



# Aeronautics & Astronautics Engineering (Astronautics conc.)

College of Engineering

code-BS-AAE  
Code-XXX

130 Credits for Graduation

Students must have a graduation index of 2.0

**AAE Engineering Major Courses (43 credits)**

**Required AAE Courses (40 credits)**

- |   |   |
|---|---|
| <p>_____ (3) AAE 20300- Aeromechanics I</p> <p>_____ (3) AAE 25100 -Intro Aerospace Design</p> <p>_____ (0) AAE 20000 - Undergrad Seminar</p> <p>_____ (3) AAE 20400- Aeromechanics II</p> <p>_____ (1) AAE 20401L- Aeromechanics II Lab</p> <p>_____ (3) AAE 33400 - Aerodynamics</p> <p>_____ (1) AAE 33401L/AAE 35201L -Aerodynamics Lab/ Structural Analysis Lab</p> <p>_____ (3) AAE 34000 - Dynamics and Vibrations</p> <p>_____ (3) AAE 43900 - Rocket propulsion</p> <p>_____ (3) AAE 36400 - Control System Analysis</p> <p>_____ (0) AAE 30000 - Undergrad Junior Seminar</p> <p>_____ (1) AAE 40000 - Undergrad Senior Seminar</p> | <p>(3) AAE 44000 – Spacecraft Attitude Dyn</p> <p>(1) AAE 36401L – Materials Processing and Design I</p> <p>(3) AAE 45000 – Spacecraft Design</p> <p>(3) ME 20000 – Thermodynamics</p> <p>(3) AAE 33300 – Fluid Mechanics</p> <p>(1) AAE 33301L –Fluid Mechanics Lab</p> <p>(3) AAE 352 – Structural Analysis I</p> <p>(3) AAE 30100-Signals Analysis</p> |
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**AAE technical Electives - (6 credits)**

- \_\_\_\_\_ (3) Technical Elective I
- \_\_\_\_\_ (3) Technical Elective II

**Major/Minor Electives (15 credits)**

**Other Departmental /Program Course Requirements (48 credits)**

- \_\_\_\_\_ (4/5) MA 16500/16100 – Calculus I ( Satisfies FYE requirement)
- \_\_\_\_\_ (4/5) MA 16600/16200 – Calculus II( Satisfies FYE requirement)
- \_\_\_\_\_ (4) CHM 11500 – General Chemistry I
- \_\_\_\_\_ (2) ENGR 13100- Transforming Ideas to Innovation I( Satisfies FYE requirement)
- \_\_\_\_\_ (2) ENGR 13200 - Transforming Ideas to Innovation II( Satisfies FYE requirement)
- \_\_\_\_\_ (3) ENGL 10600 – English Composition( Satisfies FYE requirement)
- \_\_\_\_\_ (3) COM 11400- First-Year General Education Elective( strongly recommended )
- \_\_\_\_\_ (4) PHYS 17200- Physics I( Satisfies FYE requirement)
- \_\_\_\_\_ (3) CS 15900 - Science Elective( Satisfies FYE requirement)
- \_\_\_\_\_ (4) MA 26100 – ( satisfies Math and physics requirement)
- \_\_\_\_\_ (3) MA 26500- ( satisfies Math and physics requirement)
- \_\_\_\_\_ (3) MA 26600 - ( satisfies Math and physics requirement)
- \_\_\_\_\_ (3) MA 30400 – Diff Eqn for Engr. And Sci.
- \_\_\_\_\_ (3) PHYS 24100 - ( Satisfies Math and physics requirement)
- \_\_\_\_\_ (2) CGT 16300 – Computer Graphics

**NOTE:** COM 114 is a 'highly recommended General elective and is counted separately from the 18 credits of Gen Ed requirement. Therefore the Gen Ed requirement is 18 + 3 credits = 21 when including COM 114

**General Electives (18 credits)**

- |                    |                    |                 |                 |
|--------------------|--------------------|-----------------|-----------------|
| _____ (3) G.E.-I   | _____ (3) G.E.-IV  | _____ ( ) _____ | _____ ( ) _____ |
| _____ (3) G.E.-II  | _____ (3) G.E.-V   | _____ ( ) _____ | _____ ( ) _____ |
| _____ (3) G.E.-III | _____ (3) G.E.- VI | _____ ( ) _____ | _____ ( ) _____ |

**University Core Requirements**

- |   |  |
|---|--|
| Human Cultures Humanities <input type="checkbox"/>                | Science, Technology & Society Selective <input type="checkbox"/> |
| Human Cultures Behavioral/Social Science <input type="checkbox"/> | Written Communication <input type="checkbox"/>                   |
| Information Literacy <input type="checkbox"/>                     | Oral Communication <input type="checkbox"/>                      |
| Science Selective <input type="checkbox"/>                        | Quantitative Reasoning <input type="checkbox"/>                  |
| Science Selective <input type="checkbox"/>                        |  |

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**The student is ultimately responsible for knowing and completing all degree requirements.**

**Degree Works is knowledge source for specific requirements and completion**

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## Aeronautical & Astronautical Engineering (Astronautics)

[https://engineering.purdue.edu/AAE/Academics/Undergrad/pos/20130528\\_POS\\_Instructions.pdf](https://engineering.purdue.edu/AAE/Academics/Undergrad/pos/20130528_POS_Instructions.pdf)

**Suggested Arrangement of Courses:**

		Requisites				Requisites	
Credits	Fall 1st Year	Pre	Co	Credits	Spring 1st Year	Pre	Co
4	MA16500			4	MA16600	MA16500	
4	CHM11500			4	PHYS17200		
3	ENGL10600			3	CS15900		
2	ENGR13100			2	ENGR13200	ENGR13100	
2	CGT16300			3	COM11400		
<b>15</b>				<b>16</b>			

		Requisites				Requisites	
Credits	Fall 2nd Year	Pre	Co	Credits	Spring 2nd Year	Pre	Co
3	AAE20300	PHYS17200	MA26100	3	AAE20400	AAE20300	
3	AAE25100	ENGR13200, CGT16300	AAE20000	1	AAE20401		AAE20400
4	MA26100			3	PHYS24100	PHYS17200	
3	Gen Elec I			3	MA26600		
3	MA26500			3	ME20000		
0	AAE20000			3	Gen Elec II		
<b>16</b>				<b>16</b>			

		Requisites				Requisites	
Credits	Fall 3rd Year	Pre	Co	Credits	Spring 3rd Year	Pre	Co
3	AAE33300	AAE20300 AAE20000	MA30300 OR MA30400, AAE25100	3	AAE33400	AAE33300, AAE33301, ME20000	
1	AAE33301		AAE33300	1	AAE33401 OR AAE35201		AAE33400 OR AAE35200
3	AAE35200	AAE20400 & AAE20401 & AAE20000	AAE25100	3	AAE34000	AAE20300, MA30400	
3	MA30400			3	AAE36400	AAE30100	
3	AAE30100	AAE20000, MA26500 & MA26600	AAE25100	3	Tech Elec I		
0	AAE30000			3	Gen Elec IV		
3	Gen Elec III						
<b>16</b>				<b>16</b>			

		Requisites				Requisites	
Credits	Fall 4th Year	Pre	Co	Credits	Spring 4th Year	Pre	Co
3	AAE43900	AAE30000, ME20000	AAE33400	3	AAE44000	AAE34000	
1	AAE36401	AAE36400		9	Major/Minor Electives		
6	Major/Minor Electives			3	AAE45000	AAE33400, AAE34000, AAE35200, AAE36400	AAE40000
3	Gen Elec V			3	Gen Elec VI		
3	Tech Elec II						
0	AAE39500						
<b>16</b>				<b>18</b>			

\*Satisfies a University Core Requirement

\*\*Satisfies a Non-departmental Major Course Requirement

Students must earn a "C-" or better in all required XX courses.

**130 semester credits required for Bachelor of Science degree.**

**2.0 Graduation GPA required for Bachelor of Science degree.**

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