



Engineering Sciences & Applied Mathematics

Academics

Course Listings

The course listing below outlines courses for the 2022-23 academic year. For the 2021-2022 schedule click [here](#). Visit [this page \(all-courses.html\)](#) for a complete list of courses in the department.

** = approved course for undergraduate modeling requirement.*

FILTER BY

SEARCH

Course	Course Title	Fall 2022	Winter 2023	Spring 2023
MATH 228-2 (descriptions/228-2-1pm.html)	Multiple Integration and Vector Calculus (descriptions/228-2-1pm.html)	MWF 1:00-1:50 Mani	MWF 9:00-9:50 Fontana	MWF 11:00-11:50 Mani
MATH 228-2 (descriptions/228-2-	Multiple Integration and Vector Calculus		MWF 10:00-	

2.html)	(descriptions/228-2-2.html)		10:50 Miksis	
MATH 228-2 (descriptions/228-2-1.html)	Multiple Integration and Vector Calculus (descriptions/228-2-1.html)	MWF 2:00-2:50 Mani	MWF 12:00- 12:50 Vlahovska	MWF 1:00- 1:50 Fontana
MATH 228-2 (descriptions/228-2-3.html)	Multiple Integration and Vector Calculus (descriptions/228-2-3.html)		MWF 1:00-1:50 Fontana	
ES_APPM 252-1,2 (descriptions/252-1-2.html)	Honors Calculus for Engineers (descriptions/252-1-2.html)	MTWThF 9:00-9:50 Lecoanet	MTWThF 9:00-9:50 Lecoanet	
GEN_ENG 205-4 (descriptions/205-4-sec-21.html)	Engineering Analysis 4 (descriptions/205-4-sec-21.html)	MTWThF 10:00- 10:50 Bayliss	MTWThF 11:00- 11:50 Chopp	
GEN_ENG 205-4 (descriptions/205-4-sec-22.html)	Engineering Analysis 4 (Sec 22) (descriptions/205-4-sec-22.html)	MTWThF 12:00- 12:50 Bayliss		
GEN_ENG 205-4 (descriptions/205-4-sec-23.html)	Engineering Analysis 4 (Sec 23) (descriptions/205-4-sec-23.html)	MTWThF 1:00-1:50 Bayliss		
GEN_ENG 206-4 (descriptions/206-4.html)	Honors Engineering Analysis 4 (descriptions/206-4.html)			MTWThF 11:00- 11:50 Mangan

ES_APPM 311-0 (descriptions/311-0.html)	Methods of Applied Mathematics (descriptions/311-0.html)	MWF 12:00-12:50 Vlahovska		
ES_APPM 312 (descriptions/312.html)	Methods of Applied Mathematics: Complex Variables (descriptions/312.html)			TTh 12:30-1:50 Volpert
ES_APPM 344-0 (descriptions/344-0.html)	High Performance Scientific Computing (descriptions/344-0.html)			WF 12:30-1:50 Chopp
ES_APPM 346 (descriptions/346.html)	Modeling and Computation in Science and Engineering (descriptions/346.html)		TTh 12:30-1:50 Mangan	
ES_APPM 370 (descriptions/370-1.html)	Introduction to Computational Neuroscience (descriptions/370-1.html)		MWF 11:00-11:50 Riecke	
ES_APPM 398 (descriptions/398.html)	Introduction to Applied Math Research (descriptions/398.html)		W 1:00-1:50 Riecke, Bayliss	
ES_APPM 411-1 (descriptions/411-1.html)	Differential Equations of Mathematical Physics (descriptions/411-1.html)	TTh 12:30-1:50 Volpert		

ES_APPM 411-2 (descriptions/411-2.html)	Differential Equations of Mathematical Physics (descriptions/411-2.html)		TTh 3:30-4:50 Miksis	
ES_APPM 412-0 (descriptions/412-0.html)	Methods of Nonlinear Analysis (descriptions/412-0.html)			TTH 2:00-3:20 Abrams
ES_APPM 420-1 (descriptions/420-1.html)	Asymptotic and Perturbation Methods in Applied Mathematics (descriptions/420-1.html)	TTh 9:30-10:50 Volpert		
ES_APPM 420-2 (descriptions/420-2.html)	Asymptotic and Perturbation Methods in Applied Mathematics (descriptions/420-2.html)		TTH 2:00-3:20 Miksis	
ES_APPM 421-1 (descriptions/421-1.html)	Models in Applied Mathematics (descriptions/421-1.html)	MW 2:00-3:20 Vlahovska		
ES_APPM 444-0 (descriptions/444-0.html)	High Performance Scientific Computing (descriptions/444-0.html)			WF 12:30-1:50 Chopp
ES_APPM 445 (descriptions/445.html)	Iterative Methods for Elliptic Equations (descriptions/445.html)		MW 2:00-3:20 Bayliss	
ES_APPM 446-1 (descriptions/446-1.html)	Numerical Solution of Partial Differential Equations	MWF 11:00-11:50		

	(descriptions/446-1.html)	Lecoanet		
ES_APPM 448 (descriptions/448.html)	Numerical Methods for Random Processes (descriptions/448.html)		MWF 10:00- 10:50 Kath	
ES_APPM 472 (descriptions/472.html)	Introduction to the Analysis of RNA Sequencing Data (descriptions/472.html)	TuTh 2:00-3:20 Kath		
ES_APPM 495 (descriptions/495.html)	Special Topics: Modeling Metabolic Networks (descriptions/495.html)		TTH 9:30- 10:50 Mangan	
ES_APPM 495 (descriptions/495-5-1.html)	Special Topics: Introduction to Network Science (descriptions/495-5-1.html)			WF 2:00- 3:20 (3/28- 4/29) Abrams
ES_APPM 495 (descriptions/495-5-2.html)	Special Topics: Modeling Social Systems (descriptions/495-5-2.html)			WF 2:00- 3:20 (4/30- 6/3) Abrams