

PhD Opportunities in Structural Engineering

Professor Tak-Ming Chan | Department of Civil Engineering | The University of Hong Kong

Professor Tak-Ming Chan's group welcomes enquiries from prospective PhD students interested in structural engineering research at The University of Hong Kong (HKU). Research opportunities include adaptive structures, circular construction and lunar construction.

Professor Profile

Professor Tak-Ming Chan

Professor in Structural Engineering | Associate Head (Research)

BEng (HKU), MSc, DIC, PhD (Imperial College London), PCAPP (Warwick), CEng, FStructE, MASCE



Professor Tak-Ming Chan is Professor of Structural Engineering and Associate Head (Research) in the Department of Civil Engineering at HKU. He earned a first-class honours BEng from HKU and an MSc with distinction and a PhD from Imperial College London. He is a Fellow and Council Member of the Institution of Structural Engineers (IStructE), and has been elected as the IStructE Vice President (Trustee) for Central and Eastern Asia for 2027–2029. He is also an Editor of *Thin-Walled Structures*. His honours include the 2022 Nishino Prize and two Gold Medals at the International Exhibition of Inventions Geneva, awarded in 2024 and 2026, respectively. He has also been recognised by Clarivate Analytics as being among the top 1% worldwide by citations. His co-authored paper entitled [“Recommendations for implementing circular economy in construction: direct reuse of steel structures”](#) is also one of the most Scopus cited articles published since January 2023 in *Journal of Constructional Steel Research*. His research interests cover adaptive structures, circularity in construction, lunar construction and reduced-carbon hybrid structures.

Research Opportunities

- Circularity in Construction: Deconstruction and direct reuse of structural components, design for deconstruction and reuse (DfDR), assessment and reuse of steel and composite structures, and reuse limit state.
- Adaptive and Reusable Structures: Adaptable structural systems, demountable and reusable connections, and reconfigurable components.
- Low-Carbon Construction: Reduced-carbon hybrid structures, prefabricated systems, and efficient use of steel and composite materials.
- Lunar Construction and Extraterrestrial Structures: Structural systems for lunar environments, in-situ resource utilisation, and prefabricated or deployable extraterrestrial construction.



Selected Research Projects

- Circular construction: Research Impact Fund project on [*Achieving the Circular Economy in Construction through Deconstruction and Reuse Technologies for Steel and Composite Structures*](#) (2023–2028; Project Coordinator).
- Advanced steel members: General Research Fund project on [*Novel cold-formed steel built-up section column using an interlocking design*](#) (2026–2028; Principal Investigator).
- Reusable connections: General Research Fund project on [*Development of adaptable and reusable steel blind-bolted interlocking connection*](#) (2027–2029; Principal Investigator).

Candidate Profile

We welcome motivated applicants from civil, structural, mechanical or materials engineering, or closely related disciplines. Strong academic performance (such as being among the top 5% in their undergraduate and postgraduate studies from well-known universities) and clear research interests are important. Research experience, peer-reviewed publications, national scholarships/awards/prizes, and evidence of independent work are welcome where available.

HKU Admission Requirements

Applicants must meet the applicable HKU Graduate School minimum entrance requirements and any programme-specific requirements. Applicants whose qualifying degree was awarded by an institution outside Hong Kong where teaching and/or examination was not in English must satisfy HKU's English-language requirements. HKU also lists other accepted tests and validity rules. Applicants should check the current official requirements before applying:

[HKU Graduate School admission requirements](#)

Funding and Scholarships

Competitive funding and scholarship opportunities are available to outstanding PhD applicants, including the [Hong Kong PhD Fellowship Scheme \(HKPFS\)](#), [HKU Presidential PhD Scholar Programme \(HKU-PS\)](#) and [Postgraduate Scholarships](#). Exceptional candidates will be supported for application to HKPFS.

How to Apply

Prospective candidates are encouraged to contact Professor Chan with a concise email describing their research interests and fit with one or more directions above. Please attach:

- Curriculum vitae: Include education, research experience, publications and awards, if applicable.
- Academic records: Provide undergraduate and master's transcripts and rankings, if available.
- Research proposal: Summarise a potential PhD topic or research interests in one page.
- English-language evidence: Include test results if required under HKU's admission rules.

Shortlisted candidates will be contacted by early October and will be advised on the appropriate HKU application route and any scholarship applications. Candidates interested in HKPFS should make contact early enough to allow time for preparation.

Contact

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HKU profile: <https://www.civil.hku.hk/pp-chantm.html>

Personal website: <https://www.chan-takming.com/>