PhD-CD

Doctor of Philosophy in Computational Design

Computational Design is the discipline concerned with computational approaches to problems in design — whether these relate to creation, presentation, analysis, evaluation, interaction, embodiment, making or just aesthetic expression, albeit for real or imagined application, both perceived and conceived.

Requirements

English Language

Demonstrable proficiency in the English language

Residency

The minimum required full-time residency for the PhD program in the School of Architecture is two years.

Students who have graduated from the MS-CD program can count one year towards the minimum residency period.

Full-time Enrollment

Students are required to be enrolled full-time up to the successful completion of the qualifier phase (including all required coursework).

Some students are legally required to maintain full-time status for the entire duration of the program, for example, international students on a visa.

See Graduate Handbook for rules and regulations.

Year 1

Research

48-727 Inquiry into Computation, Architecture and Design (9)

Research

48-746 Shape Machine (9)

Students who have previously and successfully taken either of these courses can claim a waiver of this requirement.

Should either of these courses not be offered, students may select a suitable alternative, e.g., *48-711 Research Methods and Paradigms in Architecture.*

Computation

15-122 Principles of Imperative Computation (10)

Computation

Advanced computation course based on student's area of research (9-12)

Students who have previously and successfully taken 15-122 can claim a waiver from this requirement.

Each student in the PhD-CD Program must take an advanced computation course. **No waiver will be granted.**

Core

Selectives (24)

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Selective core courses provide students with proficiency in various aspects of computation that might relate to design. These are selections from a combination of courses offered by School of Architecture Computational Design faculty and elsewhere, for example, from the School of Design, Department of Civil and Environmental Engineering, Department of Mechanical Engineering, School of Computer Science, Human Computer Interaction Institute, Robotics Institute, etc.

See the Master of Science in Computational Design curriculum.

Year 2 onwards

Every doctoral student is required to demonstrate ability for research prior to candidacy by completing

48 units minimum of satisfactory independent research

Students who enter the program after completing the MS-CD program may consider their Master thesis to be equivalent to 36 units of satisfactory research provided that they attained a grade of B+ or better

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Game Plan

The *game plan* specifies the student's chosen area of concentration and an abstract of scope of work within that area and the list of courses taken.

Each member of the student's advisory committee signs off on the game plan.

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Qualifier

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Proposal

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Thesis Defense