CARDIFF UNIVERSITY External Examiner Annual Report Form

Guidance notes are available to support the completion of this Report via the Cardiff University Intranet here and from ExternalExaminers@cardiff.ac.uk.

	For completion by External Examiner:		
Name of External Examiner:	Ulysses Sengupta		
Home Institution / Employer of External Examiner:	Manchester School of Architecture		
Programme and / or Modules Covered by this Report	BSc Architecture		
Academic Year / Period Covered by this Report:	2019-20	Date of Report:	14/03/2020

Please complete all information in the spaces provided and submit within **six weeks** of the Examining Board (the dissertation stage Examining Board in the case of postgraduate Master's programmes).

Please note this form will be published online and should not make any reference to any individual students or members of staff in accordance with the General Data Protection Regulation (2018).

Please extend spaces where necessary.

1. **Programme Structure** (curriculum design, programme structure and level, methods of teaching and learning)

The BSc (Architecture) appears to be structured around building design skills in Yr1, introducing more technical (e.g. building performance) criteria in Yr2 and a choice of a themed studio to undertake study on a more ambitious building project through Yr3. There is a continued value placed on craft, with some new areas of urban studies becoming visible in terms of analysis of contexts.

The overall ambition beyond the importance of craft and historic integration remains an open question from the previous year.

The first year provided an interesting series of explorations, but the less structured portfolio presentations at the end of the year created some difficulty in understanding the focus and quality of authorship. Introduction to design theories or approaches within the exercises would provide reference to existing design methodologies and potentially jump-start an architectural dialogue and mind-set.

In the second year, the technical requirements for projects – while essential and clearly defined - still appear to be more of a tick box exercise than a clear integrated design exploration. There is potential to create a design technology project exploring technology as design rather than applying it on more than one project in the year.

In the third year, the range of studios continue to demonstrate a good range of scales and programs. The attention paid to different phases of the design project could be seen as an advantage if the overall expectations of each project are considered on a more diverse criteria than practical resolution and aesthetic presentation. While this is already part of the dialogue during moderation, the encouragement of different focus areas if carefully integrated, could lead to a greater diversity in the pedagogic model.

The change to design methods is acknowledged (with more choice provided). This is already an improvement, but the idea of design methods becoming more central is another avenue for improvement (see section 7).

General:
- Tectonics could be improved in all drawn outputs (technical and non).
- Testing of solution rather than just strategies still needs attention.
- Craft and historic integration were clear areas of strength.
- Digital/computational design were not yet well integrated areas and need strategies for development of a digital culture (see section 7).

2. **Academic Standards** (comparability with other UK HEIs, achievement of students, any PSRB requirements)

The academic standards were appropriate in comparison to other UK HEI's.

The ability to start exploring specialisations (more inter/transdisciplinary understanding of urban development, engineering and computer science) within the course or as electives from other courses remains an area for exploration.

3. **The Assessment Process** (enabling achievement of aims and learning outcomes; stretch of assessment; comparability of standards between modules of the same level)

The process is clear.

While formative, feedback to students during the year should indicate standing sufficiently to encourage additional work where required and reduce stress.

It would be worth considering an open (all staff) moderation process with discussion (at least at some stage) to encourage mutual understanding and enrichment of agendas.

4. **Examination of Master's Dissertations (if applicable)** (sample of dissertations received, appropriateness of marking schemes, standard of internal marking, classification of awards)
   [*Where possible please complete this section following the dissertation examining board determining the final award.*]
N/A

5. **Year-on-Year Comments**
   [Previous External Examiner Reports are available from the Cardiff University Website here.]

There are several areas where the course has incorporated external examiner comments (at least as a trial). E.g. The change to design methods. This is encouraging to see. The primary areas in need of attention remain technological and digital education within the course structure. These in relation to design approaches and sustainability (see section 7).

6. **Preparation for the role of External Examiner (for new External Examiners only)** (appropriateness of briefing provided by the programme team and supporting information, visits to School, ability to meet with students, arrangements for accessing work to review)

N/A

7. **Noteworthy Practice and Enhancement** (good and innovative practice in learning, teaching and assessment; opportunities for enhancement of learning opportunities)

The students appear to be highly engaged and (generally) express confidence in the course. From a course design perspective, the existing course does a good job of covering the central areas of architectural design education, providing a good balance between practicalities and aesthetics. The practice focused approach is an important aspect of all architectural education and hence is not subject to any critique here. In order to improve design culture and design education for architects, there are additional opportunities to enrich the pedagogic process that should be considered. The suggestions below are examples that can help with the recognition of these areas of research and pedagogy. The institution has to make choices aligned to identity and diversity of the education provided.
Note: Additional comments about the incorporation of digital design (as a process) into the course are also provided below.

Architectural Pedagogy – What is the focus? (good practice and opportunities for improvement):
The current course has a good variety of thematic areas across the design studios (visible in Yr3). These areas appear to be rigorous and the skills developed in Yr1 & Yr2 do appear in Yr3 within design projects.
It is worth noting that there were some comments during the student feedback session regarding (a) a difficult leap from Yr2 to Yr3 in terms of ambition (possibly independence?) and (b) technical (structures and performance) support for studio projects. The integration of technical support for studio is of course an ongoing difficulty for most architecture courses (E.g. too early = relevance is not understood, too late = not in studio designs, too separate from studio = not integrated, too formal = stifled studio projects, too fixed (time of year) = not appropriate for different project types, etc.). While this is a process of refinement per cohort, an approach providing basic technical education (appears to be in place) in Yr1 & Yr2 with additional flexible consultancy type provision (students possibly do not understand the current system as this) through the year is useful to consider.
Design (especially studio) has sometimes been understood as 'learning by doing'. This pedagogic model provided the opportunity to focus on 'what was being produced' in terms of incremental learning through engagement with projects of increasing complexity and/or scale. The focus of the studio exercise over several years hence engaged with the central tenets of 'practical problem solving' and aesthetics through a variety of not very defined processes (students often developed their own processes). Arguably this model supports a product focused pedagogy?!.

A commonly used <u>alternative</u> (although still high-level and debated) approach being incorporated into design education for architects is often seen as a process incorporating (sometimes several cycles of) <u>(Phase 1) Analysis, (Phase 2) Synthesis and (Phase 3) Evaluation</u>. This process provides opportunities to integrate several additional aspects of design that have become important to architects and architectural design research. It appears to provide some advantages in terms of clearly positioning (1) in-depth-analysis and (2) problem formulation within analysis; alternative design processes and specialisations within synthesis including (3) collaboration, (4) co-production and (5) specialisations (tectonic, computational, physical modelling); validation against ambitions within evaluation (6) achievement and (7) significance.

Based on observations of the current course structure and the studio system, there is space to consider the importance of the different phases (through the weighting of different briefs):

E.g.1. Research for design – Analysis of socio-economic-political-spatial aspects (engagement with other aspects of urban studies, communities, processes of design and manufacture) to inform projects. While this is already being demonstrated in some studio agendas, a recognition of its validity - rather than just a protracted site analysis towards an aesthetic and practical designed product – needs to allow for the outcomes of the analysis to be part of the marked project, and then used in the project evaluation as well. Thus, the process becomes much more important as does the studio agenda in terms of adding specialisations to the methods used in analysis and synthesis.

<u>Design Research – Are other aspects important to achieve ambitions?:</u>
The profession continues to evolve and hopefully so does the pedagogy in terms of methods and processes of design. In practice, the common process defined by the RIBA work stages has been amended in 2013 to incorporate stages before design and after construction, reflecting a more diverse role. This development reflects opportunities for diverse approaches to design already being explored by architecture schools.

The synthesis phase mentioned above (<u>research for design</u>) provides opportunities to understand and attempt design from different perspectives (beyond the – respond to brief, analyse site, develop concept and problem solve aesthetically approach), combining or refining approaches as diverse as collaborative design, theoretically underpinned design, algorithmic/rule base design, computational design. These can come from multiple designer preferences/approaches – such as analytical, consensus building, intuitive etc. – in response to different projects.

<u>Applied research through design</u> is well embedded within studio culture in terms of testing through design project development.

However, the enrichment of these two areas through <u>research about design</u> (E.g. methodologies) can also be embedded within architectural pedagogy. This in turn can provide valuable links between staff research areas, lecture modules and studio. An opportunity to enrich the pedagogy hence lies in future program structure creating focus areas for students to engage with structural/material research, urban studies (theories from cultural studies, social science, engineering, planning and geography, etc.), and design tool development (computational and collaborative).

The opportunity requires recognition of the limitations of primarily practical and aesthetic approaches to architectural design pedagogy based on concept development and problem-solving. If successfully implemented, it can result in the development of a richer dialogue between specialisation in design methods (e.g. computational), urban studies (e.g. community, infrastructure, health, gender, etc.) and current issues (e.g. sustainability).

Topical Areas – Sustainability, Collaborative Design & Computation:

As a contemporary school of architecture, there are clearly identifiable areas of education that could be improved on in-terms-of integration and clarity of focus. These include:

- Environmental Sustainability – Moving beyond regulation to clearly link climate, energy and waste. The relationship of buildings and urban development to global climate change.
- Digital Design
- Co-Design

Digital Design- The ongoing dialogue on computation:

Tools play an increasing role in the design process. The idea of tools has also evolved since the digital turn(s) in design. While the first turn (arguably) changed our ways of making (with a focus on software, proprietary tools, information exchange and digital fabrication), the second turn sees a move away from 'tools for making' to 'tools for thinking'. This perspective incorporates the move towards defining/developing tools for the new agendas being explored as part of a design process.

Over the past year, the attempt to engage with more digital studio agendas (rather than the previous digital methods course) is laudable, but there are still many areas of potential consideration. As the suggestion made in length within the previous report is still applicable, only a short summary is revisited here (please see the previous report for the full commentary).

The development of a digital culture requires attention to at least the following aspects:

1. Digital skills development

2. Incorporation of digital theories

3. Engagement with digital methods for design

A strategic decision to engage with specific areas of digital design:

1. Visualization (including videos and game engines etc.)

2. Manufacturing (including all forms of digital to physical, parametric/algorithm-based design forms etc.)

3. Computation (including processes of data analysis and simulation)

Note: Foreseeable difficulties/failures eventually focus on the lack of a digital community.

What is the WSA digital ambition?

1. Baseline Provision

2. Industry Ready?

(Note: These two ambitions can be easily achieved through accredited courses. However, they are typically related to more technical schools or colleges with low research profiles.)

3. General Provision?

4. Academic Leader?

5. Future Digital Horizons?

8. Appointment Overview (for retiring External Examiners only) (significant changes in standards, programme/discipline developments, implementation of recommendations, further areas of work)

N/A.

9. Annual Report Checklist

Please include appropriate comments within Sections 1-7 above for any answer of 'No'.

		Yes (Y)	No (N)	N/A (N/A)
Programme/Course information				
9.1	Did you receive sufficient information about the Programme and its contents, learning outcomes and assessments?			
9.2	Were you asked to comment on any changes to the assessment of the Programme?			
Commenting on draft examination question papers				
9.3	Were you asked to approve all examination papers contributing to the final award?			
9.4	Were the nature, spread and level of the questions appropriate?			
9.5	Were suitable arrangements made to consider your comments?			
Examination scripts				
9.6	Did you receive a sufficient number of scripts to be able to assess whether the internal marking and classifications were appropriate and consistent?			
9.7	Was the general standard and consistency of marking appropriate?			
9.8	Were the scripts marked in such a way as to enable you to see the reasons for the award of given marks?			
9.9	Were you satisfied with the standard and consistency of marking applied by the internal examiners?			
9.10	In your judgement, did you have the opportunity to examine a sufficient cross-section of candidates' work contributing to the final assessment?			
Coursework and practical assessments				
9.11	Was the choice of subjects for coursework and / or practical assessments appropriate?			
9.12	Were you afforded access to an appropriate sample of coursework and / or practical assessments?			
9.13	Was the method and general standard of assessment appropriate?			
9.14	Is sufficient feedback provided to students on their assessed work?			
Clinical examinations (if applicable)				
9.15	Were satisfactory arrangements made for the conduct of clinical assessments?			
Sampling of work				
9.16	Were you afforded sufficient time to consider samples of assessed work?			
Examining board meeting				
9.17	Were you able to attend the Examining Board meeting?			

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9.18	Was the Examining Board conducted properly, in accordance with established procedures and to your satisfaction?			
9.19	Cardiff University recognises the productive contribution of External Examiners to the assessment process and, in particular, to the work of the Examining Board. Have you had adequate opportunities to discuss the Programme and any outstanding concerns with the Examining Board or its officers?			
Joint examining board meeting (if applicable)				
9.20	Did you attend a Composite Examining Board, i.e. one convened to consider the award of Joint Honours degrees?			
9.21	If so, were you made aware of the procedures and conventions for the award of Joint Honours degrees?			
9.22	Was the Composite Examining Board conducted according to its rules?			

Please return this Report, **in a Microsoft Word format**, by email to:
externalexaminers@cardiff.ac.uk

Your fee and expenses claim form and receipts, should be sent electronically to the above email address or in hard copy to:

External Examiners, Registry, Cardiff University, McKenzie House, 30-36 Newport Road, Cardiff, CF24 0DE

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