

PROGRAM PROFILE



KING MONGKUT'S UNIVERSITY OF TECHNOLOGY THONBURI

PHD IN BIOINFORMATICS AND SYSTEMS BIOLOGY



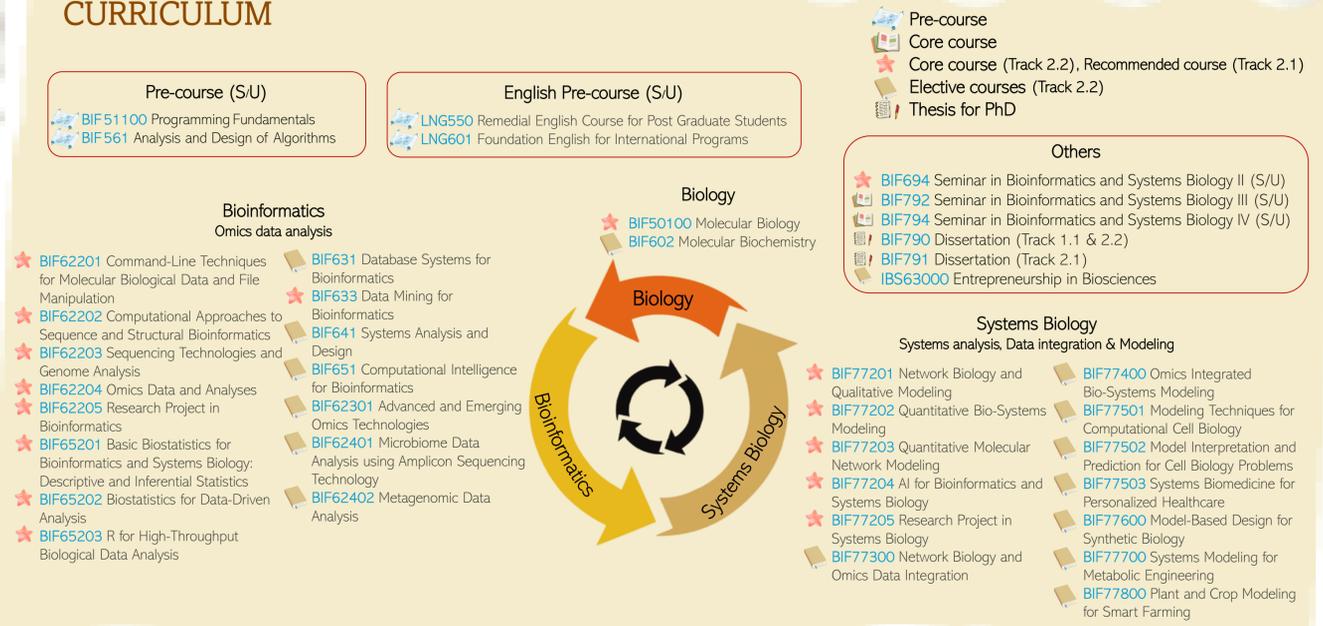
Bioinformatics and Systems Biology are cutting-edge disciplines focusing on analyzing biological data, from genetic sequences to complex metabolic networks. Our programs provide the interdisciplinary skills needed to manage, integrate, and analyze this data, offering a unique opportunity for students with interests in both biology and computer science. Craft your bioinformatics and systems biology skills through intensive learning modules in our international PhD program, which integrates computer and biological sciences. This program offers hands-on training, focusing on omics data analysis, database design, software development, and programming. Students apply their skills to real-world problems, gaining invaluable research experience that prepares them for a successful career in the global scientific community. With over 20 years of experience, our graduates are now thriving in top academic institutions and world-renowned companies.

PROGRAM LEARNING OUTCOMES

1 : Synthesizes new knowledge or creates innovative bioinformatics and systems biology approaches to solve biological problems.
 1A : Analyzes high-throughput biological data by integration of knowledge from different disciplines (biology, computing, statistics, and mathematics)
 1B : Integrates experience, domain expertise, and scientific literature with an understanding of bioinformatics and systems biology frameworks to formulate and justify a novel research question or testable hypothesis.
 1C : Designs effective bioinformatics and systems biology methods to synthesize new knowledge or create innovation.

2 : Communicates accurate information relating to bioinformatics and systems biology to diverse audiences in both oral and written formats through to the publication standard.
 3 : Coordinates team members from diverse disciplines to accomplish a common goal by sharing their own ideas, accepting others' opinions and leading a team.
 4 : Demonstrates research integrity in terms of responsible conduct of research.

CURRICULUM



STUDY AT



School of Bioresources and Technology (Bangkhuntein)



School of Information Technology (Bangmod)

STUDY PLAN

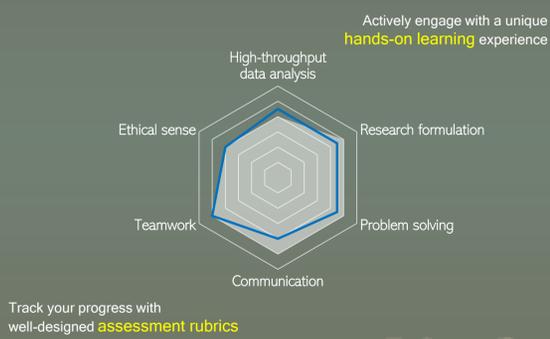
Applicants with Master's Degree

3-year Program 100% Research	Total 48 Credit	Track 1.1
3-year Program 12 Credit Courses + Research	Total 48 Credit	Track 2.1

Applicants with Bachelor's Degree

5-year Program 24 Credit Courses + Research	Total 72 Credit	Track 2.2
--	--------------------	--------------

PROGRESS TRACKING PLATFORM



HIGH IMPACT RESEARCH

- Metagenomics and microbiome
- Comparative genomics
- Medical Informatics
- BioSystems design by Systems Biology & Synthetic Biology
- Drug Design and Discovery
- Systems Biomedicine
- Big Data for Life Sciences

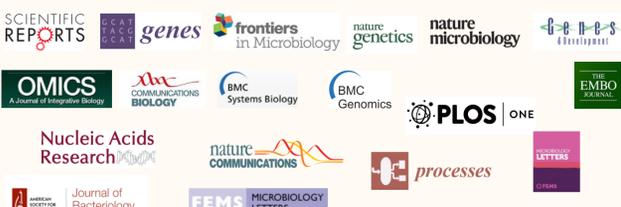
CRITERIA FOR APPLICANTS

- A bachelor's or master's degree in biological sciences, computer science, computer engineering, medical sciences, chemistry, mathematics, statistics, or related disciplines.
- (Required) English test score (TOEFL iBT ≥ 65 , IELTS Academic ≥ 5.0 , TETET ≥ 5.5 , PTE Academic ≥ 59 or Duolingo English Test ≥ 100)

CAREER OPPORTUNITIES

- Researcher or academic professional in bioinformatics, systems biology, computer science, biological sciences, or medical science.
- Analyst or computer systems designer specializing in bioinformatics or systems biology.
- Developer of software or websites related to bioinformatics and/or systems biology.
- Manager of software systems in the bioinformatics and/or systems biology domain.
- Research project analyst in bioinformatics and/or systems biology.

INTERNATIONAL JOURNAL PUBLICATIONS FROM OUR ACADEMIC STAFFS & STUDENTS



CONTACT US

- <https://bioinformatics.kmutt.ac.th/>
- facebook.com/bioinformatics.kmutt
- support.chai@mail.kmutt.ac.th
- +66 (0)2-470-7716