with it. It was evident that the School is held in a high regard by its alumni and external stakeholders.

Concluding the second day meetings the EEAP met with the academic and administrative staff working on the Program Review Report, MODIP & OMEA, and the Vice-Rector, in which a quick summary of the visit was also provided. During the meeting the EEAP was able to further clarify several key points and engage in a very detailed discussion on the curriculum and facilities. The EEAP received additional information about School of Architecture, administrative, buildings and resources, external relations and the electronic systems for student satisfaction and student records. Additional impromptu discussions with the Chair of OMEA and the School of Architecture Chair took place, to clarify certain points of the very details and comprehensive presentations and request additional information, which were promptly provided. The EEAP presented to the Vice-Rector their concerns about the reduced number of the academic staff, the need for accounting of the teaching overload associated with the Thesis ( $\Delta\iota\pi\lambda\omega\mu\alpha\tau\iota\kappa\dot{\eta}$ ) and Research Projects ( $E\rho\epsilon\nu\nu\eta\tau\iota\kappa\dot{\eta}$ ), and the need for immediate increase of the numbers of staff teaching and researchers within the School of Architecture as well as additional technical, support and administrative support. The need for some additional physical facilities and

laboratories was also presented to the Vice-Provost and the academic administration of the School.

Both the current students and the alumni spoke highly about the devotion of time and energy invested by their instructors, who extended the teaching hours long after the official completion of the meeting period for each course, which safeguarded the high level of the course quality. It is imperative that the central University administration understands the different teaching requirements that are necessary in architectural education and the increased resources that are needed to successfully complete an architectural education. The EEAP highly appreciates this devotion, but it notes that the low numbers of teaching staff coupled with the very high numbers of students enrolled in the program and the foreseeable *burn-out* of the current faculty members can be detrimental in the future development of the School.

The EEAP continued meeting on-site at the hotel and the Centre of Mediterranean Architecture, in order to complete the report and submit it to HAHE by Sunday, 7 May 2023.

In closing, the EEAP would like to express our sincere gratitude for the excellent support, hospitality, and openness that we encountered during our visit.

# III. Study Programme Profile

The School of Architecture of the Technical University of Crete initiated its operation in 2004. In the first semester of operation, the School was hosted in the Centre of Mediterranean Architecture (CMA), then from 2005 until 2013 in the old building of the French School (Γαλλική Σχολή), and since 2013 on the campus of the University. In 2009 the School of Architecture became autonomous within the University. The School offers a 5-year integrated Master's undergraduate program, in which students are required to complete a total of 50 courses (8 of which are required Design Studios) – 42 compulsory and approximately 8 required constrained and free electives – along with the completion of a Research Thesis (Ερευνητική Εργασία) and the Diploma Design Thesis (Διπλωματική Εργασία). A number of students (on average, 70 each year) also complete a non-compulsory Practical Training (Internship). The program of study has an equivalency of 300 ECTS. The program of study also includes an integrated Master's degree within the 5-year Diploma. The program is approved at European Union level as to the 11 points of reference of the EU directive 2005/36/EC article 46.

In the first three years, the curriculum ensures a solid background in architectural education, and almost all courses offered within the curriculum are compulsory. In the following two years of study, students may select thematic areas of individual constrained elective courses, the Research Thesis and the Diploma Design Thesis. In principle, students do not identify any concentration areas in which they select their courses and or complete their Diploma Design Thesis in similar thematic areas. The students' workload in the Design studios and for the final Diploma Design Thesis amounts to 42 per cent of the overall workload required by the program of study, while a further number of courses in technology, urban design and digital visualization are also studio based. The structure and the identity of the program refer to the Mediterranean place, culture and environment and the technological, digital design aspects.

The School was evaluated in 2013 by an External Evaluation Committee and some of the recommendations of the report that refer to the program of study have been addressed to a certain extent in the revisions of the program of study made by the School in in 2017 and implemented in 2018-19, while some of the recommendations that refer to the number of faculty members, the physical facilities of the School and the creation of an architectural community have still not been addressed and should be. Regarding the program of study, the revisions made aim at an enhancement of the education core in architectural design and the interconnection of architectural design with the thematic areas of technology, history, and theory, as well as the creation of the studio culture within the program of study, the reduction of the average duration of study and the improvement of the ratio of faculty members to students.

The program's specific contents, objectives and aims comply with the academic and scientific guidelines set by the University. The mission of the University refers to the proper training of the next generation of engineers, the pursuance of excellence in education and research and the expansion of knowledge and benefit of society. The School of Architecture focuses on architectural project-based design and promotes the design at different scales and complexity and technical knowledge in history, theory, technology, and digital visualization. Related subjects are expected to provide the necessary theoretical knowledge, cultivate research project-based activities of the faculty and students and be integrated within the design process

at different scales and levels of complexity. Thus, the program of study is structured in design courses, design-based courses in technology, digital visualization, and urban design, as well as theoretical courses in history and theory.

In the first three years of study all courses are compulsory, so that comprehensive and solid fundamental knowledge as well as skills in design and related scientific areas are provided. The following year consists mainly of compulsory design studios (one each semester) and a small number of design-based and theoretical courses in large scale. The last year mainly consists of the Research Thesis in parallel to constraint elective courses from different thematic areas and the Final Diploma Design Thesis. Although it is not evident that prerequisite courses are defined in the program of study, the Final Diploma Design Thesis may only be conducted after having successfully completed all design courses in the preceding semesters. The Research Thesis, the Final Diploma Design Thesis advisor and thematic areas are free to select by the students. Through progression of semesters, the design complexity and depth in the design studios (from the scale of the object and the building to the scale of the city and landscape) increase gradually. The individual compulsory courses within the program of study provide theoretical knowledge in history and theory, materials, construction and bioclimatic design, as well as design skills at different scales based on horizontal and/or vertical interconnections within the program of study. In this way, certain synergies among theoretical and design courses are aimed at throughout the semesters. Although the final two years of the program of study are flexible with regard to the constraint electives as well as the research and Diploma Design Thesis, no concentration areas are defined by the students. The diploma supplement includes a certificate on digital skills. At the same time, the last stage of studies acts as integral component of the 5year program of study, and is clearly formulated with regard to the integrated Master's component. All courses' syllabi are available for all courses taught online on the web page of the School. Students are given the opportunity to evaluate the courses they attend.

Graduates of the program of study obtain the title of Architectural Engineer and can become members of the Technical Chamber of Greece (TEE) after passing exams held by the Chamber. Graduates can be employed in both the private and public sector and most of the graduates have been successfully placed in both sectors after their graduation, in addition to completing post-graduate studies, either in Greece or at renowned institutions overseas. The Practical Training (Internship), although not compulsory is very popular, and provides students with an opportunity to explore job prospects, gain some work experience and make contacts.

There are 24 academic staff members who support the educational and research activities of the program, some of whom have doctoral degrees from Institutions in Greece and abroad. There are also 18 teaching staff and 4 special teaching staff members ( $E\Delta I\Pi$ ) and Technical Support staff (ETE $\Pi$ ), contributing to the teaching work of the School. Additionally, the School is supported by 2 administrative staff. An issue of major concern is the reduced number of academic staff, as well as the Technical Support and administrative staff.

The School maintains a library, nine institutionalized and four non-institutionalized laboratories, among others with computing and automated manufacturing facilities (Fab lab). The laboratories are associated to individual faculty members and to a certain extent available to the students at the School. Some of the laboratories are seriously understaffed and in need of

further immediate expansion with state-of-the-art equipment (wood shop, CNC-cutter, laser cutter, etc.).

The School's activities reflect the interests and specializations of the faculty. Most of the faculty have a strong design profile and/or design interests that cover different design scales and individual thematic areas within the discipline. The School has a commendable number of architectural publications and project-based research activities. The School is considered a large academic entity in the number of students, as there are 1155 registered undergraduate students (875 students currently active in the program of study), with ratio of faculty to students of around 1 to 32. Also, the number of students or student teams per required studio is up to 20, which is considered very high as the average number in many European countries is 15 students in studio course. The number of academic staff and support personnel is critically low proportionally to the size of the program and the diverse activities required to be followed by the faculty members and the students throughout the program.

# PART B: COMPLIANCE WITH THE PRINCIPLES

# Principle 1: Academic Unit Policy for Quality Assurance

INSTITUTIONS SHOULD APPLY A QUALITY ASSURANCE POLICY AS PART OF THEIR STRATEGIC MANAGEMENT. THIS POLICY SHOULD EXPAND AND BE AIMED (WITH THE COLLABORATION OF EXTERNAL STAKEHOLDERS) AT ALL INSTITUTION'S AREAS OF ACTIVITY, AND PARTICULARLY AT THE FULFILMENT OF QUALITY REQUIREMENTS OF UNDERGRADUATE PROGRAMMES. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL STAKEHOLDERS.

The quality assurance policy of the academic unit is in line with the Institutional policy on quality, and is included in a published statement that is implemented by all stakeholders. It focuses on the achievement of special objectives related to the quality assurance of study programmes offered by the academic unit.

The quality policy statement of the academic unit includes its commitment to implement a quality policy that will promote the academic profile and orientation of the programme, its purpose and field of study; it will realize the programme's strategic goals and it will determine the means and ways for attaining them; it will implement the appropriate quality procedures, aiming at the programme's continuous improvement.

In particular, in order to carry out this policy, the academic unit commits itself to put into practice quality procedures that will demonstrate:

- a) the suitability of the structure and organization of the curriculum;
- b) the pursuit of learning outcomes and qualifications in accordance with the European and the National Qualifications Framework for Higher Education;
- c) the promotion of the quality and effectiveness of teaching;
- d) the appropriateness of the qualifications of the teaching staff;
- e) the enhancement of the quality and quantity of the research output among faculty members of the academic unit;
- f) ways for linking teaching and research;
- g) the level of demand for qualifications acquired by graduates, in the labour market;
- h) the quality of support services such as the administrative services, the Library, and the student welfare office;
- i) the conduct of an annual review and an internal audit of the quality assurance system of the undergraduate programme(s) offered, as well as the collaboration of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU).

#### **Study Programme Compliance**

The Quality Assurance Policy of the School of Architecture of the Technical University of Crete is coordinated with the Institution's Quality Policy. The School's Policy is formulated and published on the School's website, publicized and implemented with the participation of all interested parties. In this framework, the School of Architecture has instituted a quality assurance body of faculty members that is responsible for reviewing the appropriateness of the structure and organization of the curriculum and the pursuit of learning outcomes and qualifications in accordance with the European and National Framework for Higher Education Qualifications. Furthermore, internationalization issues, teaching and research activities, supporting services, students' participation in evaluation procedures and the operation of the School, the transparency of activities and decisions, and the public presence of the program and

the School are decisive. The quality assurance body of the School is also responsible for supporting the academic profile and orientation of the program of study, promoting its purpose and objectives, and applying appropriate quality procedures, aiming at its continuous improvement.

The structure and contents of the program of study focus on architectural project-based design. In order to follow these objectives, the contents of the program are updated by responding to contemporary international issues of architecture. It was not evident whether education processes and studios/seminars/courses are also linked to the faculty research activities and projects. As the School of Architecture states, "Through artistic creativity, interdisciplinarity and collective work, faculty and students explore forms and concepts, by synthesizing tradition and innovation. From the small scale of architectural construction, to the intermediate one of urban design and urbanism, and the bigger one of landscape and regional planning, the School courses offer conceptual synergies between theory and practice. Technological advances, bioclimatic issues, restoration methods, digital media, visual arts and theory courses, support contemporary design and thinking in the main studio."

In achieving these goals, individual synergies in teaching and research and an interdependence of knowledge and provision of skills should be available throughout the educational program. Additionally, it is imperative that synergistic activities should exist between the individual and multiple laboratories that are very well established with a substantial record and the curriculum. The School should endeavour to establish such collaboration between the multiple laboratories and the curriculum, which is primarily design-based, while the design studios are specific in their individual thematic and individual courses on construction, sustainability, urban design, and visual arts are also design-based in different environments and scales of development. Further potentialities should emerge in view of application of new technological and environmental aspects of the profession within the design process, as well as the practice of a comprehensive design through the interdisciplinary nature of design-driven research. In this framework, the School seems to rather follow a traditional design process methodology rather than being enriched through inter- and cross-disciplinarity by the advisors and students involved, as well the geographical placement of the School.

The quality assurance body monitors the operation of the program on a regular basis. Revisions in the program of study were made in 2017 and implemented in 2018-19 to further improve the profile of the program of study and adjust the number of individual courses offered and the students' workload. The revisions made were in compliance with the reduced number of faculty members at the School, the limited financial resources, as well as the extended duration of study followed by the students. The School of Architecture is fully compliant with the European and the National Qualifications Framework for Higher Education in terms of learning outcomes and qualifications.

The committee noted the qualifications of the teaching staff, some of whom have international recognition. The faculty are devoted to the mission of the program and motivated. There is also successful teamwork among the individual faculty and students, despite the very low teaching staff/student ratio. The EEAP finds that the faculty is highly committed and respected by the students. Individual faculty members often act as role-models for the students. Nevertheless, lack of critical facilities, cooperation, the partly remote residence of some faculty members from

the location of the School, and the individuality of the multiple established laboratories do not support the development of a strong sense of community among the faculty members, and as such decreases their involvement in interdisciplinary activities within the University in teaching and research. This acts disadvantageously in achieving a unique profile of the School and in preserving the high level of teaching, as well as the advancement of collaborative and interdisciplinary research activities by the faculty members.

The School of Architecture accords importance to linking teaching to design rather than collaborative and experimental research as such. This has resulted in commendable results in terms of visibility, individual international design acknowledgements and collaborations, alumni placement and important service to the society and profession. Thus, research output, mainly in terms of design projects, is directly associated with the specific conditions of the School of Architecture (small number of staff, nature of output often suitable for exhibitions/built projects, rather than scientific publications). At this point it should be stated that individual faculty members do have commendable achievements in research as well. The evaluation criteria for promotion of the faculty members are extended and adapted to include accomplishments in multifaceted creative activities beyond research and measures of public recognition of creative work in architecture. Furthermore, the international network of the faculty members succeeded in an admirable record of alumni placements in the labour market, in Greece and abroad, as well as at renowned Institutions abroad for post-graduate study and doctoral research. The internationalization of the program through participation in Erasmus+, European networks of education and research, and exhibitions are noteworthy.

The quality of the support services was considered adequate by the academic staff and students, although it is strongly influenced by the reduced number of administrative staff; this increases the everyday difficulties and limitations inherent in the School's size. An immediate increase of the administrative personnel and lab assistants is imperative. A strategic planning of the lab infrastructure of the School through the consolidation and development of collaborative research labs and redefinition of related research activities within, will have a positive influence on the further development.

In conclusion, the School's QA policy is fully compliant with the HAHE policy and guidelines and the EU QA standards on Higher Education. Its curriculum has a high-level profile by promoting the practice of architectural design at different levels and scales of investigation, while also providing knowledge and skills in architecture. Nevertheless, due to economic constraints, the School still lacks some physical facilities for the academic staff and the students and there is very limited financial support by the University or the government for the School's operation and the faculty's research activities, which negatively affects its operation in teaching, research, and the development of a community of space for Architecture within the University. The EEAP is not aware of a formal mechanism for renewal and development of the faculty body through hiring new colleagues or external collaborators, or  $E\Delta I\Pi$  and  $ETE\Pi$  staff.

#### **Panel Judgement**

Principle 1: Institution Policy for Quality Assurance		
Fully compliant	X	
Substantially compliant		
Partially compliant		
Non-compliant		

- R1.1 The EEAP recommends a review of the School of Architecture identity, vision and goals, through an independent advisory board, ad-hoc expert panels and/or dedicated international workshops. Annual internal reviews need to be further institutionalized by the School, as well as external evaluations, organized by the School itself every four years. This will help to constantly revise and further promote the profile and mission of the School, as well as to set up long-term development aims and policies at multiple levels of operation.
- **R1.2** The program of study needs to be further enriched in the Design studio by comprehensive architectural design activities promoting aspects of collaboration, inter- and cross-disciplinarity among the faculty and the students.
- **R1.3** The updating of the curriculum and the program should be perceived as a continuous and dynamic internal evaluation process that involves several constituents including faculty, students, alumni, and external partners. This committee should include, in an advisory capacity all stakeholders, and should have a tight time schedule of meetings and consultations with the aim of a comprehensive proposal to be discussed and approved by the faculty. The central administration should facilitate such endeavours.
- **R1.4** The faculty members need to expand collaborative and interdisciplinary activities in teaching and research within the School of Architecture and with faculty of the other Schools of the University, taking advantage of the strong personal relations.

# **Principle 2: Design and Approval of Programmes**

INSTITUTIONS SHOULD DEVELOP THEIR UNDERGRADUATE PROGRAMMES FOLLOWING A DEFINED WRITTEN PROCESS WHICH WILL INVOLVE THE PARTICIPANTS, INFORMATION SOURCES AND THE APPROVAL COMMITTEES FOR THE PROGRAMME. THE OBJECTIVES, THE EXPECTED LEARNING OUTCOMES, THE INTENDED PROFESSIONAL QUALIFICATIONS AND THE WAYS TO ACHIEVE THEM ARE SET OUT IN THE PROGRAMME DESIGN. THE ABOVE DETAILS AS WELL AS INFORMATION ON THE PROGRAMME'S STRUCTURE ARE PUBLISHED IN THE STUDENT GUIDE.

Academic units develop their programmes following a well-defined procedure. The academic profile and orientation of the programme, the objectives, the subject areas, the structure and organisation, the expected learning outcomes and the intended professional qualifications according to the National Qualifications Framework for Higher Education are described at this stage. The approval or revision process for programmes includes a check of compliance with the basic requirements described in the Standards, on behalf of the Institution's Quality Assurance Unit (QAU).

Furthermore, the programme design should take into consideration the following:

- the Institutional strategy
- the active participation of students
- the experience of external stakeholders from the labour market
- the smooth progression of students throughout the stages of the programme
- the anticipated student workload according to the European Credit Transfer and Accumulation System
- the option to provide work experience to the students
- the linking of teaching and research
- the relevant regulatory framework and the official procedure for the approval of the programme by the Institution

## **Study Programme Compliance**

The School of Architecture of the Technical University of Crete initiated its operation in 2004. The first and only so far external evaluation of the program of study took place in 2013. The latest major revisions of the program by the faculty took place in 2017 and implemented in 2018-19. The revisions made refer to the major comments made in the external evaluation with regard to the enhancement of the architectural education core in architectural design and the interconnection of architectural design with the thematic areas of technology, history and theory, as well as the creation of the studio culture within the program of study, the reduction of the average duration of study and the improvement of the ratio of faculty members to students. The program of study also includes an integrated Master's degree within the 5-year Diploma. The program is approved at European Union level as to the 11 points of reference of the EU directive 2005/36/EC article 46.

The program's specific contents, objectives and aims comply with the academic and scientific guidelines set by the University. The mission of the University refers to the proper training of the next generation of engineers, the pursuance of excellence in education and research and the expansion of knowledge and benefit of society. The School of Architecture focuses on architectural project-based design and promotes the design at different scales and complexity

and technical knowledge in history, theory, technology and digital visualization. Related subjects are expected to provide the necessary theoretical knowledge, cultivate research project-based activities of the faculty and students and be integrated within the design process at different scales and levels of complexity. Thus, the program of study is structured in design courses, design-based courses in technology, digital visualization and urban design, as well as theoretical courses in history and theory.

In the first three years all courses are compulsory, so that comprehensive and solid fundamental knowledge, as well as skills in design and related scientific areas is provided. The following year consists mainly of compulsory design studios (one each semester) and a small number of designbased and theoretical courses in large scale. The last year mainly consists of the Research Thesis in parallel to constraint elective courses from different thematic areas and the Final Diploma Design Thesis. Although, no prerequisite courses are defined in the program of study, the Final Diploma Design Thesis may only be conducted after having successfully completed all design courses in the preceding semesters. The Research Thesis, the Final Diploma Design Thesis advisor and thematic areas are free to select by the students. Through progression of semesters, the design complexity and depth in the design studios (from the scale of the object and the building to the scale of the city and landscape) increase gradually. The individual compulsory courses within the program of study provide theoretical knowledge in history and theory, materials, construction and bioclimatic design, as well as design skills at different scales based on horizontal and/or vertical interconnections within the program of study. In this way, certain synergies among theoretical and design courses are aimed at throughout the semesters. Although the final two years of the program of study are flexible with regard to the constraint electives as well as the research and Diploma Thesis, no concentration areas are defined by the students. The diploma supplement includes a certificate on digital skills. At the same time, the last stage of studies acts as integral component of the 5-year program of study and is clearly formulated with regard to the integrated Master's component.

The quality assurance body and the faculty as a whole support the structure of the program as formulated above. The program's identity refers to the Mediterranean place, culture and environment and the technological, digital design aspects. The EEAP believes that the program's identity is not clearly reflected in the structure of the program of study and the students' work produced in the design studios, especially in the later semesters, and Diploma Design Theses. Furthermore, the qualifications of the faculty members are based on various areas of competence and design scales that could further enhance the development of synergies between individual courses and design, as well as inter- and cross-disciplinary design and research. Presently, the sequence of the main courses in architectural design is clearly defined regarding the contents, levels of advancement and pedagogical objectives. Nevertheless, the individual courses in each semester present certain overlap in their contents and some only sequential interconnections with the main and/or design-based courses. The EEAP believes that the individual courses in history and theory could be consolidated and further interconnected to theoretical and design-based research. The course sequence of structures and construction should be reordered to ensure the provision of fundamental technical knowledge (structures and materials) in the early semesters (1st-3rd semester) and construction and technology knowledge and design skills in the later semesters (3<sup>rd</sup>-6<sup>th</sup> semester). Technological, digital visualization and urban design courses need to act synergistically and be integrated within the design process in interactive and holistic way through formulation of single design tasks and objectives or even their interconnection with the main design studio. Furthermore, the elective restricted courses offered within the program of study need to cover all thematic areas, so that all students are able to select individual courses according to their interests and finish the concentration of their studies. In addition, the practical internship, although it does not count for the required 300 ECTS to complete the program of study, is considered to be of significance for the acquisition of practical experience and technical knowledge and should be in the future considered an integral part of the program of study. Further improvements of the program of study include the need to introduce a comprehensive design studio in the last semester of the core program of study that would integrate various disciplines within the design process and enhance collaborative design activities through contemporary technological means. This would further lead to an increase of design-driven research activities and new technologies in enhanced sustainability of the built environment in the last four semesters of the curriculum. In addition, stronger synergies in teaching and research and independence of knowledge and skills' provision can be achieved in the last year of the program of study, provided that the Research Thesis is directly associated to the theme of the Diploma Design Thesis. Additionally, this would enhance the concentration of studies in the last part of the program of study and would ameliorate the duration of the development and successful completion of the Diploma Design Thesis by the students.

The courses offered within the program of study reflect the interests and specializations of the faculty. Most of the faculty have a strong design profile and/or design interests that cover different design scales and individual thematic areas within the discipline. The output of applied research activities, such as project-based workshops and creative practice, as well as teaching is noted. It is especially noteworthy when considering the high number of students, the limited financial resources, and the reduced number of academic positions. An expansion of the number faculty is imperative. The low faculty/student ratio of approximately 1:32 impacts the quality of education. The increase of faculty should be accomplished through the hiring of new permanent faculty members, as well as adjunct and visiting faculty. The announcement of new positions in the next few years should primarily address new technological and interdisciplinary areas of design-based research and teaching, rather than traditional ones. The expansion of the faculty would contribute to the future development and sustainability of the program and could be a mechanism to forge the identity of the School's program of study.

The laboratories in the School provide some support of the educational activities and the execution of research projects. A synergistic consolidation of laboratories with related areas of activities would act positively on the research projects acquisition and interdisciplinary development. A strategic planning of the required lab infrastructure of the School would also act positively on its further development. In parallel, the fabrication laboratory is in need of further immediate expansion with state-of-the-art equipment (CNC-cutter, laser cutter, etc). In addition, a wood shop supervised by a technician and student assistants, should be developed for the support of related model making activities.

The alumni with whom we spoke, many of whom work abroad in internationally renowned practices and universities and are active in practice and research since graduation, spoke highly of the value of their experience noting that the program prepared them to be internationally competitive as they possessed highly valued knowledge and design skills.

There are procedures and regulations for the revisions of the program, and the EAAP was made aware that the program has been internally monitored and assessed periodically. The student representatives are involved and included in the School's meetings on a non-regular basis. They are encouraged by the faculty to contribute critically to curriculum revisions. We would encourage further use of virtual platforms/social media to enhance student participation and engagement.

The student guide is complete and appropriate. The School's web site is updated and well-structured with regard to the courses' syllabi and the academic personnel information. It further needs to promote the educational accomplishments and networking activities of the School. A placement of design studio work and the final Diploma Design Theses on a prominent location on the School's web site would definitely further enhance the visibility and quality of the work accomplished at the School throughout all stages of the program of study. This would allow the students and other stakeholders to access efficiently both the academic and non-academic resources of the program and the University.

#### **Panel Judgement**

Principle 2: Design and Approval of Programmes		
Fully compliant		
Substantially compliant	Х	
Partially compliant		
Non-compliant		

The External Evaluation & Accreditation Panel agrees that	YES	NO*
this Programme leads to a Level 7 Qualification according to the National & European Qualifications Network (Integrated Master)	Х	

- **R2.1** The updating of the curriculum should be perceived as a continuous and dynamic process that involves several entities including faculty, students, and external participants. The internal evaluation committee (OMEA) should include, in an advisory capacity all stakeholders, and should have a regular time schedule of meetings and consultations with the aim of continuous related improvements to be discussed and approved by the faculty. The central administration should facilitate such endeavours.
- **R2.2** The program's identity needs to be clearly reflected in the structure and the contents of the program of study and the students work produced in the design studios, especially in the higher semesters, and the Diploma Design Theses.
- **R2.3** Prerequisite courses should be defined throughout the semesters for an improvement of the educational objectives and deliverables.
- **R2.4** Synergies between theoretical courses and design, as well as inter- and cross-disciplinary design and research should be developed. This affects individual courses in each semester that need to be consolidated (history and theory courses), reordered (structures, materials, construction and technology courses) and/or integrated within the design process in interactive and holistic way (technology, digital visualization and urban design courses). Furthermore, the restricted elective courses offered within the program of study need to cover all thematic areas.
- **R2.5** The program of study needs to be further improved through introduction of a comprehensive design studio in the last semesters of the core program of study. This will integrate various disciplines within the design process and enhance collaborative design activities through contemporary technological means.
- **R2.6** Expand offering of courses in collaboration with other Schools by taking advantage of expertise available at the University at large, such as Energy, Bioclimatic Design, Materials and Fabrication.
- **R2.7** An advanced component and the possibility of concentration of the students' education in the final year should be further explored. The interdependence of the Research Thesis (Ερευνητική Εργασία) with the Design Diploma Thesis (Διπλωματική Εργασία) is expected to act positively on the educational objectives of the program and the completion of studies by the end of the  $10^{th}$  semester.
- **R2.8** Student work from design studios and the final Diploma Design Theses should be located in a prominent position on the School's web site, in order to further enhance the visibility and quality of the work accomplished at the School throughout all stages of the program of study. This will allow the students and other stakeholders to access efficiently both, the academic and non-academic resources of the program and the University.
- **R2.9** A strategic planning of the School's lab infrastructure, through consolidation of individual labs, acquisition of lab facilities and increase of the administrative personnel and lab assistants will have a positive effect on the further development of the School.

# Principle 3: Student- centred Learning, Teaching and Assessment

INSTITUTIONS SHOULD ENSURE THAT THE UNDERGRADUATE PROGRAMMES ARE DELIVERED IN A WAY THAT ENCOURAGES STUDENTS TO TAKE AN ACTIVE ROLE IN CREATING THE LEARNING PROCESS. THE ASSESSMENT METHODS SHOULD REFLECT THIS APPROACH.

Student-centred learning and teaching plays an important role in stimulating students' motivation, self-reflection and engagement in the learning process. The above entail continuous consideration of the programme's delivery and the assessment of the related outcomes.

The student-centred learning and teaching process

- respects and attends to the diversity of students and their needs, enabling flexible learning paths;
- considers and uses different modes of delivery, where appropriate;
- flexibly uses a variety of pedagogical methods;
- regularly evaluates and adjusts the modes of delivery and pedagogical methods aiming at improvement;
- regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys;
- reinforces the student's sense of autonomy, while ensuring adequate guidance and support from the teaching staff;
- promotes mutual respect in the student teacher relationship;
- applies appropriate procedures for dealing with students' complaints.

#### In addition:

- the academic staff are familiar with the existing examination system and methods and are supported in developing their own skills in this field;
- the assessment criteria and methods are published in advance;
- the assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary is linked to advice on the learning process;
- student assessment is conducted by more than one examiner, where possible;
- the regulations for assessment take into account mitigating circumstances;
- assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures;
- a formal procedure for student appeals is in place.

#### **Study Programme Compliance**

The curriculum of the School of Architecture consists of lecture courses and design studios. During the five-year program, students are required to complete a total of 50 courses, 42 of which are compulsory. The first three years consist of 35 compulsory courses (studios and lectures), while the fourth year consists of a range of required electives and elective courses and two compulsory design studios (architectural and urban or landscape design). Required electives courses continue in the 9th semester even though the last year (integrated master) is mainly devoted to a special research topic and the individual Diploma Design Thesis; in both cases, students select a professor as supervisor and they decide together the frequency of follow-up meetings, which means that the Research and the Diploma Design Thesis supervision has no official place in the students' program and is not calculated in the faculty workload.

Design studios (140/300 ECTS) introduce the fundamental elements of form, space, and structure through projects of different scales and progressive difficulty. Projects are carried out in groups. The required elective courses, sometimes accompanied by workshops, promote creative use of knowledge and experimental learning paths. The combined one year-long Research (12 ECTS) and Diploma Design Thesis (30 ECTS) projects demonstrate the student's ability to synthesize a comprehensive understanding of architecture in society.

Diploma Design Thesis juries are composed of three examiners, including the supervisor. Diploma Design Thesis juries are held throughout the year, every first Wednesday of the month. This regularity transforms the juries into moments of emulation and sociability and offers students the opportunity to complete their studies on their own schedule and avoid the excessive cost of accommodation. All diploma Design Thesis projects are digitized and archived on the web site. However, the archived (Institutional Repository) visual material (plans) is not sufficient to understand the projects.

The School promotes international collaborations. Eleven per cent of students go abroad in the context of Erasmus exchange, 18.5 per cent for practical training and a considerable number of graduates go abroad for postgraduate studies.

The total actual duration of the studies is about 7 years. At this moment, there are 1155 students enrolled, of which approximately 875 are active. Despite the large number, students have commented very positively on the availability of the professors. Faculty-student interaction is conducted on an intensive basis in the design studio and other classes. The student to faculty ratio in studio projects is 32:1. Despite the significant increase in the number of students entering the program since its inception, and the limited number of teaching staff, the professor-student relationships continue to be interpersonal.

There is no student academic advisor to monitor the progress of the students through the program or other issues. Students have expressed the need for clearer and more consistent criteria for the evaluation of projects. Professors will be appointed to coordinate each year, to ensure the coherence of the courses and the interactions between them.

Students emphasized the need for more courses about interior space or small–scale projects, as well as more in-depth teaching in urban design.

Although there exists a student survey system and students can evaluate the quality of courses through questionnaires either online or in print, students' participation is low.

#### **Panel Judgement**

Principle 3: Student- centred Learning, Teaching and		
Assessment		
Fully compliant		
Substantially compliant	Х	
Partially compliant		
Non-compliant		

- **R3.1** The EEAP recommends a more comprehensive structure for the program (e.g., thematic paths), which would highlight the character and the identity of the School and would facilitate the orientation and the focus of students in deciding their choices more consciously. This structure could be based on the interrelations between the different courses and studios (interdisciplinarity) and between teaching and research to facilitate students in the preparation of their research project in the 9th semester.
- **R3.2** The EEAP considers it necessary to integrate the Research Project and the Thesis Project supervision in the planning of the students, which could also help to reduce the duration of this process. Diploma Design Thesis project (Διπλωματική) or/and Research project (Ερευνητική) supervision should be considered in calculating the teaching staff's workload.
- **R3.3** The skills and methods of delivery and assessment, especially concerning the design studios, must be clearer.
- **R3.4** The archiving of visual material (plans, drawings, etc.), especially of Thesis projects, needs to be more complete and on the School's website.
- **R3.5** The Panel recommends an easier connection between the city and the university (shuttles), which would also facilitate students' on-site work.

# Principle 4: Student Admission, Progression, Recognition and Certification

INSTITUTIONS SHOULD DEVELOP AND APPLY PUBLISHED REGULATIONS COVERING ALL ASPECTS AND PHASES OF STUDIES (ADMISSION, PROGRESSION, RECOGNITION AND CERTIFICATION).

Institutions and academic units need to put in place both processes and tools to collect, manage and act on information regarding student progression.

Procedures concerning the award and recognition of higher education degrees, the duration of studies, rules ensuring students progression, terms and conditions for student mobility should be based on the institutional study regulations. Appropriate recognition procedures rely on institutional practice for recognition of credits among various European academic departments and Institutions, in line with the principles of the Lisbon Recognition Convention.

Graduation represents the culmination of the students' study period. Students need to receive documentation explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed (Diploma Supplement).

# **Study Programme Compliance**

The School of Architecture at the Technical University of Crete provides the students with all the necessary information about the curriculum and the syllabi of the courses. The School Secretariat is available to explain more specific details about the academic program. The undergraduate students in the School of Architecture have access to the awards that are uploaded on the School website. In addition, it is not clear that the students' progress throughout the years of study is monitored by the School.

Graduation represents the culmination of the students' experience and learning at the University. The students receive documentation explaining the qualification gained, including achieved learning outcomes and the context, level, content, and status of the studies that were pursued and successfully completed (Diploma Supplement).

The School of Architecture allows fifth-year students, with a maximum of 5 courses that are still required for the completion of the degree ECTS, the opportunity to present their Diploma Design Thesis project ( $\Delta \iota \pi \lambda \omega \mu \alpha \tau \iota \kappa \dot{\eta}$ ) or/and Research project (Ερευνητική) once a month during the any of the two academic semesters. The EEAP considers this as very appropriate, as the students are given many opportunities to complete their studies without further delay and hardship. Unfortunately, because there are a number of presentations during the year, the collegiality and the interest in attendance from the overall academic community is somewhat impeded. The EEAP applauds the effort by the School to organize at the end of academic year an exhibition presenting the student projects at the Mediterranean Centre of Architecture's space in the Arsenali.

Also, the School of Architecture encourages student mobility and promotes international collaborations. All students who have completed the first two years of the curriculum are eligible to participate in both the Erasmus Exchange Program and the Erasmus+ Traineeship Programme

(Erasmus Student Internship). However, the Covid-related restrictions have affected mobility over the last years; however, the attendance of the undergraduate students in Academic Year 2021-2022 increased.

Moreover, students are supported by the Regional Government of Crete for the Practical Training (student Internship). Although, the Practical Training does accumulate 2 ECTS units, those do not count as part of the required 300 ECTS for graduation. Since no internship is required after graduation and before acquiring professional rights, the practical experience during the studies is the only opportunity for the students to make a contact with the professional field. The School should consider establishing the Practical Training as a requirement within the overall curriculum and expand it in collaboration with the local professional representatives of The Technical Chamber of Greece (TEE).

Additionally, it is important to know that the School of Architecture has an academic network unit with various information about the Practical Training and Erasmus programs, available to the undergraduate students enrolled in the programs.

#### **Panel Judgement**

Principle 4: Student Admission, Progression, Recognition and Certification		
Fully compliant	Х	
Substantially compliant		
Partially compliant		
Non-compliant		

- **R4.1** In all courses of the first semester, introductory lectures and presentations should be held, to support students and gradually introduce them to the educational process. The School of Architecture should provide the students with all the necessary information about the curriculum and the teaching units of the courses, through an orientation early in their experiences as first year students.
- **R4.2** The EEAP encourages the School of Architecture to introduce a Student Advisor position.

# **Principle 5: Teaching Staff**

INSTITUTIONS SHOULD ASSURE THEMSELVES OF THE QUALIFICATIONS AND COMPETENCE OF THE TEACHING STAFF. THEY SHOULD APPLY FAIR AND TRANSPARENT PROCESSES FOR THE RECRUITMENT AND DEVELOPMENT OF THE TEACHING STAFF.

The Institutions and their academic units have a major responsibility as to the standard of their teaching staff providing them with a supportive environment that promotes the advancement of their scientific work. In particular, the academic unit should:

- set up and follow clear, transparent and fair processes for the recruitment of properly qualified staff and offer them conditions of employment that recognise the importance of teaching and research;
- offer opportunities and promote the professional development of the teaching staff;
- encourage scholarly activity to strengthen the link between education and research;
- encourage innovation in teaching methods and the use of new technologies;
- promote the increase of the volume and quality of the research output within the academic unit;
- follow quality assurance processes for all staff members (with respect to attendance requirements, performance, self-assessment, training etc.);
- develop policies to attract highly qualified academic staff.

#### **Study Programme Compliance**

The EEAP met with both tenured and adjunct faculty and discussed the teaching process and methods. It was evident that all faculty have invested personal time and energy in the success of the school. In addition to the course teaching, faculty are supervising Research Projects (Ερευνητική) and Diploma Design Theses ( $\Delta ιπλωματική$ ) that demand a lot of their time and are not accounted for in their normal workload. It is necessary for the University to establish an algorithm which will document the time and effort invested in the student work and progress as part of the faculty standard responsibilities. Not all faculty members live permanently in Chania, however students stated that they are very accessible and easy to contact. Additionally, it is important to note that adjunct teaching staff do not engage in the teaching process in a timely manner due to administrative issues.

The curriculum provides disciplines that cover a wide array of subjects, ranging from digital fabrication, and advanced visualization technologies to building restoration. The staff CV's and profiles suggest an inclination to interdisciplinarity and horizontal collaboration across different thematic areas. However, currently the curriculum contains courses that cover overlapping subjects, with limited horizontal integration, cross- and interdisciplinary work. In a similar manner, research laboratories have been established by one or two faculty members, usually covering similar and or adjacent thematic areas.

There are also nine institutionalized and four non-institutionalized laboratories that support mostly research and some teaching activities, most of which are seriously understaffed, some with deficiencies in instrumentation and/or maintenance and consumables. There are  $2 \text{ E}\Delta\Pi$  and  $3 \text{ ETE}\Pi$  staff members, which are not sufficient.

Despite the shortages, current students, and social and professional partners expressed their satisfaction with the dedicated teaching staff in terms of time, commitment, and quality of teaching.

Research is largely project-based, and support for original publications and conference fees are available only for tenured faculty. We were presented with various events and international workshops organized by the faculty, as well as publications and international collaborations.

## **Panel Judgement**

Principle 5: Teaching Staff		
Fully compliant	Х	
Substantially compliant		
Partially compliant		
Non-compliant		

- **R5.1.** The EEAP recommends that the School encourages cross disciplinarity and collaborations in course offerings.
- **R5.2.** The EEAP recommends a strategic plan to rationalise the laboratories and the hiring of staff, in order to make them more functional, operational and accessible to undergraduate students. This would also assist in creating synergies between them as well as sharing support staff.
- **R5.3.** The EEAP recommends the definition of a clear strategic plan for the medium and long term for faculty recruitment to fill the current and future gaps.
- **R5.4.** The incorporation of alumni in the teaching process via invitations for lectures could be a positive step in expanding knowledge and skills offered to students.
- **R5.5.** The establishment of a guesthouse for visiting and adjunct lecturers should be examined.
- **R5.6.** The University should account for the supervising of the Research Projects (Ερευνητική) and Diploma Design Theses ( $\Delta \iota \pi \lambda \omega \mu \alpha \tau \iota \kappa \dot{\eta}$ ) as part of the standard teaching load.

### **Principle 6: Learning Resources and Student Support**

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER TEACHING AND LEARNING NEEDS. THEY SHOULD, ON THE ONE HAND, PROVIDE SATISFACTORY INFRASTRUCTURE AND SERVICES FOR LEARNING AND STUDENT SUPPORT AND, ON THE OTHER HAND, FACILITATE DIRECT ACCESS TO THEM BY ESTABLISHING INTERNAL RULES TO THIS END (E.G. LECTURE ROOMS, LABORATORIES, LIBRARIES, NETWORKS, BOARDING, CAREER AND SOCIAL POLICY SERVICES ETC.).

Institutions and their academic units must have sufficient funding and means to support learning and academic activity in general, so that they can offer to students the best possible level of studies. The above means could include facilities such as libraries, study rooms, educational and scientific equipment, information and communications services, support or counselling services.

When allocating the available resources, the needs of all students must be taken into consideration (e.g. whether they are full-time or part-time students, employed or international students, students with disabilities) and the shift towards student-centred learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organised in various ways, depending on the institutional context. However, the internal quality assurance ensures that all resources are appropriate, adequate, and accessible, and that students are informed about the services available to them.

In delivering support services the role of support and administrative staff is crucial and therefore they need to be qualified and have opportunities to develop their competences.

#### **Study Programme Compliance**

Overall, the majority of students is satisfied with the academic facilities, i.e., the School of Architecture premises, studios, workshops etc. The interviewed students were aware of the available school support services (counselling etc.) but did not have any direct experience. Also available are outdoor sports facilities.

It appears, however, that the re-location of the faculty of Architecture that took place in 2013, from the neo-classical building in the city of Chania ( $\Gamma\alpha\lambda\lambda\iota\kappa\dot{\eta}$   $\Sigma\chio\lambda\dot{\eta}$ ) to the Technical University of Crete campus, affected the communal study experience. The current school building is not as easily accessible from town and somewhat isolated, resulting in the decline of the creative atmosphere that was described by TUC School of Architecture Alumni who had studied in the  $\Gamma\alpha\lambda\lambda\iota\kappa\dot{\eta}$   $\Sigma\chio\lambda\dot{\eta}$  building. The various facilities are now dispersed in two buildings that are within walking distance, but not very close. Therefore, the Architecture School is not part of a vibrant and layered urban fabric, but rather isolated in the TUC Campus.

A large number of well-equipped laboratories were viewed by the committee, but the extent to which these resources were used in the day-to-day teaching was unclear. It appears that these are mostly used for students' Diploma Design Theses ( $\Delta \iota \pi \lambda \omega \mu \alpha \tau \iota \kappa \dot{\eta}$ ) and for the faculty's research programs. The laboratory that seems to be used most frequently by the students is the laser cutter and CNC lab (FabLab), but it is only accessible when the technician is there, during the morning shift. The laboratories are attached to a particular thematic area, normally associated with one or two faculty members and not clear whether the facilities are available to the overall educational community as part of the common learning process. It is imperative that the School explores ways of making laboratories available to the student population for more

hours. One way is the utilization of lab assistants, from either the graduate or undergraduate body. Students could make excellent assistants with the appropriate training.

The students spend most of their day in the campus studios, but a big part of their work is carried out in their residences. Accommodation at a reasonable price is an important issue, as the city of Chania is a tourist destination. The cost of materials for students' studio projects and presentations should also be addressed.

#### **Panel Judgement**

Principle 6: Learning Resources and Student Support	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

- **R6.1** The EEAP suggest that the School and students' organizations plan campus events that will attract city residents (i.e., performances, exhibitions).
- **R6.2** The School should make workshop facilities available to students for more hours during a workday.
- **R6.3** The creation of a modelmaking and drafting materials shop in the campus area, should be explored.
- **R6.4** Utilize lab assistants, from either the graduate or undergraduate body. Students could make excellent assistants with the appropriate training.
- **R6.5** The EEAP recommends that a campus connection with the city with frequent dedicated bus routes, possibly operated by the University as a campus-city loop.
- **R6.6** Provide a mechanism to alleviate student concerns with housing in or near the campus area.

# **Principle 7: Information Management**

INSTITUTIONS BEAR FULL RESPONSIBILITY FOR COLLECTING, ANALYSING AND USING INFORMATION, AIMED AT THE EFFICIENT MANAGEMENT OF UNDERGRADUATE PROGRAMMES OF STUDY AND RELATED ACTIVITIES, IN AN INTEGRATED, EFFECTIVE AND EASILY ACCESSIBLE WAY.

Institutions are expected to establish and operate an information system for the management and monitoring of data concerning students, teaching staff, course structure and organisation, teaching and provision of services to students as well as to the academic community.

Reliable data is essential for accurate information and for decision making, as well as for identifying areas of smooth operation and areas for improvement. Effective procedures for collecting and analysing information on study programmes and other activities feed data into the internal system of quality assurance.

The information gathered depends, to some extent, on the type and mission of the Institution. The following are of interest:

- key performance indicators
- student population profile
- student progression, success and drop-out rates
- student satisfaction with their programme(s)
- availability of learning resources and student support
- career paths of graduates

A number of methods may be used for collecting information. It is important that students and staff are involved in providing and analyzing information and planning follow-up activities.

#### **Study Programme Compliance**

The School has established various monitoring procedures and collects data on the student population, performance indicators, teaching staff and the study program. With this information the School can identify areas of weakness and improve the study program. Students have individual access in the institute's online platforms. They can track their progress online and request basic certificates.

Course feedback is collected at the end of each semester through a questionnaire that assesses the teaching staff, their teaching methodology and materials used, their effort and the level of course difficulty. These are conducted online and analysed by the MODIP and then the teaching staff can access the results for their course. It was mentioned that a small percentage of the student body participates. This was mainly attributed to the fact that the evaluations are completed outside of the classroom and, as such, most students disregard them.

The EEAP was presented data regarding the students and their profile through the years, the career paths of the graduates and their current location, the number of faculty members and teaching staff, the modifications of the undergraduate and postgraduate programs and their projects. It was suggested by the graduates that the EEAP met with that the School should organize an alumni group and collect further information regarding the graduates.

In the School's annual review, which is mandatory by MODIP, all the available data are taken into consideration and contribute to the continuous improvement.

## **Panel Judgement**

Principle 7: Information Management		
Fully compliant	Х	
Substantially compliant		
Partially compliant		
Non-compliant		

- **R7.1** Improve participation rates in course evaluation surveys by possibly conducting them in the classroom or studios.
- **R7.2** The School should establish its own key performance indicators that include quantitative and qualitative indicators, in order to track its progress efficiently.

# **Principle 8: Public Information**

INSTITUTIONS SHOULD PUBLISH INFORMATION ABOUT THEIR TEACHING AND ACADEMIC ACTIVITIES WHICH IS CLEAR, ACCURATE, OBJECTIVE, UP-TO-DATE AND READILY ACCESSIBLE.

Information on Institution's activities is useful for prospective and current students, graduates, other stakeholders and the public.

Therefore, institutions and their academic units provide information about their activities, including the programmes they offer, the intended learning outcomes, the qualifications awarded, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students, as well as graduate employment information.

#### **Study Programme Compliance**

The School's website (https://www.arch.tuc.gr/) is detailed and indexed. Information regarding the staff members, curriculum, research programs, the policy for quality assurance and the facilities are provided both in English and Greek.

The website is accessible for some relevant information. A detailed curriculum plan, the course outlines, the staff's CV and projects, research, past students Diploma Design Theses  $(\Delta\iota\pi\lambda\omega\mu\alpha\tau\iota\kappa\dot{\eta})$  and Research Projects (Ερευνητική) archive (Institutional Repository), and a well-structured student's guide are available. Unfortunately, student work is not appropriately presented. The Diploma Design Thesis  $(\Delta\iota\pi\lambda\omega\mu\alpha\tau\iota\kappa\dot{\eta})$  and Research Projects (Ερευνητική) for each student who has completed the courses, since 2010, is presented in the Institutional Repository, neither the format nor the graphic presentation of the repository is attractive. Works for years one through four are not presented at all.

Contact details and online comprehensive maps are also available from the website's menu. News and announcements are updated, providing current information to the students. The English version of the website is not as comprehensive as the Greek version and should be updated to provide all the information needed.

Recent online lectures are available on the School's page. It is not clear whether older lectures are on the School's page, and available to the public.

The electronic presence of some of the individual faculty lab web pages ( $E\rho\gamma\alpha\sigma\tau\eta\rho\iota\alpha$ ) although in most case is excellent; they do not seem to exist within a framework that is collaborative to each other and to the overall School.

Overall, the School's information is published in a timely manner and should continue to be renewed. The School should consider establishing an inter-departmental web page available to the staff, faculty, and student only where certain relevant information such as course and administrative information can be posted but not seen by the public as is the case now.

Although, there are public lectures, some by notable architects, they do not seem to form a cohesive thematic form, and as such available and celebrated at the web page.

The School organizes a number of symposia and participates in innovative activities and "happenings" such as Dance Days Chania or the collaborative projects  $To\pi o\vartheta \varepsilon \tau \dot{\omega}$  with the Athens School of Fine Arts.

#### **Panel Judgement**

Principle 8: Public Information		
Fully compliant		
Substantially compliant	Х	
Partially compliant		
Non-compliant		

- **R8.1** Develop an inter-departmental web presence for communications among members of the School.
- **R8.2** Incorporate the individual faculty lab web pages (Εργαστήρια) within the main electronic presence of the School.
- **R8.3** Continue the innovative activities and meaningful collaborations with local, national and international entities in order to provide substantial exposure for the work of the faculty and students.
- **R8.4** Publish an archive with the students work, especially the works from the studio in years 1-4, to give more insight into the School's outcomes.
- **R8.5** Improve the English version of the website to provide all the information needed.

### **Principle 9: On-going Monitoring and Periodic Internal Review of Programmes**

INSTITUTIONS SHOULD HAVE IN PLACE AN INTERNAL QUALITY ASSURANCE SYSTEM FOR THE AUDIT AND ANNUAL INTERNAL REVIEW OF THEIR PROGRAMMES, SO AS TO ACHIEVE THE OBJECTIVES SET FOR THEM, THROUGH MONITORING AND AMENDMENTS, WITH A VIEW TO CONTINUOUS IMPROVEMENT. ANY ACTIONS TAKEN IN THE ABOVE CONTEXT SHOULD BE COMMUNICATED TO ALL PARTIES CONCERNED.

Regular monitoring, review and revision of study programmes aim to maintain the level of educational provision and to create a supportive and effective learning environment for students.

The above comprise the evaluation of:

- the content of the programme in the light of the latest research in the given discipline, thus ensuring that the programme is up to date;
- the changing needs of society;
- the students' workload, progression and completion;
- the effectiveness of the procedures for the assessment of students;
- the students' expectations, needs and satisfaction in relation to the programme;
- the learning environment, support services and their fitness for purpose for the programme

Programmes are reviewed and revised regularly involving students and other stakeholders. The information collected is analysed and the programme is adapted to ensure that it is up-to-date. Revised programme specifications are published.

#### **Study Programme Compliance**

The Quality Assurance Policy of the School is aligned with MODIP and is developed and applied with the participation of all its staff: teaching, technical and administrative. The OMEA performs an annual internal evaluation of the quality of the program and submits a written report containing its findings to MODIP.

The annual evaluation report contains all the information necessary for the School to assess the academic quality of the program, to identify its strong points and weaknesses, and to take measures for its improvement. The most recent review has identified a set of strengths and weaknesses of the School along with a list of suggested proactive actions. It is stated that the School of Architecture has meanwhile reached maturity and represents a contemporary program of study with emphasis in modern architecture. The weaknesses include (a) the large teaching load of the faculty due to the large number of students registered in the undergraduate program vis-à-vis faculty, resulting in a detrimentally low teacher to student ratio, (b) the low participation of students in the evaluation of the courses, (c) the insufficient presence of the School on the English web site, and (d) the limited contact of the graduates with the School.

At the end of every semester, students are asked to participate in a questionnaire, monitoring their satisfaction with the courses. Although the number of students that responds is low, it enables the teaching staff to self-evaluate and improve their teaching methods and outcomes.

The annual internal reviews are used for the continuous improvement of the study program and the delivery of a quality, up-to-date curriculum. It also serves for the improvement of staff,

resources, facilities, work environment and administrative process in support of the educational activities. The written report is submitted to MODIP, and they publish it to their website.

The School is committed to provide high quality education and experience to the student body and staff, while maintaining a positive and friendly environment.

#### **Panel Judgement**

Principle 9: On-going Monitoring and Periodic Review of Programmes	Internal
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

- **R9.1** The School should further engage in a formal and consistent evaluation process of the program of studies and activities. Additionally, strengthening of the research activities of the faculty and related synergistic actions with students, in order to engage them further in the latest research trends and changing needs of the society, should be included as compelling components for the future development of the School.
- **R9.2** The School should consider, as part of its programmatic evaluation, the trends of emerging inter- and cross-disciplinary research and practice in architecture in strategically addressing future faculty hires. The EEAP is concerned that the School's faculty members and administrative personnel are overextended in teaching and administrative duties.

# **Principle 10: Regular External Evaluation of Undergraduate Programmes**

PROGRAMMES SHOULD REGULARLY UNDERGO EVALUATION BY COMMITTEES OF EXTERNAL EXPERTS SET BY HAHE, AIMING AT ACCREDITATION. THE TERM OF VALIDITY OF THE ACCREDITATION IS DETERMINED BY HAHE.

HAHE is responsible for administrating the programme accreditation process which is realised as an external evaluation procedure, and implemented by a committee of independent experts. HAHE grants accreditation of programmes, with a specific term of validity, following to which revision is required. The accreditation of the quality of the programmes acts as a means of verification of the compliance of the programme with the template's requirements, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees.

Both academic units and institutions participate in the regular external quality assurance process, while respecting the requirements of the legislative framework in which they operate.

The quality assurance, in this case the accreditation, is an on-going process that does not end with the external feedback, or report or its follow-up process within the Institution. Therefore, Institutions and their academic units ensure that the progress made since the last external quality assurance activity is taken into consideration when preparing for the next one.

#### **Study Programme Compliance**

The School was evaluated in 2013 by an international external evaluation committee. As the School states, part of the external evaluation of 2013, was considered in the final formulation of the revised program of studies, but also in the update that followed. The revisions made referred to a restructuring of the curriculum based on a reduction of courses, and the redefinition of architectural design courses in each semester to directly relate with individual thematises and scales, design-based and research from the subject areas defined within the units of the School.

The EEAP recommends continuous review of the curriculum of the School, to address contemporary issues of the society and the profession, to enhance its emerging identity and to maintain the future development and sustainability of the program, given the number of faculty members. The different thematic areas of the School should account for the broader contemporary context of the discipline, with reference to theory, communication media, social and environmental sustainability, digital computation and fabrication, technology design, interand cross-disciplinary design-based research. The required expansion of faculty through the announcement of new positions (in addition to the allocated ones) in the next few years should address such cross-disciplinary areas of design-based research and teaching, rather than the traditional ones.

The external review of 2013 strongly identified issues with the physical infrastructure, laboratories, and workshops. The EEAP is also concerned with the efficiency of the teaching spaces and the lack of support for the upgrade and maintenance of current facilities, which was stated in the 2013 EEC report, especially in the support personnel, so the students can have access to the facilities. The EEAP is very concerned about national budget practices that have had substantial detrimental effect on key infrastructure elements such as the computer laboratory, fabrication facilities and general facilities and equipment. Such budget shortfalls

threaten even the most basic ability to conduct coursework. Although, the University has allocated additional and substantial space to the School, the physical separation of the building units poses a hindrance to the collegiality and exchange of ideas among faculty and primarily students.

The EEAP is concerned about the currently low number of faculty, high teaching load of the faculty members and low ratio of faculty members to students. The EEAP is also concerned with the efficiency of the teaching spaces and the lack of state financial support.

There have been no other evaluation efforts outside of the single review sponsored by HAHE. However, the School implements the procedures set forth by the University Quality Assurance Unit, collects and analyses the required data periodically, and provides their results to the QAU.

All faculty and staff recognize the importance of the external evaluation and value the past and future recommendations. They all believe this helps the School achieve its goals and purpose, help them improve, and engage in meaningful discussions about the future of the program and the changing educational demands placed by a diverse set of social and professional issues. Unfortunately, the School does not have the financial means to implement its own external evaluation process. A possible solution might be the establishment of an advisory professional board whose members volunteer their services for the benefit of the School.

The EEAP had the opportunity to interact not only with almost all faculty and staff members, but also with current students at the School, as well as graduates. All showed a great level of enthusiasm and professionalism, as well as commitment in supporting and aiding the EEAP in any manner and for any request. The administration, faculty and staff of the School were very eager in accommodating the needs and requests of the EEAP, which was made to feel very welcomed. The slightly negative current comments presented in this Principle could be ameliorated by implementing the suggested recommendations by the external reviews.

#### **Panel Judgement**

Principle 10: Regular External Evaluation of Under Programmes	graduate
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

- **R10.1** The School should continuously review the curriculum and staffing needs, to address contemporary issues of the society and the profession, enhance its emerging identity and maintain the future development and sustainability of the program.
- **R10.2** The stated goal of the production of high-quality research activity by the faculty members of the School should be expanded to include cross- and inter-disciplinary research and greater collaboration among teaching staff in research projects.
- **R10.3** The School should implement its own external evaluation process. A possible solution might be the establishment of an advisory professional board whose members volunteer their services for the benefit of the School. Such a board should take advantage of the highly placed alumni of the School within the professional offices worldwide.
- **R10.4** The School should continue its efforts to fully respond to the comments and recommendations provided in the External Evaluation Committee report of 2013, some of which are present in this report as well.

# **PART C: CONCLUSIONS**

#### I. Features of Good Practice

- Strong interaction with partners, both in the public and private sectors.
- The preparation that the program affords for their alumni, which manifest itself in excellent professional careers.
- Dedication and accessibility of teaching staff.
- Location that affords opportunities within the stimulating Chania historical centre.
- Strong involvement with design-based projects that serve the overall community.

#### II. Areas of Weakness

- The number of teaching staff is low especially in relation to the broad academic goals of the School.
- Low ratio of academic staff to students.
- Existing infrastructure needs updating and consolidation/improvement of the laboratories.
- Lack of collaborative and interdisciplinary research activities, especially amongst similar thematic areas.
- Limited facilities and high accommodation cost within the local area for both students and visiting/adjunct lecturers.
- School web site presence is not fully comprehensive and informative.

### III. Recommendations for Follow-up Actions

- The central administration of the Technical University of Crete and the Ministry of Education must increase the numbers of the academic staff.
- Improve the student teaching staff ratio, either by substantially increasing the number of faculty or by decreasing the number of students.
- Evaluate the curriculum to increase synergies between individual courses and design areas. Explore the introduction of a comprehensive design studio.
- o Introduce a comprehensive design studio in the last semesters of the core program of study.
- Rethink the separation of the Research Project and the Diploma Design Thesis.

- Expand collaborative and interdisciplinary activities in teaching and research within the School of Architecture and with faculty of the other Schools of the University.
- Improve physical infrastructure and collaborative working spaces for the School. Laboratories and workshop infrastructure should be reconsidered within a collaborative framework.
- Appropriate laboratory and administrative personnel should be increased.
- Establish a School Liaison Office (Γραφείο Διασύνδεσης), enhance the role of the alumni, and improve their tracking.
- Enhance use of the Public Information outlets and social media to promote the Architecture School's contribution, by making the Student Projects public.
- o Provide opportunities for further faculty development.

# **IV. Summary & Overall Assessment**

The Principles where full compliance has been achieved are: 1, 4, 5, 6, 7, 9, and 10.

The Principles where substantial compliance has been achieved are: 2, 3, and 8.

The Principles where partial compliance has been achieved are: None.

The Principles where failure of compliance was identified are: None.

Overall Judgement	
Fully compliant	Х
Substantially compliant	
Partially compliant	
Non-compliant	

The External Evaluation & Accreditation Panel agrees that	YES	NO
this Programme leads to a Level 7 Qualification according		
to the National & European Qualifications Framework	Х	
(Integrated Master)		

### The members of the External Evaluation & Accreditation Panel

#### Name and Surname

# Signature

#### 1. Professor Loukas N. Kalisperis (Chair)

Pennsylvania State University, University Park, Pennsylvania, USA

#### 2. Professor Marios C. Phocas

University of Cyprus, Nicosia, Cyprus

# 3. Ms. Dimitra Chatzipavli

Department of Architecture, University of Thessaly Student Representative

#### 4. Assoc. Professor Marilena Kourniati

École Nationale Supérieure d'Architecture Paris – La Villette, Paris, France

### 5. Dr. Olga Venetsianou

Representative of the Technical Chamber of Greece, Athens, Greece