

Northwestern McCORMICK SCHOOL OF ENGINEERING

Engineering Sciences & Applied Mathematics

Academics

Course Listings

The course listing below outlines courses for the 2023-24 academic year. For the 2022-2023 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 2023	Winter 2024	Spring 2024
MATH 228-2 (descriptions/228-2-1pm.html)	Multiple Integration and Vector Calculus (descriptions/228-2-1pm.html)	MWF 1:00-1:50 Lecoanet	MWF 9:00-9:50 Fontana	MWF 11:00-11:50 Mani
MATH 228-2 (descriptions/228-2-2.html)	Multiple Integration and Vector Calculus (descriptions/228-2-2.html)	MWF 2:00-2:50 Fontana	MWF 10:00-10:50 Fontana	MWF 1:00-1:50 Wick
MATH 228-2	Multiple Integration		MWF	

(descriptions/228-2-1.html)	and Vector Calculus (descriptions/228-2-1.html)		12:00-12:50 Mani	
MATH 228-2 (descriptions/228-2-3.html)	Multiple Integration and Vector Calculus (descriptions/228-2-3.html)		MWF 1:00-1:50 Vlahovska	
GEN_ENG 205-4 (descriptions/205-4-sec-22.html)	Engineering Analysis 4 (descriptions/205-4-sec-22.html)	MTWThF 10:00-10:50 Bayliss	MTWThF 11:00-11:50 Bayliss	
GEN_ENG 205-4 (descriptions/205-4-sec-21.html)	Engineering Analysis 4 (descriptions/205-4-sec-21.html)	MTWThF 12:00-12:50 Bayliss		
GEN_ENG 205-4 (descriptions/205-4-sec-23.html)	Engineering Analysis 4 (descriptions/205-4-sec-23.html)	MTWThF 4:00-4:50 Jayadharan		
GEN_ENG 206-4 (descriptions/206-4.html)	Honors Engineering Analysis 4 (descriptions/206-4.html)			MTWThF 11:00-11:50 Chopp
ES_APPM 245 (descriptions/245.html)	Elementary Applied Linear Algebra (descriptions/245.html)		MWF 12:00-12:50 Chopp	
ES_APPM 252-1,2 (descriptions/252-1-	Honors Calculus for Engineers	MTWThF 10:00-	MTWThF 10:00-	

2.html)	(descriptions/252-1-2.html)	10:50 Abrams	10:50 Abrams	
ES_APPM 311-0 (descriptions/311-0.html)	Methods of Applied Mathematics (descriptions/311-0.html)	MWF 12:00-12:50 Volpert		
ES_APPM 311-0 (descriptions/311-0.html)	Methods of Applied Mathematics (descriptions/311-0.html)	MWF 1:00-1:50 Volpert		
ES_APPM 322-0 (descriptions/322.html)	Applied Dynamical Systems (descriptions/322.html)		TTh 12:30-1:50 Abrams	
ES_APPM 344 (descriptions/344-0.html)	High Performance Scientific Computing (descriptions/344-0.html)			MW 12:30-1:50 Chopp
ES_APPM 345 (descriptions/345.html)	Applied Linear Algebra (descriptions/345.html)			TTh 12:30-1:50 FitzGerald
ES_APPM 370 (descriptions/370-1.html)	Introduction to Computational Neuroscience (descriptions/370-1.html)		MW 3:30-4:50 Kath	
ES_APPM 395	Special Topics:			MW 2:00-

(descriptions/395.html)	Mathematics of Life (descriptions/395.html)			3:20 Mani
ES_APPM 398 (descriptions/398.html)	Introduction to Applied Math Research (descriptions/398.html)		W 1:00-2:00 Riecke, Bayliss	
ES_APPM 411-1 (descriptions/411-1.html)	Differential Equations of Mathematical Physics (descriptions/411-1.html)	TTh 12:30-1:50 Miksis		
ES_APPM 411-2 (descriptions/411-2.html)	Differential Equations of Mathematical Physics (descriptions/411-2.html)		TTh 12:30-1:50 Miksis	
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 421-1 (descriptions/421-1.html)	Models in Applied Mathematics (descriptions/421-1.html)	MW 2:00-3:20 Miksis		
ES_APPM 444-0 (descriptions/444-0.html)	High Performance Scientific Computing (descriptions/444-			MW 12:30-1:50

	0.html)			Chopp
ES_APPM 446-1,2 (descriptions/446-1.html)	Numerical Solution of Partial Differential Equations (descriptions/446-1.html)	MWF 11:00-11:50 Lecoanet	MWF 2:00-2:50 Lecoanet	
ES_APPM 448 (descriptions/448.html)	Numerical Methods for Random Processes (descriptions/448.html)		MWF 10:00-10:50 Riecke	
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 479 (descriptions/479.html)	Data Driven Methods for Dynamical Systems (descriptions/479.html)			TTh 9:30-10:50 Mangan
ES_APPM 495 (descriptions/495.html)	Special Topics: Soft Matter (descriptions/495.html)		TTh 9:30-10:50 (1/3-2/3) Vlahovska	
ES_APPM 495 (descriptions/495.html)	Special Topics: Active Matter (descriptions/495.html)		TTh 9:30-10:50 (2/4-3/9) Vlahovska	
ES_APPM 495	Special Topics:		TTh 2:00-	

(descriptions/495.html)	Metabolic Networks Condensed (descriptions/495.html)		3:20 (1/3-2/3) Mangan	
ES_APPM 495 (descriptions/495.html)	Special Topics: Parameter Estimation (descriptions/495.html)		TTh 2:00-3:20 (2/4-3/9) Mangan	
ES_APPM 495 (descriptions/495.html)	Special Topics: Intro to Integral Equations (descriptions/495.html)			TTh 2:00-3:20 (3/26-4/27) Volpert
ES_APPM 495 (descriptions/495.html)	Special Topics: Intro to Variational Methods (descriptions/495.html)			TTh 2:00-3:20 (4/28-6/1) Volpert