

Report of the RIBA exploratory board to the University of Leeds

Date of visiting board: 21 & 22 February 2020
Confirmed by RIBA Education Committee: 16 June 2020

1 Details of institution hosting course

School of Civil Engineering
Faculty of Engineering and Physical Sciences
University of Leeds
Woodhouse Lane
Leeds LS2 9JT

2 Head of School of Civil Engineering

Professor Muhammed Basheer

Programme Manager

Justin S. Lunn

3 Course/s offered for candidate course status

MEng, BEng Architecture, MEng, BEng Architecture (Industrial)

4 Awarding body

The University of Leeds

5 The visiting board

Professor David McClean
Dr Jenny Russell, Vice-Chair
Peter Williams

Stephanie Beasley-Suffolk, validation manager – 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 Recommendation of the Exploratory Board

The Board was invited by the University of Leeds to consider its MEng, BEng Architecture, MEng, BEng Architecture (Industrial) for the award of candidate course status for Part 1.

The designation 'Candidate Course for Validation' implies that the course has been judged to have the potential to meet RIBA criteria, if implemented as anticipated. It is not, however, equivalent to recognition, which can only be granted once the standard of work produced by graduating students has been assessed and found satisfactory.

On the 16 June the RIBA Education Committee confirmed that candidate course status/as appropriate for Part 1 be awarded to the:

MEng, BEng Architecture, MEng, BEng Architecture (Industrial):
proposed candidate course for Part 1

On the assurance of staff and students that process work is available the Board recommends that the School could invite the RIBA to conduct a full

visiting board to view the work of the 2019/2020 cohort, if the School wishes to do so. The School should ensure that full academic portfolios are provided, in accordance with section 4.7 of the 2011 validation procedures (second revision, May 2014).

8 Standard requirements for validation

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
- 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 (statement written by the school)

The MEng, BEng Architecture programme at the University of Leeds is a unique programme of learning, providing professional qualifications in Architecture, Civil & Structural Engineering and Building Physics. Its aim is to produce construction industry design professionals who can work across disciplines, in preparation for the complex challenges of practice.

Architecture has been taught at the University of Leeds, School of Civil Engineering, as part of the Architectural Engineering programmes, since the 1970's. The School, as part of a Russell Group University, has a strong reputation for high quality teaching and research, with high profile research activity in materials science, structures, sustainability and environmental engineering, building energy, indoor air quality, and construction project management, achieving 2nd for research power in the 2014 REF: Civil & Construction Engineering UoA 14. Within this setting, Architectural Engineering has consistently offered a pioneering integration of creative design with scientific knowledge through building design. Graduates from the programme have gone on to become senior figures within industry, with some entering and passing the ARB Examination Route for Part 1. When this route was closed in 2012, it was decided to fundamentally redesign the programme in order to allow ARB Prescription for Part 1. With close involvement from external academic expertise and a purposely formed Architectural Steering Group made up of academics and practitioners, new programmes have been developed and introduced which further enhance the integration of architecture and engineering. Including overlapping teaching with each other and to a lesser extent with other programmes in the School, these are the MEng, BEng Architectural Engineering, and the MEng, BEng Architecture. Both four-year full-time programmes are accredited by the Joint Board of Moderators (IStructE and ICE) to CEng, and the Architecture programme is also Prescribed by the ARB to Part 1.

The MEng, BEng Architecture programme is a unique integration of creative and technical knowledge in architecture, structural and building services engineering, delivered within one school. The programme sees architecture as the synthesis of creative, cultural and technological influences to create buildings in a process not just of design but also realisation, with the goal of producing construction industry professionals who have enhanced technical expertise and understanding of integrated building design. This is reinforced by our strong involvement with practice, with creative design issues being explored in practical, real world project settings. Technical modules such as structural design and analysis, properties of materials, and building physics are used to establish the fundamental principles by which materials are selected and physical processes take place within building forms, allowing students not only to be able to employ technical aspects in design, but also to use them as an inherent and natural part of architectural sensibility. Cultural context is seen as a vital part of professional learning – for architects and engineers alike – and so is part of all programmes within the School. This highly integrated approach means that graduates from this programme meet the exemplifying academic standards of the ICE, IStructE and CIBSE for CEng status, as well as the ARB Criteria for Part I.

The heart of the programme is centred on studio-based architectural design projects, supported by learning in architectural history & theory, urban design, structures, construction, materials and building physics. These open-ended and creative architectural design projects are used to demonstrate and develop students' knowledge gained in other modules. They are based in a new 400m² studio designed to host lectures, tutorials and personal study. This space is very well used and is an essential part of developing a collaborative learning culture - students benefit by learning from peers, the academic teaching team and design tutors from practice. Regular small group tutorials and reviews with written feedback and advice are a key feature of learning, with the emphasis on students' individual development rather than a 'unit' based approach. School teaching & learning modes include the Faculty's Blended Learning Strategy making full use of its Virtual Learning Environment's resources such as screencasts, grading rubrics, coursework submission and assessment, feedback and lecture capture.

The School hosts internationally recognised researchers in a range of areas, who are actively involved in teaching. Within the dedicated architectural staff, current research fields which contribute to taught modules include building energy & environment; innovative construction methods; cities & urbanism. Architectural staff include active practitioners engaged in cohousing design. The architecture programme is delivered by a dedicated teaching team within the School, comprised of professionally qualified and experienced architects and engineers, supported by practice-based architects who are part of the studio tutoring team. Students also benefit from the range of scientific and technical expertise provided by staff from the school of civil engineering. Three Visiting Professors include senior practicing architects one of whom is an RIBA Fellow, and an

honorary Fellow of the RIBA who is a Royal Designer for Industry.

All degree courses within the School share a common first year of six compulsory 20 credit modules, including an introduction to architectural history and theory, practical building drawing & analysis studies, materials and structures and the context of the construction industry. There is also a creative design studio where, through a series of small projects of increasing complexity, students apply and develop what is learned from other studies. Cultural studies continue throughout the programme, with history & theory modules collaborating with the School of Fine Art & Cultural Studies (year 2, focused on relationships between art, architecture and engineering), and the Schools of Geography and Medieval Studies (year 3, focusing on urbanism). In the fourth year, students work on an investigative essay from a range of given topics, supervised by research and practice active staff, as well as an essay project, supported by lectures, on management, practice & law. Technology and engineering learning includes structural design and analysis, geotechnics, materials and building physics, with students demonstrating their applied knowledge through design studio. Design projects increase in sophistication and scope across the years, with the fourth year including 80 credits of studio. Each project gives students a physical location, usually in Leeds, and an outline brief. Projects are typically well-known building types so that the design process begins from a position of familiarity but allows investigation and enquiry into assumptions. Students research and develop their own unique proposals through site and precedent studies, with guidance and support from small group tutorials, lectures and reviews. Final submissions include aesthetic, spatial, structural and environmental design conclusions. In this way students are encouraged to develop a personal and unique approach to design and communication, integrating practical methodology as well as theoretical concerns.

As well as conventional modules, students take part in a residential surveying field course in year 1, a 5-day study visit to a European city (currently Naples, where the visit collaborates with the Naples School of Architecture) and at the end of third year an option to join the Construction Site Field Course.

The School hosts a variety of external lectures and seminars on a range of architectural and engineering topics, including the annual Lunoe Lecture, which has recently included speakers on the V&A Dundee, the Darwin Centre at the Natural History Museum and the Shard.

Entry requirements to the School are three A levels at grade A or equivalent, one of which must be mathematics. School and University policies are applied to encourage wider access to programmes, so that 27% of undergraduate intake is from lower socio-economic groups. There is no requirement to demonstrate artistic ability through qualification or portfolio – experience has shown that visual communications skills and creative abilities are attributes which are learned during the course of study.

Students participate in the academic life of the school through representation at a regular staff-student forum (led by students) and education committees, and take part in the development of student education action plans and curriculum development. The Civil Engineering Society (CivSoc) is a strong and vibrant part of School life. Students' positive experiences are reflected in good NSS overall satisfaction scores (1st out of 58 in 2018).

In terms of employability, there are as yet too few graduates from the MEng, BEng Architecture programme to provide useful statistics. The Faculty benefits from an 8-strong dedicated employability team, which provides practical advice and guidance as well as co-ordinating placement and employment enquiries from employers. It is the School's intention to develop MArch Part 2 and Part 3 programmes in the future to provide a complete route to professional registration.

10 Commendations

- 10.1 The Board commends the distinctive character and ambition of the course.
- 10.2 The Board commends the student body, not only for their articulate and measured engagement with the validation process but also for their impassioned advocacy of the course.

11 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. Failure by the university to satisfactorily resolve action points may result in a course being conditioned by a future visiting board.

- 11.1 The Board recommends that the academic position statement be revisited, to better reflect the course aspiration as described on the visit, and to assert and clarify the unique offer, including the relationship between architecture and architectural engineering. This should form part of the documentation for a full visiting board.
- 11.2 The Board recommends that the School clarify any differences in pedagogical approach between architecture and architectural engineering
- 11.3 The Board recommends that the School articulate its plans for broadening the scope of interdisciplinary input to the students; for example, landscape and urban design.
- 11.4 The School is encouraged to make the process and development of critical thinking more explicit. This should be evident to the forthcoming full visiting board.
- 11.5 The Board recommends that project development, particularly in relation to place and conceptual response, be encouraged to a greater extent through the better formulation of briefs. This should be evident to the forthcoming full visiting board.

11.6 In line with the request from the RIBA New Courses Group, the Board recommends that the opportunity for risk-taking within the design process is nurtured. This should be demonstrated to the full visiting board.

12. 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.

12.1 The Board advises that students are strongly encouraged to broaden their frame of reference, including, but not exclusively, by visiting other schools of architecture end of year shows, exhibitions, building visits and so forth.

12.2 The Board advises that the institution provides better marketing support of the course, given its truly distinctive character and potential within the marketplace.

13 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 the MEng, BEng Architecture, MEng, BEng Architecture (Industrial) had the potential to meet the Part 1 graduate attributes, if developed as anticipated.

14 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.

15. Other information

15.1 Student numbers

MEng, BEng Architecture, MEng, BEng Architecture (Industrial): proposed candidate course for Part 1: 22

15.2 Documentation provided

The School provided all advance documentation as required by the Procedures for Validation. The School is referred to section 4.7 of the RIBA Procedures document regarding the requirement to present full academic portfolios at the full visiting board.

***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