

AAE Engineering Major Courses (56 credits)

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| _____ | (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)

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| _____ | (2) | CGT 16300 – Graphical Communication and Spatial Analysis |
| _____ | (4) | CHM 11500++* – General Chemistry I (<i>Satisfies FYE requirement</i>) |
| _____ | (3) | Oral Communication++* (COM 11400 – Fund. Of Speech Communication PREFERRED)(<i>Satisfies FYE requirement</i>) |
| _____ | (3) | CS 15900/17700/18000++ – Computer Programming (<i>CS 15900 satisfies FYE requirement</i>) |
| _____ | (2) | ENGR 13100++* – Transforming Ideas to Innovation I (<i>Satisfies FYE requirement</i>) |
| _____ | (2) | ENGR 13200++ – Transforming Ideas to Innovation II (<i>Satisfies FYE requirement</i>) |
| _____ | (3/4) | Written Communication++* (ENGL 10600/ENGL 10800 – Written Composition PREFERRED)(<i>Satisfies FYE requirement</i>) |
| _____ | (4/5) | MA 16500/16100++* – Calculus I (<i>Satisfies FYE requirement</i>) |
| _____ | (4/5) | MA 16600/16200++* – Calculus II (<i>Satisfies FYE requirement</i>) |
| _____ | (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 (<i>Satisfies FYE requirement</i>) |
| _____ | (3/4) | PHYS 24100/27200 – Electricity Optics/E&M Interactions |
| _____ | (3) | AAE Technical Electives |
| _____ | (3) | Statistics Selective |
| _____ | (12) | General Education Electives++* |
| _____ | (3) | AAE Communications Rule++ |

University Core Requirements*

Human Cultures Humanities	☐	General Education++	Science, Technology & Society Selective	☐	General Education++
Human Cultures Behavioral/Social Science	☐	General Education++	Written Communication	☐	ENGL 10600/10800++
Information Literacy	☐	ENGR 13100++	Oral Communication	☐	COM 11400++
Science Selective	☐	PHYS 17200++	Quantitative Reasoning	☐	MA 26500
Science Selective	☐	CHM 11500++			

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 15900/17700/18000++ 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	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