

Curriculum

□ Undergraduate Course

Classification	Subject No.	Subject Name	Lecture:Lab.:Credit (Homework)	Semester	Remark
Mandatory Major Course	AM220	Matrix Computation and Numerical Methods	3:2:3(6)	Spring, Fall	
	AM241	Analysis I	3:1:4(6)	Spring	*MA241
	AM250	Probability, Statistics and their Applications	3:2:3(6)	Spring, Fall	*MA250
	AM320	Algorithms for Scientific Computation	3:2:3(6)	Fall	
	AM343	Applied Complex Analysis	3:0:3(6)	Spring	*MA341
Elective Major Course	AM210	Introduction to Applied Mathematics	3:2:3(6)	Spring, Fall	
	AM222	Introduction to Scientific Computation	3:2:3(6)	Fall	*MA242
	AM242	Analysis II	3:1:3(6)	Fall	
	AM311	Mathematical Logic	3:0:3(6)	Spring	*MA365
	AM321	Numerical Analysis	3:2:3(6)	Fall	
	AM331	Ordinary Differential Equations	3:0:3(6)	Spring	
	AM347	Optimization and Game Theory	3:0:3(6)	Spring	
	AM350	Elementary Probability and Simulation	3:1:3(6)	Fall	*MA450
	AM360	Applied Statistics	3:2:3(6)	Fall	*MA455
	AM432	Partial Differential Equations	3:0:3(6)	Fall	*MA440
	AM434	Mathematics for Mechanics	3:0:3(6)	Spring	
	AM441	Several Variables Analysis and Geometry	3:0:3(6)	Spring	
	AM442	Fourier Analysis and Applications	3:2:3(6)	Fall	
	AM445	Advanced Theory of Integration	3:0:3(6)	Fall	
	AM448	Transform Theories and Applications	3:0:3(6)	Spring	
	AM451	Elementary Stochastic Processes	3:0:3(6)	Spring	
	AM452	Random Processes and Signal Processing	3:0:3(6)	Fall	
	AM453	Stochastic Processes and Communication Systems	3:2:3(6)	Spring	
	AM455	Statistics and Artificial Intelligence	3:2:3(6)	Fall	
	AM461	Linear Model	3:0:3(6)	Spring	
AM462	Statistical Methods with Computer	2:3:3(6)	Fall		
AM465	Introduction to Financial Mathematics	3:0:3(6)	Spring	**AM250	
AM470	Mathematical Modelling	3:2:3(6)	Fall		
AM480	Topics in Applied Mathematics	3:0:3(6)	Spring, Fall		
Research	AM490	Graduate Research	0:6:3	Spring, Fall	
	AM495	Independent Research	0:6:1	Spring, Fall	
	AM496	Seminar	1:0:1	Spring, Fall	

※ 400 level courses credits can be counted as master courses credits.

※ * represents substitutive courses.

※ ** represents pre-requisite courses.

□ Graduate Course

Classification	Subject No.	Subject Name	Lecture:Lab.:Credit (Homework)	Semester	Remark
Mandatory Major Courses	AM511	Methods of Applied Mathematics	3:0:3(6)	Spring	
	AM541	Applied Real Analysis	3:0:3(6)	Fall	*MA540
Elective Major Courses	AM501	Analysis for Engineers	3:0:3(6)	Spring	
	AM502	Functional Analysis for Engineers	3:0:3(6)	Fall	
	AM503	Complex Variable Techniques for Engineers	3:0:3(6)	Spring	
	AM504	Applied Matrix Computation	3:0:3(6)	Fall	
	AM520	Advanced Numerical Analysis	3:0:3(6)	Spring	*MA565
	AM521	Machine Learning Theories and Applications	3:0:3(6)	Fall	
	AM523	Knowledge Discovery and Data Mining	3:0:3(6)	Fall	
	AM530	Partial Differential Equations	3:0:3(6)	Spring	*MA743
	AM531	Mathematical Fluid Mechanics	3:0:3(6)	Spring	*MAE510
	AM542	Applicable Complex Analysis	3:0:3(6)	Spring	*MA541
	AM546	Wavelets and Applications	3:0:3(6)	Fall	
	AM547	Applied Approximation Theory	3:0:3(6)	Spring	
	AM548	Special Functions	3:0:3(6)	Fall	
	AM550	Probability with Applications	3:0:3(6)	Fall	*MA551
	AM551	Applied Stochastic Processes	3:0:3(6)	Spring	
	AM552	Queueing Theory and Applications	3:0:3(6)	Fall	
	AM560	Advanced Statistics	3:0:3(6)	Fall	
	AM580	Recent Progress in Applied Mathematics	2:0:2(6)	Spring, Fall	
	AM620	Numerical Partial Differential Equations	3:0:3(6)	Fall	
	AM621	Computational Models of Neural Networks	3:0:3(6)	Spring	
	AM641	Applied Functional Analysis	3:0:3(6)	Spring	
	AM643	Harmonic Analysis and Applications	3:0:3(6)	Spring	
	AM644	Generalized Functions and Applications	3:0:3(6)	Fall	
	AM650	Stochastic Differential Equations	3:0:3(6)	Fall	
	AM662	Graphic Models in Statistics	3:0:3(6)	Fall	
	AM663	Statistical Analysis of Incomplete Data	3:0:3(6)	Spring	
	AM664	Multivariate Statistical Analysis	3:0:3(6)	Fall	
	AM665	Bayesian Statistics	3:0:3(6)	Spring	
	AM670	Numerical Fluid Mechanics	3:0:3(6)	Fall	*MAE613
	AM671	Hyperbolic Differential Equations	3:0:3(6)	Spring	
AM675	High Speed Computations	3:0:3(6)	Spring		
AM730	Mathematical Methods for Mechanics	3:0:3(6)	Fall		
AM801	Topics in Applied Mathematics	3:0:3(6)	Spring, Fall		
Research	AM960	Thesis Research (Master)		Spring, Fall	
	AM980	Thesis Research (Doctoral)		Spring, Fall	
	AM966	Seminar (Master)	1:0:1	Spring, Fall	
	AM986	Seminar (Doctoral)	1:0:1	Spring, Fall	

※ 500 unit courses can be counted towards either Bachelor's or Master's course.

※ * represents substitutive courses.