

National Chiao Tung University Department of Applied Mathematics
Required Courses for Undergraduate and Regulations for the Granting of the
“Field Completion Certificate”

Applicable to the 97th academic year freshmen thereafter(2007/09)

1. Required Courses for Current NCTU DAM Students:

Freshman		Sophomore		Junior	
1 st semester	2 nd semester	1 st semester	2 nd semester	1 st semester	2 nd semester
Calculus (4)	Calculus (4)	Advanced Calculus (4)	Advanced Calculus (4)	Algebra (3)	Algebra(3)
Linear Algebra (3)	Linear Algebra (3)	Ordinary Differential Equations (3)			
Introduction to Computer Science (3)	Introduction to Computer Science (3)		Discrete Mathematics(3)		
Elementary Mathematics(2)	Elementary Mathematics(2)	Probability (3)		Statistics (3)	
General Physics (3)	General Physics (3)			Numerical Analysis(3)	

Total 55 credits. Besides the above courses, NCTU DAM students are required to pass 2 elective courses (6 credits) offered by the department.

2. Students will be awarded the “Field Completion Certificate” (not limited to one) after earning 6 or more credits from that specific field.

Fields	Accredited Courses
Pure Mathematics	Complex Analysis, Topology, Geometry, Introduction to Analysis
Differential Equations and Scientific Computing	Introduction to Dynamical Systems, Scientific Computing, Introduction to Partial Differential Equations, Ordinary Differential Equations II
Probability and Statistics	Advanced Statistics, Stochastic Process
Combinatorics	Graph Theory, Coding Theory, Introduction to Graph Theory

For more information please consult Professor Chuah Meng-Kiat (pure mathematics), Professor Shih Chih-Wen (Differential Equations and Scientific Computing), Professor Sheu Yuan-Chung (Probability and Statistics), and Professor Chen Chiu-Yuan (Combinatorics) or professors of related fields.

3. NCTU DAM students who have fulfilled the above two criteria with an average of over 70, will have to file a request for the “Field Completion Certificate” to the department office. The granting of the certificate is under the authority of the department Course Committee. This certificate is helpful for further study or future career.
4. The above regulation is in effect in the 90th academic year thereafter.