

Master & Doctor of Philosophy Programs in Computer Science

Research Fields

Pattern Recognition
Data Analysis
Internet of Things and Network Communication
Machine Learning
Web Semantic and Ontology



For more information,
please visit the following website.
www.cs.science.cmu.ac.th

```
MOV DL, '-' ; get  
MOV AH, 2 ; print  
INT 21H ; print '-'  
POP AX ; get AX ba  
NEG AX ; AX = -AX  
END_IF1:  
get decimal digits  
MOV CX, 0 ; CX co  
MOV BX, 10D ; BX ha  
REPEAT1:  
MOV DX, 0 ; prep  
DIV BX ; AX = quot  
PUSH DX ; save  
count =
```



Doctor of Philosophy Program in Computer Science

Type 1.1: Student with Master's degree

Total credits 48 credits

A. Thesis 48 credits

204898 Ph.D. Thesis 48 credits

B. Academic activities

1. A student has to present in English the topic related to his/her thesis at the seminar at least once a semester for at least three semesters and participate in other departmental academic activities.
2. Thesis Publication
 - 2.1 The whole or part of his/her thesis work must be accepted for full-paper publishing in a peer review international accredited journal approved by the Graduate Program Administrative Committee. The student must be the first author for at least one full-paper.
and
 - 2.2 A student must present at least one full-paper at an international academic conference accompanied by peer-reviewed proceedings. The student must be the first author.
3. A student must give a written study report every regular semester in a format determined by the Graduate School and the report must be approved by the student's academic advisor and thesis committee.

C. Non-credit course

1. Graduate School's requirement : A foreign language
2. Program requirements :
204891 Advanced Research Methodology in Computer Science 3 credits

D. Qualifying examination

1. A student must complete a qualifying examination to evaluate his/her ability before presenting a thesis proposal.
2. An unsuccessful examinee may take re-examination within the following regular semester.
3. An unsuccessful examinee will be transferred to Master's Degree studies with the approval of the Graduate Program Administrative Committee.

Type 2.2: Student with Bachelor's degree

Total credits a minimum of 72 credits

A. Courses a minimum of 24 credits

1. Graduate Courses	a minimum of	24 credits
1.1 Field of concentration courses	a minimum of	24 credits
1.1.1 Required courses		9 credits
204801	Advanced Design and Analysis of Algorithms	3 credits
204812	Computer System Organization	3 credits
204816	Formal Languages and Computation Complexity	3 credits
1.1.2. Elective courses	a minimum of	15 credits
1.1.2.1	Student must select one course from the following courses :	
204815	Automata Theory	3 credits
204820	Computational Discrete Mathematics	3 credits
206751	Advanced Numerical Analysis	3 credits
1.1.2.2	Student must select at least two courses from the following courses :	
204802	Design of Fault-Tolerant Digital Systems	3 credits
204803	Artificial Neural Networks	3 credits
204804	Programming Language Design	3 credits
204805	Database Systems	3 credits
204806	Software Methodology	3 credits
204807	Object-Oriented Design	3 credits
204809	Theory of High-Speed Parallel Computation	3 credits
204818	Theory of Operating Systems	3 credits
204819	Computer Networks	3 credits
204821	Scientific Visualization	3 credits
1.1.2.3	Student must select at least two courses from the following courses :	
204808	Large Scale Software Project Management	3 credits
204810	Parallel Numerical Algorithms	3 credits
204811	Parallel Programming	3 credits
204813	Computer System Analysis	3 credits
204814	Distributed Computer Systems	3 credits
204881	Selected Topics in Computer Science 1	3 credits
204882	Selected Topics in Computer Science 2	3 credits
1.2	Other course	None
2. Advanced Undergraduate Courses		None
B. Thesis		48 credits
204898	Ph.D. Thesis	48 credits

C. Non-credit course

1. Graduate School's requirement : A foreign language

2. Program requirements :

204891 Advanced Research Methodology in Computer Science 3 credits

D. Qualifying examination

1. A student must complete a qualifying examination to evaluate his/her ability before presenting a thesis proposal.

2. An unsuccessful examinee may take a re-examination within the following regular semester.

3. An unsuccessful examinee will be transferred to Master's Degreestudies with the approval of the Graduate Program Administrative Committee.

E. Academic activities

1. A student has to present in English the topic related to his/her thesis at the seminar at least once a semester for at least three semesters and participate in other departmental academic activities.

2. Thesis Publication

2.1 The whole or part of his/her thesis work must be accepted for full-paper publishing in a peer review international accredited journal approved by the Graduate Program Administrative Committee. The student must be the first author for at least one full-paper. *and*

2.2 A student must present at least two full-paper at an international academic conference accompanied by peer-reviewed proceedings. The student must be the first author.

3. A student must give a written study report every regular semester in a format determined by the Graduate School and the report must be approved by the student's academic advisor and thesis committee.

F. Comprehensive examination

Having submitted a request form to the Graduate School, approved by general advisor or major thesis advisor, a student must then complete a comprehensive examination.