Ph.D. in DESIGN AND PLANNING PROGRAM

3 Years Structure

Design and Planning Program

School of Architecture and Design, KMUTT

Name of Program

Doctor of Philosophy Program in Design and Planning (International Program)

Full name:

Doctor of Philosophy Program (Design and Planning) (International Program)

Abbreviated name:

Ph.D. (Design and Planning) (International Program)

PhD Program Overview

School of Architecture and Design at King Mongkut's University of Technology is the first International design school in Thailand to offer a doctor of philosophy (PhD) in design and planning. The aim of the program is to create a disruptive design innovator who contribute to create new design knowledge based on research. After finishing the program, the graduate students are able to adapt themselves and learn fast in the digital era. Students are able to create a disruptive design innovation with a long vision, holistic view of system and knowledge connection. Moreover, they have an in depth understanding in problem solving, understand their own field and integrate other disciplines.

Program Educational Objectives

- Innovators who able to design a disruptive Innovation through the research topics from industry/community.
- Professional in design and well-round other discipline in order to integrate skill and knowledge.
- Thinkers who can solve the design problem that is complex. They can think systematically and explain the holistic view that leads to innovation.
- Enhancing their professional with the life-long learning and ready to the change of digital era.
- Skillful in communication related to design and excellent in academic writing and presenting their research.

Length of study: 3 years

Timing

6 semesters (beyond Master degree) 12 credits for core courses and 36 credits for dissertation.

Students will learn through the following extra activities:

- Network with the design community
- Creating or strengthening community platform of the professional is a key to bring the problem from industries and communities for the Ph.D. research. It is also a dissemination of knowledge between academic and practice.

Maker space

- A place where the collaboration of varies fields. They are able to communicate, share and practice the creativity skill.

Small private on-line courses

- Several courses from master program will be deposited on the website so students are able to select the content that they have not experienced with. Other content that related to the dissertation and not provided by instructor will be coordinated with the advisor.

Low residency program (Optional for those who are overseas)
Courses

DPL771	Disruptive Design Innovation	3(3-0-9)
DPL772	Data Analytics in Innovation Research	
		3(3-0-9)
DPL773	Forum for PhD Research	1(0-2-3)
DPL774	Learning in Digital Age	3(3-0-9)
DPL775	Maker Space	2(0-4-6)
DPL776	Writing Research Article for Publication	
		3(3-0-9)
DPL 800	Dissertation	36 Credits

English Language Foundation Corse	Not count credit	
LNG 601	Foundation English for International Programs	
		3(2-2-9) S/U

Note: LNG 601 this course for student who have not yet passed in English Proficiency Score and submitted any English Score to Program

Graduation Requirements

- **Two international journals or**
- **One international journal with 2 national journals or**
- **One international journal with 2 international conferences or**
- **One international journal with 1 national journal and 1 international conferences**
- And Complete required earning credits

Curriculum Components
Total Program Credits 48 credits (beyond Master degree)

Course Structure
Curriculum

Total Program Credits 48	Credits

For Master Students

Course Structure

A.Compulsory Courses	8	Credits
B.Seminar Course	1	Credits
C.Elective Courses	3	Credits
D.Dissertation	36	Credits

Subjects

A. Compulsory Courses	8	Credits
DPL 771 Design Disruptive Innovation		3(3-0-9)
DPL 772 Data Analytics in Innovative Research		3(3-0-9)
DPL 775 Maker Space		2(0-4-6)
B. Seminar Course	1	Credits
DPL 773 Forum for PhD Research		1(0-2-3)
C. Elective Courses	3	Credits
DPL 774 Learning in Digital Age		3(3-0-9)
DPL 776 Writing Research Article for Publication		
		3(3-0-9)
D. Dissertation		36 Credits
DPL 800 Dissertation		36 Credits

Study Plan	Course Description

Study Plan

Year 1 Semester 1

DPL 771 Design Disruptive Innovation 3(3-0-9)

DPL 772 Data Analytics in Innovative Research 3(3-0-9)

Total 6(6-0-18)

Hrs/Week = 24

Year 1 Semester 2

DPL 775 Maker Space 2(0-4-6)

DPL 773 Forum for PhD Research 1(0-2-3)

XXX XXX Elective I 3(X-X-X)

Total 6(x-6+x-9+x)

Hrs/Week = (17+x)

Year 2 Semester 1

DPL 800 Dissertation 9(0-18-36)

Total 9(0-18-36)

Hrs/Week = 54

Year 2 Semester 2

DPL 800 Dissertation 9(0-18-36)

Total 9(0-18-36)

Hrs/Week = 54

Year 3 Semester 1

DPL 800 Dissertation 9(0-18-36)

Total 9(0-18-36)

Hrs/Week = 54

Year 3 Semester 2

DPL 800 Dissertation 9(0-18-36)

Total 9(0-18-36)

Hrs/Week = 54

Course Description

DPL 771 Design Disruptive Innovation 3(3-0-9)

Prerequisite: None

Preparation students to effectively manage creativity in the process of generating high potential ideas and converting them into design disruptive new models. Comprehensive foundation for additional learning in the context of innovative model design. Far more as practice than theory. The emphasis throughout the course on drawing and synthesizing concepts, practices, and techniques.

DPL 772 Data Analytics in Innovation Research

3(3-0-9)

Prerequisite: None

Skills, tools and knowledge of data analytic to identify the pattern and predict through visualization. Data modeling technique as a mean to explore new knowledge in conjunction with design research and design thinking.

DPL773 (Forum for PhD Research) 1(0-2-3)

Prerequisite: None

Activity that supports the knowledge exchange. Closing the gap of industry demand and education with forum. Special interest group for research topic, collaboration and knowledge exchange.

DPL 774 (Learning in Digital Age) 3(3-0-9)

Prerequisite: None

Techniques and methods how to learn and practice faster on new things and skills in digital age. Several kinds of learning techniques in psychology. Learn how to understand their own selves as a mean to identify strengths, performances, values and planning for success.

DPL775 (Maker Space)   2(0-4-6)

Prerequisite: None

Work space where people with common interest. Function as centers for peer learning and sharing resources to build and make things. Multidiscipline include designers, artists, engineer, scientists, and computer scientists. The facility including machine shops, software station and reflection area.

DPL 776 (Writing Research Article for Publication)

3(3-0-9)

Prerequisite: None

Framework of writing research articles for publication including manuscript for submission to an international refereed journal. Three key areas necessary success. Developing strategy for publish. Developing story with a compelling research article. Using language to enhance clear and effective communication.

DPL 800 Dissertation   36 Credits

Prerequisite: Pass Qualifying Examination, QE

Students enrolled are required to carry out an original research on a topic related to design and planning under the supervision and approval of the advisory committee. Each student has to present his research progress in the seminar for every semester for his dissertation enrollment.