

**Curriculum for the Degree of
Bachelor of Engineering in
Computer Engineering
Total Number of Credits Required
for Graduation is at least 139**

GENERAL EDUCATION

31 CREDITS

1.	Science and Mathematics	11 credits
-----------	--------------------------------	-------------------

208111	Engineering Drawing	3	credits
403111	General Chemistry	4	credits
403112	Laboratory in General Chemistry	1	credit
and choose 3 credits from the following courses :			
999011	Food for Mankind	3	credits
999012	Health for Life	3	credits
999213	Environment, Technology and Life	3	credits

2.	Language	12 credits
-----------	-----------------	-------------------

355xxx	English	9	credits
999021	Thai Language for Communication	3	credits

3.	Social Sciences	3 credits
-----------	------------------------	------------------

Choose 3 credits from the following courses :

999041	Economics for Better Living	3	credits
999141	Man and Society	3	credits

4.	Humanities	3 credits
-----------	-------------------	------------------

Choose 3 credits from the following courses :

999031	The Heritage of World Civilizations	3	credits
999032	Thai Studies	3	credits
999033	Arts of Living	3	credits

5. Physical Education Activities	2 credits
---	------------------

175xxx	Physical Education Activities	1,1	credit
--------	-------------------------------	-----	--------

SPECIFIC COURSES AT LEAST 102 CREDITS

1. Engineering Core Courses	25 credits
------------------------------------	-------------------

204111	Computers and Programming	3	credits
204112	Information Technology for Engineers	1	credit
213211	Materials Science for Engineers	3	credits
417167	Engineering Mathematics I	4	credits
417168	Engineering Mathematics II	3	credits
417267	Engineering Mathematics III	3	credits
420111	General Physics I	3	credits
420112	General Physics II	3	credits
420113	Laboratory in Physics I	1	credit
420114	Laboratory in Physics II	1	credit

2. Major Courses	62 credits
-------------------------	-------------------

204211	Discrete Mathematics	3	credits
204212	Abstract Data Types and Problem Solving	3	credits
204213	Theory of Computation	3	credits
204214	Programming Skill Development Laboratory	1	credit
204221	Computer Organization and Assembly Language	3	credits
204222	Digital Systems Design	3	credits
204223	Practicum for Computer Engineering	1	credit
204224	Logic Circuit Laboratory	1	credit
204313	Algorithm Design and Analysis	3	credit
204321	Computer Architecture	3	credits
204325	Data Communication and Computer Networks	3	credits
204331	System Software	3	credits
204332	Operating Systems	3	credits
204341	Design and Construction of Large Software Systems	3	credits
204351	Database Systems	3	credits
204352	Laws and Ethics in Information Technology	3	credits

204421	Computer Networks	3	credits
204422	Computer Communication and Network Laboratory	1	credit
204495	Computer Engineering Project Preparation	2	credits
204497	Seminar	1	credit
204499	Computer Engineering Project	2	credits
205201	Introduction of Electrical Engineering	3	credits
205202	Electricial Engineering Laboratory I	1	credit
205203	Electronics for Computer Engineers	3	credits
205303	Electronics Laboratory for Computer Engineers	1	credit
208201	Basic Principle in Engineering Mechanics	3	credits

3. Technical Electives at least	15 credits
--	-------------------

Choose at least 15 credits from the following courses:

200490	Co-operative Education	6-9	credits
204312	Probability and Random Processes for Computer Engineers	3	credits
204323	Micropocessor and Microcomputer Design	3	credits
204324	Computer System Laboratory	1	credit
204342	Managing Software Development	3	credits
204371	Transform Techniques in Signal Analysis	3	credits
204411	Symbolic Computation	3	credits
204424	Digital Design Automation	3	credits
204425	Network Programming	3	credits
204426	Network Configuration	3	credits
204432	Object-Oriented Computing	3	credits
204433	Programming Language Translation	3	credits
204434	Parallel and Distributed Computing Systems	3	credits
204435	Programming Language Concepts	3	credits
204451	Database System Design	3	credits
204452	Information Technology Management	3	credits
204461	Artificial Intelligence	3	credits
204462	Introduction to Expert Systems	3	credits
204463	Introduction to Natural Language Processing	3	credits
204464	Computer Vision	3	credits
204471	Microcomputer Interfacing	3	credits
204472	Numerical Computation	3	credits

204481	Foundations of Computer Graphics	3	credits
204482	Computer-Human Interfaces	3	credits
204496	Selected Topics in Computer Engineering	1-3	credits
204498	Special Problems	1-3	credits
205314	Digital Signal Processing	3	credits
205338	VLSI Systems	3	credits
205415	Digital Image Processing	3	credits
206321	Operations Research for Engineers I	3	credits
206425	Operations Research for Engineers II	3	credits
219211*	Software Development Training Camp	1	credit

FREE ELECTIVES**6 CREDITS****Engineering Training**

Industrial Practice of at least 240 hours

* 219211 Software Development Training Camp 1 (0-3) is the technical elective for every computer engineering student the study