

Aerospace Course Offering Schedule

NOTE: The pre-requisites listed assume aerospace coursework was completed as per the prescribed curriculum in the Undergraduate Catalog

Course No.	Course Name	Notes	Fall	Spring	Summer
ENAE 100 (1 Credit)	The Aerospace Engineering Profession	Substitutions: UNIV 100 ENES 181	✓		
ENAE 200 (1 credit)	The Aerospace Engineering Profession II	Depending on seats available, only open to ENAE majors		✓	
ENAE 202	Aerospace Computing	Substitution: CSMC 106 and MATH 206 or CMSC 132 and MATH 206		✓	✓
ENAE 283	Introduction to Aerospace Systems	Prereq: PHYS 161 ENES 102 MATH 141 Co-req: PHYS 260/261	✓		✓
ENAE 301	Dynamics of Aerospace Systems	Prereq: ENAE202, ENAE 283, ENES 102 Linear Algebra, MATH 246 PHYS 270/271	✓		
ENAE 311	Aerodynamics I	Prereq: MATH241, MATH246, MATH461, PHYS270/271 ENAE283, ENES220, ENAE202. Co-req: ENES 232	✓		✓
ENAE 324 (4 credits)	Aerospace Structures	Prereq: ENES 220		✓	
ENAE 362	Aerospace Instrumentation and Experimentation	Prereq: ENAE 283, MATH 246	✓		
ENAE 380	Flight Software Systems	Prereq: ENAE 202 ENAE 283	✓		
ENAE 403	Aircraft Flight Dynamics	Prereq: ENAE 414 ENAE 432	✓		
ENAE 404	Space Flight Dynamics	Prereq: ENAE 301		✓	
ENAE 414	Aerodynamics II	Prereq: ENAE 311		✓	
ENAE 423	Vibration and Aeroelasticity	Prereq: ENAE 324	✓		✓
ENAE 432	Control of Aerospace Systems	Prereq: ENAE 283 ENAE 301 Junior standing		✓	

Course No.	Course Name	Notes	Fall	Spring	Summer
ENAE 441	Space Navigation and Guidance	Prereq: ENAE 404, ENAE 432	✓		
ENAE 455	Aircraft Propulsion and Power	Prereq: ENAE 311 ENAE 414 ENME 232/320	✓		
ENAE 457	Space Propulsion and Power	Prereq: ENAE 311 ENME 232/320 PHYS 260/261	✓		
ENAE 464	Aerospace Engr. Lab	Prereq: ENAE 311 ENAE 324 ENAE 362 ENAE 432		✓	
ENAE 471	Aircraft Flight Testing	Prereq: ENAE 414 Co-req: ENAE 403		✓	
ENAE 481	Principles of Aircraft Design	Prereq: ENAE 324 ENAE 362 ENAE 432	✓		
ENAE 482	Aeronautical Systems Design	Prereq: ENAE 403 ENAE 455 ENAE 481		✓	
ENAE 483	Principles of Space Systems Design	Prereq: ENAE 324 ENAE 362 ENAE 404 ENAE 432	✓		
ENAE 484	Space Systems Design	Prereq: ENAE 441 ENAE 457 ENAE 483		✓	
ENAE 398H/499	Independent Research Project	Permission of Department	✓	✓	
NON-AEROSPACE COURSES	PHYS 161, 260/261, 270/271; CHEM 135; MATH 140, 141, 240, 246, 461	See specific course descriptions in catalog	✓	✓	✓
ENES 100	Intro. To Engr. Design	Entrance into Engineering School; Placement into MATH 140 or higher	✓	✓	
ENES 102	Mechanics I	Coreq: MATH 140	✓	✓	✓
ENES 220	Mechanics II	Prereq: ENES 102 MATH 141 PHYS 161	✓	✓	✓

Course No.	Course Name	Notes	Fall	Spring	Summer
ENES 232	Thermodynamics	Prereq: PHYS 260/261 MATH 141	✓	✓	✓ Typically offered in Winter
ENGL 393	Technical Writing	Prereq: Junior standing and completion of ENGL 101 or equivalent	✓	✓	✓

Aerospace Electives

Depending on student interest and faculty availability, the following courses may be considered as electives for the undergraduate program. Students may also take a course from the other aerospace engineering track or an ENAE graduate level class if approved by department.

COURSE NUMBER	TITLE	CREDITS
ENAE 420	Computational Structural Mechanics	3
ENAE 425	Mechanics of Composite Structures	3
ENAE 471	Aircraft Flight Testing	3
ENAE 488	Topics in Aerospace Engineering	3
ENAE 398H or 499*	Elective Research	3

*ENAE 499 is repeatable to 6 credits; only 3 credits may count towards degree requirements.

Revised 12/06/2012