Doctor of Philosophy Program in Biochemical Technology (International Program)

Ph.D. (Biochemical Technology)

Philosophy of the Program:

Doctor of Philosophy Program in Biochemical technology aims at producing international standard researchers and academics with in- depth knowledge in Biomolecule and technology to solve the problems, process development of cumulative research.

Applicant Qualifications

Plan 1.1

Applicants must complete Master's Degree in biochemical technology, chemistry, food science, food technology, biotechnology, or other equivalent programs with a cumulative grade point average not less than 3.50. For those with a grade lower than 3.50, this shall be at the discretion of the program committee in considering the applicants on Publication, Awards Other works, Registered subjects.

Plan 2.2

Applicants must complete Bachelor's Degree with First Class Honors or Second Class Honors and placed in top 25% of the class (Certificate issued from Registrar's Office) in biochemical technology, chemistry, food science, food technology, biotechnology, or other equivalent programs. For those who obtained Second Class Honors and are not placed in top 25%, this shall be at the discretion of the program committee in considering the applicants on Publication, Awards Other works, Registered subjects.

Applicants must submit the English Proficiency Test Score as part of their application according to the KMUTT announcement on the English Language Requirement for Doctoral Degree.

Professions after graduation

1. Academics/Lecturers in Institutes focusing on Science, Technology, Power, Food, Agriculture of Engineering.
2. Researchers in Biotechnology in institutes, government and industrial sectors
3. Innovators, product analysts and designers, entrepreneurs

Curriculum

Plan 1.1 for student with Master degree	48	Credits
Plan 2.2 for student with Bachelor degree	74	Credits

Curriculum Components

Plan 1.1 for student with Master degree

- Major Course 3 Credits
- Dissertation 48 Credits

Plan 2.2 for student with Bachelor degree

- Major Course 10 Credits
- Elective Course 16 Credits
- Dissertation 48 Credits

COURSE STRUCTURE

Plan 1.1 for student with Master degree

First Year

First Semester	**Credits**
BCT 791 Seminar I: Mini-review	1 (0-2-2)
BCT 799 Dissertation	6 (0-12-12)
Total	6 (0-14-14)

Second Semester	**Credits**
BCT 792 Seminar II: Scientific Paper Analysis	1 (0-2-2)
BCT 799 Dissertation	6 (0-12-12)
Total	6 (0-14-14)

Second Year

First Semester	**Credits**
BCT 793 Patent Analysis for Innovation Development	1 (1-0-3)
BCT 799 Dissertation	9 (0-18-18)
Total	9 (1-18-21)

Second Semester	**Credits**
BCT 799 Dissertation	9 (0-18-18)
Total	9 (0-18-18)

Third Year

First Semester	Credits
BCT 799 Dissertation	9 (0-18-18)
Total	9 (0-18-18)

Second Semester	**Credits**
BCT 799 Dissertation	9 (0-18-18)
Total	9 (0-18-18)

Plan 2.2 for student with Bachelor degree

First Year

First Semester	**Credits**
BCT 661 Biochemical Techniques and Instrumentation	3 (3–0–9)
BCT 641 Functional Properties of Biochemicals	4 (2–6-8)
BCT xxx Elective Courses	3 (3–0–9)
BCT xxx Elective Courses	1 (1–0–3)
Total	11 (9–6–29)

Second Semester	**Credits**
BCT 791 Seminar I :Mini-review	1 (0-2-2)
BCT xxx Elective Courses	3 (3-0-9)
BCT xxx Elective Courses	3 (3-0-9)
BCT xxx Elective Courses	3 (3-0-9)
Total	10 (9-2-29)

Second Year

First Semester	**Credits**
BCT 792 Seminar II : Scientific Paper Analysis	1 (0-2-2)
BCT 793 Patent Analysis for Innovation Development	1 (1-0-3)
BCT xxx Elective Courses	3 (3-0-9)
BCT 799 Dissertation	3 (0-6-6)
Total	8 (4-8-20)

Second Semester	**Credits**
BCT 799 Dissertation	6 (0-12-12)
Total	6 (0-12-12)

Third Year

First Semester	**Credits**
BCT 799 Dissertation	7 (0-14-14)
Total	7 (0-14-14)
Second Semester	**Credits**
BCT 799 Dissertation	7 (0-14-14)
Total	7 (0-14-14)

Fourth Year

First Semester	**Credits**
BCT 799 Dissertation	7 (0-14-14)
Total	7 (0-14-14)
Second Semester	**Credits**
BCT 799 Dissertation	6 (0-12-12)
Total	6 (0-12-12)

Fifth Year

First Semester	**Credits**
BCT 799 Dissertation	6 (0-12-12)
Total	6 (0-12-12)
Second Semester	**Credits**
BCT 799 Dissertation	6 (0-12-12)
Total	6 (0-12-12)