

WESTERN SYDNEY
UNIVERSITY



THE OFFICE OF THE NSW BUILDING COMMISSIONER DOCTORATE PROGRAM



The Office of NSW Building Commissioner (OBC) and Western Sydney University (WSU) have developed a unique Industry Doctorate Program.

The OBC Doctorate Program is underpinned by an exclusive data access agreement between OBC and WSU. This provides successful applicants working in four priority areas with special access to Construct NSW's 'Data Lake' which is fed by the OBC's ongoing occupancy certificate audits and NSW Project Remediate program.

Aims

The OBC Doctorate Program is a vocational PhD program designed to meet the needs of industry by matching leading construction industry organisations with world-class research expertise, facilities and resources.

The OBC Doctorate Program is specifically designed to support The Construct NSW reform strategy to produce more trustworthy buildings through a more customer focused, ethical, sustainable, innovative and digitally enabled construction industry.

The OBC Doctorate Program provides exciting opportunities for industry thought-leaders from across the construction industry to challenge old institutional models, practices and norms and transform traditional ways of thinking by imagining a more trustworthy built world.

How the program works?

- The OBC Doctorate Program identifies interested candidates and supportive organisations.
- Companies can nominate and sponsor applicants through two routes:
 - Internal route: companies sponsor their staff as a professional development opportunity (internal applicant pathway)
 - External route: companies can create a scholarship (see costs below) for external applicants (external applicant pathway).
- Potential candidates will be asked to complete a simple online OBC Doctorate Program proposal template and nominate for one of five priority research areas as detailed below.
- Proposals will be assessed by a panel of representatives from WSU, OBC and the sponsoring company.
- Successful candidates will then nominate to be enrolled in WSU and apply to be admitted through the normal WSU PhD application process in the faculty in which they are registered.
- All applicants will be jointly supervised by internationally renowned experts in their field from WSU.
- Academic supervisors from WSU will work with candidates and OBC to transform their initial proposal into a structured PhD proposal in accordance with WSU requirements and apply to the relevant Doctorate Program at WSU.
- Provided a candidate meets the relevant WSU university PhD entry requirements, applicants will be admitted to the OBC Doctorate Program.
- Throughout the OBC Doctorate Program, candidates will work closely with their joint supervisory team and the OBC will provide accelerated access to data from its data lake.
- In addition to regular progress reviews at their chosen university, candidates will report quarterly to OBC on progress and collaboratively co-design the PhD program to ensure the research feeds back into the data lake and delivers practical outcomes which address industry reform priorities and needs.

Priority research areas

Applicants are invited to submit proposals under the following priority research areas.

1. Innovative construction technologies and industry transformation

The development and diffusion of novel technologies and digital innovations such as virtual reality, digital twins and digital tracking/monitoring for enhancing the performance of built assets through life including: construction materials technology (advanced composites); construction techniques (e.g. offsite construction, mass customisation.); smart buildings and smart construction; and modelling of the performance of building production and facilities (e.g. optimisation, finite element analysis).

2. Sustainable design and construction

Energy conservation, building design optimisation, implications of climate change on design and construction, green buildings, sustainable development, energy management, and reuse and recycling of materials and components.

3. Construction Business Processes and supply chain management

Improving value and efficiency in design and construction, collaborative and concurrent engineering, knowledge management, quality assurance, contract management, procurement reform, and innovation diffusion within the supply chain.

4. Industry reform

Effectiveness of NSW construction industry reform strategy: design, development, implementation, impact (economic, social, environmental, cultural), lessons learnt, international comparisons.

Who can apply?

A minimum period of ten years industry experience is required to apply to the OBC Doctorate Program and the quality and relevance of this experience will also be considered.

Three industry referees are also required to attest to subject matter expertise and an applicant's ability to undertake research at a high level.

Prior experience of research either in a work or study context will be essential.

Generally an applicant must have completed a recognised master's by research or bachelor's degree with first or second class honours (Division 1), or an equivalent or higher qualification, or submitted other evidence of general and professional qualifications that demonstrates potential to pursue graduate research studies.

Internal applicants who are employees of the sponsoring organisation must have that organisation's support.

External applicants will be assessed by the sponsoring organisation and then endorsed before applying to WSU.

The program welcomes applications from a range of industry disciplines. Interdisciplinary insights are important to the outcomes of the program:

- Construction
- Engineering
- Design
- Law
- Manufacturing
- Business
- Technology

The success of the OBC Doctorate Program rests on the support on the sponsoring organisation. The OBC Doctorate Program welcomes supportive organisations from all sectors of the industry:

- Private sector organisations (e.g. contractors, consultants, suppliers and manufacturers, startups, SMEs and other corporates)
- State owned enterprises
- Public sector organisations
- Non-governmental organisations
- Governments (local, state or federal)
- Government funded research organisations

How long does it take?

The OBC Doctorate Program involves a 3–4 year full-time research project, where the PhD candidate is typically based in the partner organisation investigating a complex industry problem.

External route candidates are expected to spend a large proportion (typically 70–80%) of their time at the premises of their collaborating company, depending on the nature of the project.

Internal route candidates are expected to be able to work at least 50% of their time on the research project.

How much does it cost?

Industry partners

- For external candidates the industry sponsor will be required to pay a tax-free stipend of \$45,000 per year for three years. This is to cover student living costs.
- For internal candidates (current employees) the industry sponsor will continue to pay their salary plus any extra support fees required by their host university.

Students

- The majority of domestic students who are offered entry to the program will have the cost of their tuition fees covered by the [Australian Government's Research Training Program \(RTP\) Fees Offset Scholarship](#).
- Recipients of an RTP Fee Offset Scholarship should however still expect to pay the ongoing costs of being part of an academic environment and conducting research which includes a [Student Services and Amenities Fee](#) (SSAF).

Western Sydney University special support

- Apply for up to \$5,000 during candidature to attend and present their research at an internationally recognised conference. Again, this is non-competitive and budgeted for every IDP student.

Assessment

- Successful OBC Doctorate Program applicants will be subject to relevant WSU assessment protocols – depending on where they are enrolled.
- Successful OBC Doctorate Program applicants will be required to complete a thesis, under the supervision of their joint supervisory team. WSU have thesis admission requirements which should be referred to.
- Successful OBC Doctorate Program applicants should show they have contributed to the advancement of knowledge in their chosen field and should be capable of applying the knowledge and expertise acquired in a business environment in a disciplined, innovative and penetrating way.
- Successful OBC Doctorate Program applicants are normally required to submit, in consultation with their supervisor(s), a progress report at the end of each session, and to complete a doctoral assessment and seminar.
- A formal course of study or other work may also be prescribed to support Successful OBC Doctorate Program applicants to develop their research skills or knowledge of the industry they are working in. This taught component will be assessed and form an integral part of the degree.
- Successful OBC Doctorate Program applicants are also normally invited to participate in other research activities to support the development of their research skills.



What's in it for industry?

- A targeted applied research program that genuinely responds to the needs of the construction industry and your organisation, regardless of how big you are.
- Access to world-class researchers, research facilities and research infrastructure at WSU – and to future opportunities for industry-university research collaborations
- Negotiated access to any intellectual property generated during the project
- Firsthand experience of innovation in action and the opportunity to embed an innovation culture within your organisation
- Increased staff development opportunities – each project requires a project sponsor from within your organisation, leading to new opportunities for a member of your team.
- The chance to be matched with an outstanding WSU PhD student or to provide a unique development opportunity for a key employee if you chose the Internal Route.

What's in it for the student?

- Experience working on a real-world research problem of national and international significance in collaboration with WSU and OBC
- Exclusive and accelerated access to OBC's data lake
- Access to world class WSU research facilities at the heart of Sydney's emerging innovation precincts.
- Experience of working in partnership with world-class researchers who are internationally recognised leaders in their field
- The opportunity to see the immediate impact of their work
- The chance to receive input and guidance from both academia and industry
- Access to new career opportunities
- The opportunity to build industry and university connections
- A wealth of new research and professional skills.

Western Sydney University
Locked Bag 1797
Penrith NSW 2751 Australia



WESTERNSYDNEY.EDU.AU