Royal Institute of British Architects

Report of the RIBA visiting board to the University of Nottingham, Ningbo, China (UNNC)
Department of Architecture and Built Environment

Date of visiting board: 20/21 October 2014
Confirmed by RIBA Education Committee: 11 February 2015
Details of institution hosting course/s
The University of Nottingham, Ningbo, China (UNNC)
Department of Architecture and Built Environment
Faculty of Science and Engineering
Science and Engineering Building
199 Taikang East Road
Ningbo, 315100, China

Head of Department of Architecture and Built Environment
Ir Dr Llewellyn Tang

Course/s offered for validation
BArch (Hons) Architecture (Architecture and Built Environment), and BEng (Hons) Architecture, Candidate Course for RIBA Part 1 validation.

Course Director
Dr Shibu Raman

Awarding body
The University of Nottingham

The visiting board
Professor Lorraine Farrelly – Chair, academic
Professor Kevin Singh – Vice Chair, academic
John Ashton, practitioner
Peggy Le Cren, practitioner
Mike Bradley - regional representative for UNNC visit.

Stephanie Beasley-Suffolk, Validation Manager, was in attendance.

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.

Proposals of the visiting board
At its meeting on 11 February 2015 the RIBA Education Committee confirmed unconditional validation for Part 1 of the
BArch (Hons) Architecture (Architecture and Built Environment) and BEng (Hons) Architecture

with effect from the 2013/2014 graduating cohort.

The next visiting board should take place in 2019.

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

i external examiners being appointed for the course

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

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

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

Academic position statement (written by the Department)

When the East calls, the West responds

东鸣西应 (Dōng míng Xī yìng), Chinese proverb

The design of the built environment has a profound impact on the quality of life and on the behaviour of people, on the culture of place, as well as on economic, social, and environmental development. Today, with more than half of the world population living in urban areas, it is imperative to design and build sustainable and liveable human settlements, tackling the challenges of climate change, the global financial crisis, social issues including poverty and housing demand, the need for a rational use of energy and resources, while preserving and celebrating the fine arts, histories, and creative expressions of traditional cultures. Globalisation has influenced many aspects of life, increasing cooperation, mobility, and exchanges between nations, but also transforming the ways and places where people live and work. Yet, as professional design practices become more international, the preservation of local identity assumes an increasingly relevant role. As part of one of the most rapidly developing regions of the world, cities in China are transforming at a considerable pace. However, an evident shift in living standards and demands has not yet been consistently supported by a thorough critical dialogue between policy makers, designers, the construction industry, and end-users. The Chinese urban population is predicted to increase to 74% by 2030, thus requiring the urgent definition of architectural and urban design strategies to respond to this hasty process of development and to a large migration from rural areas, identifying solutions that rigorously and creatively address concerns of affordability, densification, marginalisation, cultural and technological adequacy, and sustainability.

In response, the Department of Architecture and Built Environment at UNNC strives to stand as a truly global laboratory for architecture and engineering, yet sensitive to contextual characters and to societal and market demands. With academics and students from diverse cultural backgrounds – and with programmes that span the architectural and building sciences – the Department aims to dialogically ‘bridge’ the skills, knowledge, and practices of the West with those of the East, informing its teaching by cutting-edge research, and engaging with actors of the construction industry in the Zhejiang Province, Shanghai, China, and the Asia Pacific region. Consistently with the ethos of the home Department in Nottingham, UK, all programmes seek to provide a critical balance between the cultural, technical, and professional aspects necessary for a rounded education in disciplines of architecture and the built environment, underpinned by diversity in design response, and social and environmental responsibility.

The architecture programme aims to educate the next generation of architects and urban designers, who will become leaders in the critical dialogue among the various players of the building industry both in China and internationally. This dynamic and vibrant course is taught by a multi-cultural body of staff from academia and practice – all well-established in their field of design and research expertise, including architecture and urban design, humanities, tectonics, environmental science, professional studies, sustainable energy technologies, and fundamental and applied engineering – and is embraced by an equally varied cohort of students, coming from all over China and abroad. The course is founded on collaborative work with public and private sector organisations (e.g., the Housing and Urban-Rural Development Committee, the Academy of Smart City Development, and the Urban and Rural Planning Research Centre in Ningbo, the Ningbo and Hangzhou city planning offices, etc.) and is supported by the active engagement of several guest tutors, critics, and lecturers from local and international design firms (e.g., UN Studio, Atkins, AE:COM, Allied Architects, Gensler, Glen Howell Architects, Pro Form, PTW Architects, Chapman Taylor, Slow
Studio, Will Alsop Architects, Parsons Brinckerhoff, etc.). This ensures relevance to the programme, and allows students to be exposed to design best practice. The teaching stands for high-achieving academics and students, and promotes a distinctive education founded on a critical understanding of the socio-cultural, economic, environmental, and political forces acting within the current context of urbanization in China and at a global level, yet promoting a design thinking that is creative, artistic, inspired, independent, and transformative. The programme ultimately aims to form designers and decision makers capable of comprehensively reconciling technological, industrial, and financial development with quality of life, social justice, and environmental preservation.

The programme prides itself on being able to recruit students of considerable talent, and seeks to provide them with a high quality teaching delivered by its enthusiastic and engaging staff, growing resources — such as studio spaces, workshops, library, IT facilities, etc. — and the individual tutoring needed to achieve their full potential, and maturing at both professional and personal levels. Students are stimulated to appraise and interpret, reflect and imagine, dream and experiment, designs and paradigms for the buildings and cities of today and tomorrow, in the context of a teaching and learning approach that aims to combine the solid pedagogical tradition of skill development and enhancement of rigorous technical competence promoted by the Chinese higher education system, with the critically-informed framework of analysis and design synthesis that characterises UK architectural pedagogies.

Architecture as a collaborative, responsive, and creative discipline is a core theme of the course, and the programme derives distinctiveness from promoting multidisciplinary ways of thinking and practicing design. Students are encouraged to develop personal reflective positions, while learning to work effectively individually and in teams. To generate a fertile ground for enhancing critical thinking and comprehensive design skills, the course integrates technologies, humanities, and professional studies around the central core of studio. The teaching focuses on nurturing the knowledge and competence of students to respond to a continuously evolving, diverse and multi-faceted, building industry, but also on providing the holistic and open-minded education that will allow them to cooperate with other professionals, and influence, practically and intellectually, the local and global architectural discourse.

The curriculum is structured on a progression of educational experiences and design challenges. In the preliminary year (Year 0), the teaching concentrates on developing English proficiency to a high level, and on practicing and enhancing the graphic communication and drawing skills required for an education and career in architecture. International students who can demonstrate competent mastering of academic English, and have the necessary study prerequisites, can enter directly to the first year of the programme. In the qualifying year (Year 1), students undertake appropriately constrained projects, proceeding in stages from the design of an individual residential retreat through to a small civic building. In the following year (Year 2), students engage with projects framed within the wider context of human settlements, addressing issues of technical and environmental concern. In the final year (Year 3), as deeper professional design competence is acquired and practiced, students validate their skills and demonstrate their critical inspiration in more complex projects that are based on self-developed briefs.

The study of historical and artistic precedent — Chinese and international, knowledge of traditional and cutting-edge construction methods, technologies, and techniques, understanding and exploration of principles of building physics and environmental science, and the integration of all such disciplinary domains in coherent architectural designs are central to the programme’s aims. This is facilitated by an open 24/7 design studio framework and by a vertical structuring of studio units in Year 2 and 3, which — together with their horizontal integration with all other taught modules — provide a stimulating platform for inter-year cooperation and collaborative peer learning. Attention to the students’ learning experience is core to the pedagogy, with a projected full-time staff-to-student ratio of approximately 1:13. Studio and seminar tutoring is complemented by an extensive academic and pastoral support mechanism, including a staff open-door policy, and by several guest lectures and extra-curriculum events. The Department strongly promotes an engaging studio culture. Dedicated studio spaces are individually allocated to students in Years 1, 2, and 3 of the programme, while students in Year 0 are assigned designing and making spaces based on their timetabled studio hours. All students at the UNNC freely receive the core textbooks recommended for their modules, and are
accommodated on our inspirational campus. As commended by the External Examiners, the course also strongly enhances students' creative engagement and holistic understanding of contemporary and traditional design solutions with field study trips and project site visits, all fully-funded or heavily subsidised by the Faculty. In recent years, these have included: Ningbo, Shanghai, Hangzhou, Zhouzhuang, Xuebou, and Beijing in China; and Spain and Portugal in Europe. In addition, intercampus exchange opportunities with the home Department in UK and other Universities worldwide, joint studios, and international design workshops, all enrich exposure of students to a broad variety of educational methodologies and design approaches.

In essence, the architecture programme aims to provide students with a wide-ranging and robust base of core knowledge, skills, and competence, supported by critical thinking and technical rigour, allowing them to graduate as fully-rounded, reflective, and highly employable young practitioners. The success of this pedagogical approach is testified by many students regularly obtaining summer placements in local design firms at the end of their second year of study, while most of the recent graduates have already secured positions in eminent architectural practices in China and abroad. In the last years, students’ design work has been exhibited in institutional and cultural venues in Ningbo and Hangzhou.

Building on the support from the University and Faculty in Ningbo, its unique location in the Yangtze River Delta, and on continuous exchanges with the UK Department, future plans of development of the course include the reinforcement of the research-informed teaching and scholarly activities by its staff. This will be facilitated by a reached balance in the staff-to-student ratio, and the allocation of teaching workloads closely aligned to individual areas of research interest and expertise. This will allow nurturing the programme with cutting-edge advances in all its subject areas, yet supporting the development of specialist streams of design investigation with a greater understanding and appreciation of the local context. Research-informed teaching will also be enhanced by strengthening the links with Chinese and international research and industrial bodies, as pioneered by several investigation projects undertaken at our Centre for Sustainable Energy Technologies (CSET), the first zero-carbon building in China.

11 Commendations
The visiting board made the following commendations:

11.1 The Board commends the ambition and potential of UNNC Department of Architecture and Built Environment to develop an environment for staff and students to bring together cultural, technological and environmental understanding of international architectural influences and apply them in a Chinese context.

11.2 The Board commends the engagement of the Industry Panel to discuss and advise curriculum developments within the School.

12 Conditions
There are no conditions.

13 Action points
The visiting board proposes the following action points. Failure by the university to satisfactorily resolve action points may result in a course being conditioned by a future visiting board.

13.1 The Board recommends that local contemporary as well as historic exemplars of typology, design, local building techniques and cultural references are promoted and evidenced in student work across the curriculum (GC4.3).
13.2 As the course has ambitions to respond to both Chinese and UK professional contexts of architectural practice, it is important to ensure students have current, relevant knowledge as required in GC11, particularly to refer to GC11.1 and that an appropriate portion of the curriculum is allocated to this.

13.3 The Board considers that Year 0 offers students an important transitional experience to bridge between secondary school education in China and the expectations of UNNC Department of Architecture and Built Environment. The Board recommends that, as the course continues to expand, resourcing for Year 0 is maintained at an appropriate level to continue to support this transition.

13.4 The School must put in place mechanisms to ensure that they can collect and retain all work and evidence needed for complete academic portfolios as required by a visiting validation board (RIBA Procedures for Validation 2011, second revision 2 May 2014, section 4.7, p34, ‘Inspection of Student Work’).

13.5 As the School’s ambition as stated in the academic position statement is to produce a creative, reflective graduate, the students should be encouraged to engage in evidencing their design process from concept through to detailed design at every level of the course. This is, of course, also required by the RIBA to be included in the complete academic portfolio.

13.6 The Board advises that the scale and type of the design projects across the School should reflect and respond to local conditions of design projects (GC7.2) as well as acknowledging international contexts for design briefs.

13.7 Given the potential strength of the Industry Panel, the Board recommends the views and advice of the Industry Panel be recorded and, where relevant, that minutes of these meetings be used to inform discussions on course development in the School.

14. **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.

14.1 The Board was pleased to note the diverse range of staff research interests and would like to suggest that the School ensures staff have sufficient time within their workload to develop the emerging research culture which will inform the School’s growing sense of independence and identity.

14.2 The Board notes that the Integrated Design in Architecture modules are an important interface between design and technology teaching. However, this should be more integrated with the design process and become more of a reflective document rather than a written report.

14.3 The Board considers it important that students have clearer understanding of the needs of building users (GC5.1) and that this can be evidenced through design projects, in particular through appropriate space planning.
14.4 There is a distinctive context in China of dynamic change, particularly around rapid urbanisation. It is important there is a mechanism for the curriculum to be periodically reviewed and sufficiently responsive within this context.

15 Delivery of academic position
The academic position statement was particularly useful in providing a context to the course.

16 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 was content that all graduate attributes for Part 1 were met.

17 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.

GC4 Adequate knowledge of urban design, planning and the skills involved in the planning process
4.3 current planning policy and development control legislation, including social, environmental and economic aspects, and the relevance of these to design development.

Please refer to action point 13.1.

GC5 Understanding of the relationship between people and buildings, and between buildings and their environment, and the need to relate buildings and the spaces between them to human needs and scale
GC5.1 The graduate will have an understanding of:
the needs and aspirations of building users;

Please refer to advice item 14.3.

GC7 Understanding of the methods of investigation and preparation of the brief for a design project
GC7.2 The graduate will have an understanding of:
Please refer to action point 13.6.

GC11 Adequate knowledge of the industries, organisations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning
GC11.1 The graduate will have knowledge of:
the fundamental legal, professional and statutory responsibilities of the architect, and the organisations, regulations and procedures involved in the
negotiation and approval of architectural designs, including land law, development control, building regulations and health and safety legislation;

Please refer to action point 13.2.

18 Other information

18.1 Student numbers
106 students including 10 graduates (2014 graduating cohort).

18.2 Documentation provided
The School provided all advance documentation in accordance with the validation procedures.

19. *Notes of meetings
On request, the RIBA will issue a copy of the minutes taken from the following meetings:

- Budget holder and course leaders
- Students
- Head of institution
- External examiners
- Staff