

Doctor of Philosophy Program in Science and Technology

Ph.D. (Science and Technology)

Philosophy of the Program:

Education serves as a tool or a process for the development of human beings in terms of knowledge, ability, thought, behavior, attitude, values, morals and ethics. These characteristics are essential factors and important sources of power for the country's development in every aspect. Since the society is changing rapidly and there are obviously significant competitions in the present day society, the quality of human beings is becoming more vital. As a result of this, learning becomes even more essential; specifically, profound learning in various forms needs to be integrated in order to constantly develop the quality of human beings.

The present day learning is changing rapidly as a result of the development of knowledge and new technology, especially the development of information technology and communication. Additionally, the globalization era has changed the scope of education from learning in the curricular to learning based on one's own desires by integrating the way of learning with problem solving. Doctor of Philosophy in Science and Technology is a Thai Program designed for any scholar who wants to further study in his/her major field or any specific field as required to develop knowledge, abilities, skills and experience for his/her work related development and to serve the needs of science and technology personnel. Focusing on research procedure, this program is specifically designed for the utmost benefits of resource utilization. It also aims at collaborating with various organizations for academic strength. As a result, the multidisciplinary college has developed the Doctor of Philosophy in Science and Technology program in which science and technology are integrated. This program is designed to be modern and relevant to science and technology as well as the rapid changes of the way of learning.

Objectives:

1. To produce researchers and academics at the doctoral level in science and technology who are skillful in studying, researching, analyzing and solving problems on their own at the international standard so as to be important human resources for the country and for world development.
2. To conduct research and create a new body of knowledge essential for science and technology development as well as to collaborate with universities locally and internationally.
3. To push local research for excellence and to continuously develop research work.

Qualifications of a prospective candidate:

1. Holds a Master degree in science or equivalent qualifications.
2. Has other additional qualifications as stipulated by KMUTT's graduate study regulations.

Professions after graduation:

1. Scientists/Technologists
2. Academics/researchers in science and technology
3. Science and technology lecturers

Curriculum

Plan 1.1 for student with Master degree	48	Credits
Plan 2.2 for student with Bachelor degree	72	Credits

Curriculum Components

Plan 1.1 for student with Master degree

- Dissertation 48 Credits

Plan 2.2 for student with Bachelor degree

- Major Course and Elective Course 24 Credits
- Dissertation 48 Credits

COURSE STRUCTURE

Plan 1.1 for student with Master degree

First Year

First Semester	Credits
HON 790 Dissertation	8(0-16-32)
HON 681 Seminar 1	1 (0-2-3)
Total	8(0-18-35)

Second Semester

	Credits
HON 790 Dissertation	8(0-16-32)
HON 682 Seminar 2	1 (0-2-3)
Total	9(0-18-35)

Second Year

First Semester	Credits
HON 790 Dissertation	8(0-16-32)
Total	8(1-16-32)

Second Semester	Credits
HON 790 Dissertation	8(0-16-32)
Total	8(1-16-32)

Third Year

First Semester	Credits
HON 790 Dissertation	8(0-16-32)
Total	8(1-16-32)
Second Semester	Credits
HON 790 Dissertation	8(0-16-32)
Total	8(1-16-32)

Plan 2.2 for student with Bachelor degree

First Year

First Semester	Credits
XXX xxx Major Courses	3 (x-x-x)
XXX xxx Elective Courses	3 (x-x-x)
XXX xxx Elective Courses	3 (x-x-x)
Total	9 (x-x-x)
Second Semester	Credits
XXX xxx Major Courses	3 (x-x-x)
XXX xxx Elective Courses	3 (x-x-x)
XXX xxx Elective Courses	3 (x-x-x)
Total	9 (x-x-x)

Second Year

First Semester	Credits
HON 790 Dissertation	3(0-16-32)
HON 681 Seminar 1	1 (0-2-3)
XXX xxx Major Courses	3 (x-x-x)
XXX xxx Elective Courses	3 (x-x-x)
Total	9 (x-18+x-35+x)
Second Semester	Credits
HON 790 Dissertation	5(0-16-32)
HON 682 Seminar 2	1 (0-2-3)
Total	5 (0-18-35)

Third Year

First Semester	Credits
HON 790 Dissertation	7(0-16-32)
Total	7 (0-16-32)



Second Semester	Credits
HON 790 Dissertation	7(0-16-32)
Total	7 (0-16-32)
Fourth Year	
First Semester	Credits
HON 790 Dissertation	7(0-16-32)
Total	7 (0-16-32)
Second Semester	Credits
HON 790 Dissertation	7(0-16-32)
Total	7 (0-16-32)
Fifth Year	
First Semester	Credits
HON 790 Dissertation	6(0-16-32)
Total	6(0-16-32)
Second Semester	Credits
HON 790 Dissertation	6(0-16-32)
Total	6(0-16-32)