Doctor of Philosophy Program in Bioinformatics and Systems Biology (International Programme)

Ph.D. (Bioinformatics and Systems Biology)

Philosophy of the Program:

The Doctor of Philosophy Program in Bioinformatics and Systems Biology is designed for students who desire focused training in the elements of biology, computer science, and information technology needed for a successful career in the exciting new discipline of Bioinformatics & Systems Biology. Students in our program will receive comprehensive training in omics analysis, database design and management, software engineering and programming (including web-based development), simulation techniques and modeling, and data integration. Each student will apply their skills to a practical project, where they will design and implement a solution to a real-world problem under the guidance of an experienced mentor in industry or academia.

Professions after graduation

1. Academics/Lecturers in in Bioinformatics and Systems Biology, Computer, Bioscience, and medical science in institutes, government and industrial sectors
2. Analysts and product designers in value-added Bioinformatics and Systems Biology
3. Programmer in Bioinformatics and Systems Biology
4. Software Manager in Bioinformatics and Systems Biology
5. Computer Auditor in Bioinformatics and Systems Biology
6. Entrepreneurs/Owners in Bioinformatics and Systems Biology
7. Consultants in Bioinformatics and Systems Biology
8. Project Analysts in Bioinformatics and Systems Biology

Curriculum

Plan 1.1 for student with Master degree	48	Credits
Plan 2.1 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

- ☐ Major Course 3 Credits
- ☐ Dissertation 48 Credits

Plan 2.1 for student with Master degree

- ☐ Major Course 3 Credits
- ☐ Elective Course 9 Credits
- ☐ Dissertation 36 Credits

Plan 2.2 for student with Bachelor degree

- ☐ Major Course 6 Credits
- ☐ Elective Course 18 Credits
- ☐ Dissertation 48 Credits

COURSE STRUCTURE

Plan 1.1 for student with Master degree

First Year/ First Semester		Credits
BIF 794	Seminar in Bioinformatics and Systems Biology IV	1 (0-2-3) (S/U)
BIF 790	Dissertation	8 (0-32-64)
	Total	9 (0-34-67)

First Year/ Second Semester		Credits
BIF 796	Seminar in Bioinformatics and Systems Biology V	1 (0-2-3) (S/U)
BIF 790	Dissertation	8 (0-32-64)
	Total	9 (0-34-67)

Second Year/ First Semester		Credits
BIF 798	Seminar in Bioinformatics and Systems Biology VI	1 (0-2-3) (S/U)
BIF 790	Dissertation	8 (0-32-64)
	Total	9 (0-34-67)

Second Year/ Second Semester		Credits
BIF 790	Dissertation	8 (0-32-64)
	Total	8 (0-32-64)

Third Year/ First Semester		Credits
BIF 790	Dissertation	8 (0-32-64)
	Total	8 (0-32-64)

Third Year/ Second Semester		Credits
BIF 790	Dissertation	8 (0-32-64)
	Total	8 (0-32-64)

Plan 2.1 for student with Master degree

First Year/ First Semester		Credits
BIF 794	Seminar in Bioinformatics and Systems Biology IV	1 (0-2-3) (S/U)
BIF xxx	วิชาเลือก	3 (3-0-9)
BIF xxx	วิชาเลือก	3 (3-0-9)
BIF xxx	วิชาเลือก	3 (3-0-9)
	Total	10 (9-2-30)

First Year/ Second Semester		Credits
BIF 796	Seminar in Bioinformatics and Systems Biology V	1 (0-2-3) (S/U)
BIF 791	Dissertation	6 (0-24-48)
	Total	7 (0-26-51)

Second Year/ First Semester	Credits
BIF 798 Seminar in Bioinformatics and Systems Biology VI	1 (0-2-3) (S/U)
BIF 791 Dissertation	9 (0-36-72)
Total	10 (0-38-75)
Second Year/ Second Semester	**Credits**
BIF 791 Dissertation	9 (0-36-72)
Total	9 (0-36-72)
Third Year/ First Semester	**Credits**
BIF 791 Dissertation	9 (0-36-72)
Total	9 (0-36-72)
Third Year/ Second Semester	**Credits**
BIF 791 Dissertation	3 (0-12-24)
Total	3 (0-12-24)

Plan 2.2 for student with Bachelor degree

First Year/ First Semester	Credits
BIF 692 Seminar in Bioinformatics and Systems Biology I	1 (0-2-3)
BIF xxx วิชาเลือก 1	3 (3-0-9)
BIF xxx วิชาเลือก 2	3 (3-0-9)
BIF xxx วิชาเลือก 3	3 (3-0-9)
รวม	10 (9-2-30)
First Year/ Second Semester	**Credits**
BIF 694 Seminar in Bioinformatics and Systems Biology II	1 (0-2-3)
BIF xxx วิชาเลือก 4	3 (3-0-9)
BIF xxx วิชาเลือก 5	3 (3-0-9)
BIF xxx วิชาเลือก 6	3 (3-0-9)
รวม	10 (9-2-30)
Second Year/ First Semester	**Credits**
BIF 792 Seminar in Bioinformatics and Systems Biology III	1 (0-2-3)
BIF 790 Dissertation	6 (0-24-48)
รวม	7 (0-26-51)
Second Year/ Second Semester	**Credits**
BIF 794 Seminar in Bioinformatics and Systems Biology IV	1 (0-2-3)
BIF 790 Dissertation	6 (0-24-48)
รวม	7 (0-26-51)
Third Year/ First Semester	**Credits**
BIF 796 Seminar in Bioinformatics and Systems Biology V	1 (0-2-3)
BIF 790 Dissertation	6 (0-24-48)
รวม	7 (0-26-51)

Third Year/ Second Semester	Credits
BIF 798 Seminar in Bioinformatics and Systems Biology VI	1 (0-2-3)
BIF 790 Dissertation	6 (0-24-48)
รวม	7 (0-26-51)
Forth Year/ First Semester	**Credits**
BIF 790 Dissertation	6 (0-24-48)
Total	6 (0-24-48)
Forth Year/ Second Semester	**Credits**
BIF 790 Dissertation	6 (0-24-48)
Total	6 (0-24-48)
Fifth Year/ First Semester	**Credits**
BIF 790 Dissertation	6 (0-24-48)
Total	6 (0-24-48)
Fifth Year/ Second Semester	**Credits**
BIF 790 Dissertation	6 (0-24-48)
Total	6 (0-24-48)