



Curricular Plan Mechanical & Aerospace Engineering BS



A curricular plan provides a roadmap for completing this academic program and the UB Curriculum in four years. Your actual plan may vary depending on point of entry to the university, course placement and/or waivers based on standardized test scores, earned alternative credit and/or college transfer credit.

All students are encouraged to use this plan in conjunction with other academic planning resources such as your academic advisor, the hUB Academic Advisement Report, My Planner and Path Finder tool.

In addition to following this course roadmap, all other admission and academic requirements of this major as listed in the Undergraduate Catalog must be met in order to successfully complete this degree.

| Freshman Year – Fall Semester | | |
|--------------------------------|-----------------|---------------|
| <i>Course</i> | <i>Category</i> | <i>Credit</i> |
| EAS 199 | M/UBS | 3 |
| CHE 107 | M/SLI 1 | 4 |
| MTH 141 | M/MQR | 4 |
| Pathway or ENG 105 | P or CL 1 | 3 or 4 |
| | | |
| | | |
| <i>Total Credits:</i> 14 or 15 | | |

| Freshman Year – Spring Semester | | |
|---------------------------------|-----------------|---------------|
| <i>Course</i> | <i>Category</i> | <i>Credit</i> |
| MAE 177 | M | 1 |
| PHY 107 | M/SLI 2 | 4 |
| MTH 142 | M | 4 |
| Pathway or ENG 105 | P or CL 1 | 3 or 4 |
| EAS 230 | M | 3 |
| EAS 202 | M | 1 |
| <i>Total Credits:</i> 16 or 17 | | |

| Sophomore Year – Fall Semester | | |
|--------------------------------|-----------------|---------------|
| <i>Course</i> | <i>Category</i> | <i>Credit</i> |
| EAS 207 | M | 3 |
| MAE 204 | M | 3 |
| MTH 241 | M | 4 |
| PHY 108 | M | 4 |
| PHY 158 | M | 1 |
| MAE 277 or MAE 278 | M | 3 |
| <i>Total Credits:</i> 18 | | |

| Sophomore Year – Spring Semester | | |
|----------------------------------|-----------------|---------------|
| <i>Course</i> | <i>Category</i> | <i>Credit</i> |
| EE 200 | M | 3 |
| EAS 208 | M | 3 |
| EAS 209 | M | 3 |
| MTH 306 | M | 4 |
| Pathway | P | 3 |
| | | |
| <i>Total Credits:</i> 16 | | |

| Junior Year – Fall Semester | | |
|-----------------------------|----------|--------|
| Course | Category | Credit |
| MAE 315 | M | 3 |
| MAE 335 | M | 3 |
| MAE 340 | M | 3 |
| MAE 376 | M | 3 |
| MAE 381 | M | 3 |
| EAS 360 | M/CL 2 | 3 |
| | | |
| <i>Total Credits:</i> | | 18 |

| Junior Year – Spring Semester | | |
|-------------------------------|----------|--------|
| Course | Category | Credit |
| MAE 316 | M | 3 |
| MAE 334 | M | 2 |
| MAE 336 | M | 3 |
| MAE 345 | M | 3 |
| MAE 385 | M | 1 |
| MAE 424 | M | 3 |
| Pathway | P | 3 |
| <i>Total Credits:</i> | | 18 |

| Summer Semester | | |
|-----------------------|----------|--------|
| Course | Category | Credit |
| Professional Practice | M | 3 |

| Senior Year – Fall Semester | | |
|--------------------------------|----------|--------|
| Course | Category | Credit |
| MAE 338 or MAE 339 | M | 2 |
| MAE 377 | M | 3 |
| MAE 422 | M | 3 |
| MAE 436 | M | 3 |
| MAE 451 | M/P | 3 |
| Pathway and Diversity Learning | P/DL* | 3 |
| | | |
| <i>Total Credits:</i> | | 17 |

| Senior Year – Spring Semester | | |
|-------------------------------|----------|--------|
| Course | Category | Credit |
| MAE 311 | M | 3 |
| MAE 364 | M | 3 |
| MAE 423 | M | 3 |
| MAE 425 | M | 3 |
| MAE 434 | M/P | 3 |
| MAE 494 | M | 3 |
| UBC 399 | CAP | 1 |
| <i>Total Credits:</i> | | 19 |

MAE courses found in Pathways course list 3 if not already met through major courses.

| | |
|---|------------|
| Total Credits Required for Degree: | 140 |
|---|------------|

**Approved Diversity Learning course if not met through approved major, elective, or UBC course.*

Category Legend:

M = Course Required for Major (including pre-requisites needed for admission to the major)

E = Elective (course not required for major or UB Curriculum)

The following are all components of the UB Curriculum (UBC) For more information on the UBC and course options visit: <https://catalog.buffalo.edu/policies/ubcurriculum.html>

- UBS = UB Seminar
- CL1/CL 2 = Communication Literacy (2 required)
- CAP = UB Capstone

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- DL = Diversity Learning
- MQR = Math and Quantitative Reasoning
- P = Pathway Course (6 required: 3 Global, 3 Thematic)
- SLI1/SLI2 = Scientific Literacy and Inquiry (2 required)

Note: Some classes may count toward both a major (M) and UB Curriculum (UBC) requirement. Courses that count towards more than one requirement are indicated by a "/" (slash) in the category column indicating which categories the course will satisfy.