



Department of Mechanical Engineering
B.S. Aerospace Systems Engineering with Co-op 490005BS

Updated: 12/17/2018

RECOMMENDED SCHEDULE
 Official course requirements based upon semester admitted into the program.

ENTERING FALL 2018

| First Year | | |
|--|---|--------|
| Fall | Spring | Summer |
| 3150:151 ^Principles of Chemistry I 3 | 3300:xxx ^2nd Writing Course 3 | |
| 3150:152 Principles of Chem I Lab 1 | 3450:222 ^Analytic Geometry-Calculus II 4 | |
| 3300:111 ~^English Composition I 3 | 3650:291 ^Elementary Classical Physics I 4 | |
| 3450:221 ^Analytic Geometry-Calculus I 4 | 4900:166 Aerospace Systems Engineering Project Management 1 | |
| 4900:165 Tools for Aerospace Systems Eng 2 | *General Ed or Honors Distribution 3 | |
| 13 | *General Ed or Honors Distribution 3 | |
| | 18 | |

| Second Year | | |
|--|--|---|
| Fall | Spring | Summer |
| 3250:244 Intro to Economic Analysis (Social Sci) 3 | 3450:335 Intro. To Ordinary Differential Equations 3 | |
| 3450:223 ^Analytic Geometry-Calculus III 4 | 4300:202 Mechanics of Solids 3 | |
| 3650:292 ^Elementary Classical Physics II 4 | 4400:307 Basic Electrical Engineering 4 | 4100:300 Cooperative Education Work Per |
| 4300:201 ^Statics 3 | 4600:203 ^Dynamics 3 | |
| *General Ed or Honors Distribution 3 | 4600:260 Engineering Analysis I 2 | |
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| Third Year | | |
|--|---|--------------------------------|
| Fall | Spring | Summer |
| 4600:300 Thermodynamics I 3 | | 4800:470 Human Factors Eng. 3 |
| 4600:310 Fluid Mechanics I 2 | | 4900:340 Avionics I 3 |
| 4600:360 Engineering Analysis II 2 | 4100:301 Cooperative Education Work Per | 4900:380 Aerospace Materials 3 |
| 4900:240 Aerospace Systems Engineering I 3 | | |
| 4900:336 Aerospace Structures 3 | | |
| 6200:201 Accounting Principles I 3 | | |
| 16 | | 9 |

| Fourth Year | | |
|---|--|---|
| Fall | Spring | Summer |
| | 4600:315 Heat Transfer 3 | |
| | 4600:337 Design of Mechanical Components 3 | |
| 4100:302 Cooperative Education Work Per | 4600:411 Compressible Fluid Mech. 3 | 4100:403 Cooperative Education Work Per |
| | 4600:413 Intro to Aerodynamics 3 | |
| | 4600:483 Measurements Lab 2 | |
| | *General Ed or Honors Distribution 3 | |
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| Fifth Year | | |
|---|--|--------|
| Fall | Spring | Summer |
| 4600:400 Thermal System Comp. 3 | 4900:420 Object Oriented Design & Management 3 | |
| 4600:412 Fundamentals of Flight 3 | 4900:440 Avionics II 3 | |
| 4600:414 Intro to Aero Propulsion 3 | 4900:450 Aerospace Computations 3 | |
| 4600:460 Concepts of Design 3 | 4900:460 Aero Systems Manufacturing 3 | |
| 4900:320 Aerospace Systems Engineering II 3 | 4900:490 Aerospace Design Project (CS) 2 | |
| 15 | *General Ed or Honors Distribution 3 | |
| | 17 | |

College of Engineering Notes
 *Credit hours shown for General Education or Honors Distribution are general guidelines only. These courses should be chosen in accordance with the appropriate General Education curriculum guide (for non-honors students) or Honors Distribution (for honors students). Honors students must also ensure that their course selections meet additional requirements not shown on this curriculum guide.
[Gen Ed Program - https://www.uakron.edu/general-education/](https://www.uakron.edu/general-education/) [Honors Distribution - https://www.uakron.edu/honors/curriculum/](https://www.uakron.edu/honors/curriculum/)
 ^Honors sections may be available; check the schedule of classes.

Aerospace Systems Engineering Program Notes
 Based on industry requirements for full-time and co-op placement, Aerospace Systems Engineering is limited to citizens or permanent resident aliens of the United States. Students must have a cumulative GPA at least 3.0 before their first co-op term.
 ~The Mechanical Engineering Department recommends that English Composition I be used to satisfy writing course requirement but other choices are available. See the General Education Program for details.
 *Check General Education Program or Honors Distribution to find courses that satisfy the 2nd writing course requirement.
 In addition to meeting all other degree requirements, a minimum of 139 credits must be completed.