RIBA ♯

Royal Institute of British Architects

Arab Academy of Science, Technology and Maritime Transport (AASTMT) Smart Village Campus

Part 1: BSc in Architectural Engineering and Environmental Design (first 4 years)

Date of visiting board: 27/28 September 2017
Confirmed by RIBA Education Committee: 9 February 2018

1   **Details of institution hosting course**
       Arab Academy of Science, Technology and Maritime Transport
       (AASTMT)
       Architectural Engineering and Environmental Design Department
       College of Engineering and Technology, Smart Village, Giza
       P.O. Box 12577
       Smart Village - B2401
       6th October City

2   **Head of Architecture Department**
       Suzette Aziz Ph.D. Professor

3   **Courses offered for validation**
       Part1: The first 4 years (full-time) of the BSc in Architectural
               Engineering and Environmental Design

4   **Awarding body**
       The Arab Academy of Science, Technology and Maritime Transport
       (AASTMT)

5   **The visiting board**
       Harbinder Birdi, Chair – practitioner
       Andy Usher – Vice Chair – practitioner
       Angie Pascoe – academic
       Jane McAllister – academic
       Dr Basil Kamel - regional representative

       Stephanie Beasley-Suffolk – RIBA validation manager was in
       attendance.

6   **Procedures and criteria for the visit**
       The visiting board was carried out under the *RIBA procedures for
       validation and validation criteria for UK and international courses
       and examinations in architecture* (published July 2011, and effective
       from September 2011)*;* this document is available at
       www.architecture.com.

7   **Proposals of the visiting board**
       On 9 February 2018 the RIBA Education Committee confirmed, by
       circulation, unconditional validation of the following

       Part1: The first 4 years (full-time) of the 5-year BSc in Architectural
               Engineering and Environmental Design

       This applies immediately from the 2017 graduating cohort onwards.

       The next full visit to the Part 1 programme should take place in
       2022.

8   **Standard requirements for continued recognition**
       Continued RIBA recognition of all courses and qualifications is
       dependent upon:

i   external examiners (or an acceptable alternative) being appointed for the course

ii   any significant changes to the courses and qualifications being submitted to the RIBA

iii   any change of award title, and the effective date of the change, being notified to the RIBA so that its recognition may formally be transferred to the new title

iv   submission to the RIBA of the names of students passing the courses and qualifications listed

v   In the UK, standard requirements of validation include the completion by the institution of the annual statistical return issued by the RIBA Education Department

9   Academic position statement (written by the School)

Introduction and vision
The Architectural Engineering and Environmental Design Department at Smart Village (AEED-SV) operates a five-year program based on the same curriculum offered by our sister departments in Alexandria and Cairo. Our vision is to evolve into an establishment for the lifelong learning of architecture, with an intrinsic emphasis on community engagement, conservation and revival. To fulfil this vision, we seek to capitalize on our individual strengths, particularly our strategic location in a unique business hub, and proximity to historical monuments from Pharonic, Coptic and Islamic eras. We aim at producing graduates who have been exposed to a diversified and holistic architectural pedagogy that merges between historicism, cultural heritage and modernity, coupled with first hand exposure to issues of contemporary practice.

Areas of Activity at AEED Smart Village
Our curriculum is centred around design problem-solving, and therefore features a distinct stream of design-studio modules, during which students are exposed to a variety of project typologies. Our curriculum additionally features parallel streams of building technology, environmental studies and construction modules. Students are also offered electives nurturing aesthetic and artistic appreciation.

Electives in computer software and rendering are also available. Students often work individually, and are occasionally assigned group projects, to build confidence in team-working.

Features of Distinction
We pride ourselves on a number of distinctive features related to:

• Location: Our unique Smart Village location, which boasts buildings of Neo-Pharonic architectural styles, gives students first-hand exposure to successful building design. Several Smart Village buildings are LEED-accredited, and students are invited to seminars explaining how the design and construction of these buildings meet international standards. Our location also offers proximity with some

of the largest architectural firms in the region, maximizing students' employability prospects.

*• **Design studio projects:** These address real-world issues particular to the Egyptian context. We encourage students to reflect upon and respond to rapid geo-political and social changes transpiring in Egypt, following the January 2011 revolution. Architectural design is used as a vehicle, through which contextual response is questioned, and dialogues between buildings, the urban tapestry in which they are set, and cities that they form are discussed. Projects are located across a number of different cities and governorates across the country (e.g. Downtown Cairo, Alexandria, the Sinai, Port-Said, Ismailia and Alamein).*

*• **Representation techniques:** Our students are encouraged to explore and experiment with a range of representation media, to explore, develop and represent their ideas and solutions. This includes freehand sketching and technical drawing using both analogue and digital means. We also pride ourselves in a strong culture of physical model-making to accompany the development of students' design ideas in studio. Our students are encouraged to keep up with state-of-the-art means in representation; for example, members of our recently graduated cohort created a walkthrough of their interior spaces with the assistance of virtual reality (VR) goggles.*

*• **High calibre faculty:** We are fortunate to attract high-calibre faculty, several of whom have returned from their postgraduate studies abroad. The majority is situated within a relatively young age bracket (> 40 years). Some practice architecture professionally and/or participate in both national and international competitions. This means that our staff body remains up-to-date with all that is state-of-the-art. We also recruit part-time staff from governmental and private universities, offering knowledge from various schools of thought wider trajectories.*

*• **Interactive learning facilities:** We have invested in state-of-the-art learning facilities such as interactive smart boards. We have recently invested in digital machinery to set up a digital fabrication laboratory. Setting up a laboratory for environmental testing is also part of our forthcoming expansion.*

*• **Off-campus activities:** We strive to build a strong tradition of field trips by making site visits an integrated feature of our design studios. These often take place outside of Cairo, allowing students to explore the rich social, historical and contextual tapestries of Egyptian culture.*

Visiting Critics and Departments' Activities
We routinely seek the expertise of professionals and academics from outside AEED-SV through participation as jury panellists. We

also invite external speakers to talk about their participation on national and international projects and competitions.

Aims and outcomes of RIBA I and RIBA II award levels
We anticipate that validation will follow the same structure applied at our sister branches, with RIBA Part I corresponding to the first four years of our B.Sc. course. The aim at this level is to equip students with fundamental knowledge (e.g. of building construction and technologies, environmental design and architectural history and theories) and skill-sets (e.g. critical thinking and creative problem-solving) to allow design problem-solving at diverse scales and in response to various contexts. By the end of the first four years, students should be able to develop their design proposals into technical, execution documents, responding to market demands. We envision that Part II will follow a practice-based approach, orienting students toward more challenging and sophisticated problem-solving.

Specific Outcomes and Relevance to Professional Practice
Our course is designed to produce graduates who can satisfy the following job market requirements:
• Setting architectural programs
• Development of design proposals at both architectural and urban planning scales.
• Presenting design proposals in visual, verbal and written formats, using digital and nondigital media.
• Preparation of well-written analytical reports.
• Selection of construction methods and preparation of associated technical drawings.
• Project management practices.
Our course also emphasizes acquisition of transferrable skills including critical thinking, creative problem-solving, design development, communication and team-working.

Interpretation of the Validation Criteria in terms of Course Content and Delivery
Evaluating our course against RIBA validation criteria, our architectural design modules enhance students' abilities in producing aesthetically-pleasing and technically-sound designs that are innovative, yet contextually-responsive and respectful of the Egyptian identity. This is supported by architectural history and theory modules emphasizing the country's rich cultural, social and intellectual histories, all of which inform design problem-solving. Planning modules focus on theories of urban design, and students are encouraged to reflect on the intertwining layers of Cairo's urban fabric across multiple locations. These include historic parts of the city such as Old Cairo, as well as newer suburban communities.

Alongside these major module streams, different modules address criteria concerning the impact of fine arts on architectural design quality, and the relationship between people, buildings and the community at large.

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10   Commendations
The visiting board made the following commendations:

10.1   The Board commends the Department for preparing a well-presented and documented exhibition for their first cohort of students.

10.2   The Board commends the Department for its management of a comprehensive architecture programme that clearly prepares students for professional practice within the architectural and construction industries.

10.3   The Board commends the Department's initiative in setting up an Industry Board which seeks to establish links with the local and regional business communities.

10.4   The Board commends the Department for having a committed and collegiate complement of faculty and teaching assistants, who are dedicated to the success of the students and the Department.

10.5   The Board commends the hard-working and committed students who have been encouraged to deliver a diverse range of work.

10.6   The Board commends the commitment to the academic position statement i.e. with reference to emphasis on "community engagement, conservation and revival" and their realisation in the project briefs.

11   Conditions
There are no conditions.

12   Action points
The visiting board proposes the following action points. The RIBA expects the university to report on how it will address these action points. The university is referred to the RIBA's criteria and procedures for validation for details of mid-term monitoring processes. Failure by the university to satisfactorily resolve action points may result in a course being conditioned by a future visiting board.

12.1   The Academy should continue to invest in the Department's resources, notably the physical workshops, library and material and environmental laboratories.

12.2   The Department should establish student representation for all academic years to provide formal mechanisms for the discussion of student matters with faculty.

13   Advice
The visiting board offers the following advice to the school on desirable, but not essential improvements, which, it is felt, would assist course development and raise standards.

13.1   The Board notes the campus strategy for physical expansion, which will afford more architecture studio space. The Board advises that this space is prioritised for the provision of design studios that will enable a stronger studio culture to be fostered.

13.2   The Board advises that the Department reviews professional administrative support to enable the academic staff to dedicate more time to the disciplines of research and teaching.

13.3   The Board advises that the Department establishes a policy for the appointment of both full and part-time assistants and agrees on an appropriate training programme and professional development plan for each member of staff.

13.4   The Board advises that the Department identifies a mechanism for the overall co-ordination of the bachelor architecture programme to ensure the cross-co-ordination of key staff members teaching a variety of work streams.

13.5   The Board advises the Department to review the quality of the electives (some of which are excellent).

15   Delivery of graduate attributes
It should be noted that where the visiting board considered graduate attributes to have been met, no commentary is offered. Where concerns were noted (or an attribute clearly not met), commentary is supplied. Finally, where academic outcomes suggested a graduate attribute was particularly positively demonstrated, commentary is supplied.

The Board confirmed that all Part 1 graduate attributes were met.

16   Review of work against criteria
It should be noted that where the visiting board considered a criterion to have been met, no commentary is offered. Where concerns were noted (or a criterion clearly not met), commentary is supplied. Finally, where academic outcomes suggested a criterion was particularly positively demonstrated, commentary is supplied.

The Board confirmed that all criteria were met.

17   Other information

17.1   Student numbers
In 2016 302 students were enrolled in the first semester and 291 in the second.

Confirmed report – for publication

17.2 Documentation provided
The School provided all documentation as required under the Procedures for Validation.

18. Notes of meetings
On request, the RIBA will issue a copy of the minutes taken from the following meetings. These notes will not form part of the published report but will be made available on request. The full set of notes will be issued to the next full visiting board.

18.1 Meeting with head of school and core staff

18.2 Meeting with students
18.3 Meeting with the Academic Dean
18.4 Meeting with external examiners and jurors
18.5 Meeting with staff