


Fall	15 Credits	Calculus I Math 165 4 Credits	Chemistry for Engineers Chem167/177 4 Credits	Engineering Problem Solving AerE 160/H 3 Credits	Library Instruction Libr 160 1 Credit	English Composition I Engl 150 3 Credits	Engineering Orientation Engr 101	First Year
	Spring	16 Credits	Calculus II Math 166 4 Credits	Classical Physics I Phys 231 & 231L 5 Credits	Num., Graph., & Lab Techniques AerE 161/H 4 Credits	General Education GenEd 3 Credits	Aerospace Seminar AerE 192/H	
Fall	17 Credits	Multi-variable Calculus Math 265 4 Credits	Classical Physics II Phys 232 4 Credits	Intro to Performance & Design AerE 261 3 Credits	Statics for Engineers CE 274 3 Credits	English Composition II Engl 250 3 Credits	Second Year	
	Spring	16 Credits	Differential Equations Math 267 4 Credits	Dynamics ME 345 3 Credits	Intro to Material Sci & Engrg MatE 273 3 Credits	Mechanics of Materials EM 324 3 Credits		Technical Comm Engl 309/314 3 credits
Fall	17 Credits	Flight Structures AerE 321 3 Credits	Structures Lab AerE 322 2 Credits	Thermodynamics ME 231 3 Credits	Aero-dynamics I AerE 310 3 Credits	Astro-dynamics I AerE 351 3 Credits	Flight Dynamics & Control AerE 355 3 Credits	Third Year
	Spring	18 Credits	Advanced Flight Structures AerE 421 3 Credits	Comp. Techniques for Aero. Design AerE 361 3 Credits	Aerospace Systems AerE 362 3 Credits	Aerodynamics/Propulsion Lab AerE 344 3 Credits	Aero-dynamics II AerE 311 3 Credits	
Fall	15 Credits	Technical Elective TechE 3 Credits	Astronautics Requirement 3 Credits <small>(see chart, page 2)</small>	Design Methodology AerE 461 3 Credits	Aerospace Vehicle Propulsion AerE 411 3 Credits	General Education GenEd 3 Credits	Fourth Year	
	Spring	15 Credits	Technical Elective TechE 3 Credits	Technical Elective TechE 3 Credits	Design of Aerospace Systems AerE 462 3 Credits	General Education GenEd 3 Credits		General Education GenEd 3 Credits

Basic Program

Course Groups	Aerospace Requirement	Technical Elective	Engineering Fundamentals
Mathematics	Chemistry & Physics	General Education	Seminars


Basic Program - 24 credits

Must be completed (Basic Program GPA > 2.0 and Cumulative GPA > 2.0) before 200-Level Engr courses

	Calculus I	Math 165	4	Calculus II	Math 166	4
	Chemistry	Chem 167/177	4	Physics I	Phys 231/231L	5
	Engr. Prob Solving	AerE 160/H	3	English 150	Engl 150	3
	Engr. Orientation	Engr 101		Library Instruction	Libr 160	1

English Proficiency - 9 credits

Grade of C or higher is required in ENGL 150, ENGL 250 and ENGL 309/314

	English Comp I	Enl 150	3
	English Comp II	Enl 250	3
	Technical Comm	Enl 309 or 314	3

General Education - 12 credits



GenEd


From list approved by department. Must include U.S. Diversity (3 credits) and International Perspective (3 credits) requirement. Two semester sequence in a single foreign language may be applied per ISU Foreign Language Requirements.


Aerospace Engineering - 51 credits in 8 areas of study



Aerodynamics	Aerodynamics I	AerE 310	3
	Aerodynamics II	AerE 311	3
	Aerodynamics/Propulsion Lab	AerE 344	3
Propulsion	Propulsion	AerE 411	3
Structures	Flight Structures	AerE 321	3
	Aero Structures Lab	AerE 322	2
	Adv Flight Structures	AerE 421	3
Controls	Flight Dynamics & Control	AerE 355	3
	Flight Control Systems	AerE 331	3
Astrodynamics	Astrodynamics I	AerE 351	3
Systems and Design	Performance and Design	AerE 261	3
	Aerospace Systems	AerE 362	3
	Design Methodology	AerE 461	3
	Design of Aero Systems	AerE 462	3
Software and Numerics	Num. Graph. Techniques	AerE 161/H	4
	Comp. Techniques for Aero. Design	AerE 361	3
Astronautics Requirement	One of:		
	(a) Rocket Propulsion	AerE 415	3
	(b) Spacecraft Dynamics	AerE 433	3

Technical Electives - 9 credits - Advisor Approval Required

 **Make to Innovate/ Undergrad Research** AerE 294- Freshman and Sophomores (credits do not count towards graduation). AerE 494 - Juniors and Seniors (maximum of 6 credits may count towards graduation). See Make to Innovate Coordinator for registration procedure.

 **Technical Electives** Group-A Aerospace Electives (3 credits), group-B Technical/Engineering Electives (3 credits) and group-C Career Electives (3 credits). Consult advisers for the current approved technical elective list. Group A electives can be used for Group B and C. Group B electives can be used for group C.