

AAE Engineering Major Courses (56 credits)

- _____ (0) AAE 20000 – Undergrad Sophomore Seminar
- _____ (3) AAE 20300++ – Aeromechanics I
- _____ (3) AAE 25100 – Intro Aerospace Design
- _____ (3) AAE 20400++ – Aeromechanics II
- _____ (1) AAE 20401 – Aeromechanics II Lab
- _____ (0) AAE 30000 – Undergrad Junior Seminar
- _____ (3) AAE 30100 – Signals Analysis
- _____ (3) AAE 33300 – Fluid Mechanics
- _____ (1) AAE 33301 – Fluid Mechanics Lab
- _____ (3) AAE 33400 – Aerodynamics
- _____ (1) AAE 33401/AAE 35201 – Aerodynamics Lab/ Structural Analysis Lab
- _____ (3) AAE 33800/33900 – Thermal Sciences/Aerospace Propulsion
- _____ (3) AAE 34000 – Dynamics and Vibrations
- _____ (3) AAE 35200 – Structural Analysis I
- _____ (3) AAE 36400 – Control System Analysis
- _____ (1) AAE 36401 – Controls Systems Laboratory
- _____ (1) AAE 40000 – Undergrad Senior Seminar
- _____ (3) AAE 42100/44000 – Flight Dynamics & Control/Spacecraft Attitude Dynamics (Spring only)
- _____ (3) AAE 45000/45100 – Spacecraft Design/Aircraft Design
- _____ (9) AAE Specialization
- _____ (6) AAE Selective

Other Departmental/Program Course Requirements (74 – 77 credits)

- _____ (2) CGT 16300 – Graphical Communication and Spatial Analysis
- _____ (4) CHM 11500++* – General Chemistry I (*Satisfies FYE requirement*)
- _____ (3) Oral Communication++* (COM 11400 – Fund. Of Speech Communication PREFERRED)(*Satisfies FYE requirement*)
- _____ (3) CS 15900/17700/18000++ – Computer Programming (*CS 15900 satisfies FYE requirement*)
- _____ (2) ENGR 13100++* – Transforming Ideas to Innovation I (*Satisfies FYE requirement*)
- _____ (2) ENGR 13200++ – Transforming Ideas to Innovation II (*Satisfies FYE requirement*)
- _____ (3) Written Communication++* (ENGL 10600/ENGL 10800 – Written Composition PREFERRED)(*Satisfies FYE requirement*)
- _____ (4/5) MA 16500/16100++* – Calculus I (*Satisfies FYE requirement*)
- _____ (4/5) MA 16600/16200++* – Calculus II (*Satisfies FYE requirement*)
- _____ (4) MA 26100++* – Calculus III
- _____ (3) MA 26500* – Linear Algebra
- _____ (3) MA 26600* – Ordinary Differential Equations
- _____ (3) MA 30300 – Differential Equations and Partial Differential Equations for Engr. & Sci.
- _____ (3) ME 20000 – Thermodynamics
- _____ (4) PHYS 17200++* – Modern Mechanics (*Satisfies FYE requirement*)
- _____ (3/4) PHYS 24100/27200 – Electricity Optics/E&M Interactions
- _____ (3) AAE Technical Electives
- _____ (3) Statistics Selective
- _____ (12) General Education Electives++*
- _____ (3) AAE Business Rule++
- _____ (3) AAE Communications Rule++

University Core Requirements*

Human Cultures Humanities	<input type="checkbox"/>	<u>General Education++</u>	Science, Technology & Society Selective	<input type="checkbox"/>	<u>General Education++</u>
Human Cultures Behavioral/Social Science	<input type="checkbox"/>	<u>General Education++</u>	Written Communication	<input type="checkbox"/>	<u>ENGL 10600/10800++</u>
Information Literacy	<input type="checkbox"/>	<u>ENGR 13100++</u>	Oral Communication	<input type="checkbox"/>	<u>COM 11400++</u>
Science Selective	<input type="checkbox"/>	<u>PHYS 17200++</u>	Quantitative Reasoning	<input type="checkbox"/>	<u>MA 26500</u>
Science Selective	<input type="checkbox"/>	<u>CHM 11500++</u>			

The student is ultimately responsible for knowing and completing all degree requirements.
Degree Works is knowledge source for specific requirements and completion

++Critical Courses ("C-" or better required)
 *Satisfies a University Core Requirement

Aeronautical and Astronautical Engineering

Suggested Arrangement of Courses:

Credits	Fall 1 st Year	Prerequisites	Credits	Spring 1 st Year	Prerequisites
2	ENGR 13100++*	FYE Major	3	CS 15900++	ENGR 131 co-req
4	CHM 11500++*	75 ALEKS or SAT/ACT	2	ENGR 13200++	FYE Major; ENGR 131
5/4	MA 161/16500++*	85 ALEKS or SAT/ACT	5/4	MA 16200/16600++*	Calc 1
3-4	Written Communication Selective++*		4	PHYS 17200++*	Calc 1 co-req
			3	Oral Communication Selective++*	
13-14			16		

Credits	Fall 2 nd Year	Prerequisites	Credits	Spring 2 nd Year	Prerequisites
0	AAE 20000	Major: Soph	3	AAE 20400++	AAE 203
3	AAE 20300	PHYS 172; Calc III co-req	1	AAE 20401	AAE 204 co-req
3	AAE 25100	ENGR 132: co-reqs CGT 163; AAE 200: CS 159	3	MA 26600*	MA 261
2	CGT 16300	ENGR Major	3	ME 20000	CHM 115; MA 261 co-req; ENGR 132 co-req
4	MA 26100++*	Calc II	3	PHYS 24100	PHYS 172
3	MA 26500*	Calc III co-req	3	UCC Behavioral/Social Science++* (General Education II)	
3	UCC Humanities++* (General Education I)				
18			16		

Credits	Fall 3 rd Year	Prerequisites	Credits	Spring 3 rd Year	Prerequisites
0	AAE 30000	AAE 200	3	AAE 33400	AAE 333; AAE 33301; ME 200
3	AAE 30100	AAE 200; MA 265; MA 266; AAE 251 co-req	1	AAE 33401 OR AAE 35201	AAE 334 or 352 co-req
3	AAE 33300	AAE 203; AAE 200; AAE 251 co-req; MA 303 co-req	3	AAE 33800 OR AAE 33900	AAE 200; ME 200; AAE 334 co-req
1	AAE 33301	AAE 333 co-req	3	AAE 34000	AAE 203; MA 304
3	AAE 35200	AAE 204; AAE 20401; AAE 200; AAE 251 co-req	3	AAE 36400	AAE 301
3	MA 30300	MA 265 & MA 266	3	General Education IV++ (could satisfy UCC STS*)	
3	General Education III++				
16			16		

Credits	Fall 4 th Year	Prerequisites	Credits	Spring 4 th Year	Prerequisites
1	AAE 36401	AAE 364	3	AAE 44000 OR 42100	AAE 340; AAE 300; AAE 364 co-req
1	AAE 40000	AAE 300	3	AAE 45000 OR 45100	AAE 334; AAE 340; AAE 352; AAE 364; AAE 400 co-req; AAE 339; or [AAE 439 + AAE 438 co-reqs]
6	AAE Engr Specialization/AAE Selectives		9	AAE Engr Specialization/AAE Selectives	
3	Business Rule or General Education VI++		3	Communications Rule++	
3	Technical Elective (could satisfy UCC STS*)				
3	Statistics Selective				
17			18		=130-131

++Critical Courses ("C-" or better required)

*Satisfies a University Core Requirement

130 semester credits required for Bachelor of Science degree
2.0 Graduation GPA and 2.0 AAE major GPA required for Bachelor of Science degree