

Faculty of Engineering

Bachelor of Science Programme in Computer Science

Bachelor of Science Programme in Computer Science (English Program) B.Sc. (Computer Science)

Philosophy of the Program

School of Information Technology, King Mongkut's University of Technology Thonburi aims to produce graduates who are knowledgeable and skillful in computer science. The graduates can perform tasks related to programs, information communication and computer science administration. They can communicate and collaborate with others effectively with the utmost aim of being good computer science professionals with morals and ethics, and at the same timework with a professional foundation of knowledge and understanding. They can think, analyze, solve problems, analyze digital information, and apply it appropriately. They are responsible, honest, dedicated and being role models to create innovations in computer science, which are beneficial for the country's development.

Professions after graduation:

- 1. Computer specialists or computer scientists
- 2. Academics in computer science
- 3. Information system developers
- 4. Programmers
- 5. Network system and server administrators
- 6. Database administrators
- 7. Software project managers
- 8. Software project coordinators
- 9. Professionals in establishments using computer science

Curriculum

Total Program	Credits	124 credits	
Curriculum Co	omponents		
General Core (Course	31 Credits	
Specific course	2	87 Credits	
☐ Mather	matics Courses	12 Credits	
☐ English	Courses	3 Credits	
Founda	ation Course	51 Credits	
0	Group of Organi	zation and Information Systems	6 Credits
0	Group of Applie	d Technology	6 Credits
0	Group of Techno	ology and Software Methods	18 Credits
0	Grope of Infrastr	ructure systems	18 Credits
0	Group of Comp	uter Architecture	3 Credits
☐ Elective	e Courses		21 Credits
Free Elective C	Courses	6 Credits	



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COURSE STRUCTURE

First	Year
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First Semester	Credits
CSC 102 Computer Programming I	3 (2 2 5)
CSC 103 Computer Architectures and Organization	3 (3 0 6)
CSC 165 Discrete Mathematics	3 (3 0 6)
LNG 105 Academic English for International Students	3 (3 0 6)
GEN 111 Man and Ethics of Living	3 (3 0 6)
GEN 101 Physical Education	1 (0 2 2)
Total	16 (14 4 31)
Second Semester	Credits
CSC 105 Computer Programming II	3 (2 2 5)
CSC 209 Data Structures	3 (3 0 6)
CSC 261 Statistics for Scientists	3 (3 0 6)
LNG 106 Academic Listening and Speaking	3 (3 0 6)
GEN 121 Learning and Problem Solving Skills	3 (3 0 6)
Total	15 (14 2 29)

Second Year

First Semester	Credits
CSC 210 Analysis and Design of Algorithms	3 (3 0 6)
CSC 213 Systems Analysis and Design	3 (3 0 6)
CSC 318 Database Systems	3 (3 0 6)
CSC 319 Object-oriented Software Development	3 (3 0 6)
LNG 107 Academic Reading and Writing	3 (3 0 6)
GEN 231 Miracle of Thinking	3 (3 0 6)
Total	18 (18 0 36)

Second Semester	Credits
CSC 233 Programming Paradigms	3 (2 2 5)
CSC 317 Operating Systems	3 (3 0 6)
CSC 320 Computer Networks	3 (2 2 5)
CSC 321 Software Engineering	3 (3 0 6)
GEN xxx General Education Elective 1	3 (3 0 6)
GEN 241 Beauty of Life	3 (3 0 6)
Total	18 (16 4 34)

Third Year

First Semester	Credits
CSC 340 Artificial Intelligence	3 (3 0 6)
CSC 424 Software Project Management	3 (3 0 6)



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CSC 498 Computer Science Project I	3 (0 6 9)
MTH 101 Mathematics 1	3 (3 0 6)
GEN xxx General Education Elective 2	3 (3 0 6)
GEN 351 (Modern Management and Leadership	3 (3 0 6)
Total	18 (15 6 39)

Second Semester	Credits
CSC 371 Distributed Systems	3 (3 0 6)
CSC 499 Computer Science Project II	3 (0 6 9)
CSC xxx Computer Science Elective 1	3 (3 0 6)
MTH 102 Mathematics 2	3 (3 0 6)
LNG 411 English for Employment	3 (3 0 6)
Total	15 (12 6 33)

Summer Session

CSC 395 Career Training	3(S/U) (0 35 6)
Total	3 (0 35 6)

Forth Year

First Semester	Credits
CSC xxx Computer Science Elective 2	3 (3 0 6)
CSC xxx Computer Science Elective 3	3 (3 0 6)
CSC xxx Computer Science Elective 4	3 (3 0 6)
CSC xxx Computer Science Elective 5	3 (3 0 6)
XXX xxx Free Elective 1	3 (3 0 6)
Total	15 (15 0 30)

Second Semester	Credits
XXX xxx Free Elective 2	3 (3 0 6)
CSC xxx Computer Science Elective 6	3 (3 0 6)
Total	6 (6 0 12)