Master Program in Applied Mathematics

Research Fields

Mathematical Modelling
Optimization
Control Theory
Numerical Analysis
Partial Differential Equation
Probability Theory

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

Master of Science Program in Applied Mathematics

Type 2 (Plan A Type A2)

Degree Requirements		a minimum of	38	credits
A. Coursework		a minimum of	26	credits
1. Graduate Courses		a minimum of	26	credits
1.1 Field of Specialization		a minimum of	23	credits
1.1.1 Required courses			11	credits
206743	Theory of Differential Equations		3	credits
219731	Applied Analysis		3	credits
219753	Numerical Analysis		3	credits
219791	Seminar in Applied Mathematics 1		1	credit
219792	Seminar in Applied Mathematics 2		1	credit
1.1.2 Elective courses		a minimum of	12	credits

Student may take any graduate level mathematics courses in the following 2 categories

Group 1 Applied Mathematics

219720	Matrix Analysis	3	credits
219741	Partial Differential Equations	3	credits
219751	Finite Element Method 1	3	credits
219752	Finite Element Method 2	3	credits
219761	Mathematical Modeling	3	credits
219765	Mathematics in Quantum Mechanics	3	credits
219766	Mathematical Control Theory	3	credits
219767	Mathematics in Electromanetic Theory	3	credits
219768	Mathematics in Fluid Dynamics	3	credits
219781	Foundation of Optimization	3	credits
219789	Selected Topics in Applied Mathematics	3	credits

Group 2 Mathematics

206713	Topology	3	credits
206714	Algebraic Topology	3	credits
206720	Algebra	3	credits
206721	Theory of Finite Groups	3	credits
206722	Field Theory	3	credits
206723	Ring and Module Theory 1	3	credits
206724	Algebraic Semigroup Theory	3	credits

206725	Universal Algebra	3	credits
206729	Algebraic Graph Theory	3	credits
206730	Fixed Point Theory and Applications	3	credits
206731	Real Analysis 1	3	credits
206732	Real Analysis 2	3	credits
206733	Complex Analysis	3	credits
206734	Functional Analysis	3	credits
206735	Distribution Theory and Applications	3	credits
206736	Graph Theory and Applications	3	credits
206738	Combinatorics	3	credits
206751	Advanced Numerical Analysis	3	credits
206771	Theory of Probability 1	3	credits
206772	Theory of Probability 2	3	credits
206773	Stochastic Processes and Applications	3	credits
206783	Operational Research Techniques 1	3	credits
206789	Selected Topics in Mathematics	3	credits

1.2 Other courses (if any) a maximum of 3 credits

1.2.1 Required courses none

1.2.2 Elective courses (if any) a maximum of 3 credits

Student may take any graduate level courses offered by Chiang Mai University subject to approval of the Graduate Program Administrative Committee and consent of advisor.

2. Advanced Undergraduate Courses None

B. Thesis

219799 Master's Thesis 12 credits

C. Non-credit Courses

1. Graduate School Requirement : a foreign language
2. Program Requirement : None

D. Academic Activities

The whole or a part of the master's thesis work must be published or at least accepted to be published in a national journal listed in TCI Tier 1 database or appeared as a full paper in international conference proceedings acceptable in the area or a national conference in Mathematics organized by the Mathematical Association of Thailand under the Patronage of His Majesty the King (Annual Meeting in Mathematics). The student must be the first author in at least one of the published works written in English.

Note : Course in the field of concentration are courses in graduate level in Mathematics (206...) and Applied Mathematics (219...)