B.S. Aerospace Engineering 2020-2021 Academic Year

Student Information

Name:_____ OSU Email:_____

Suggested Curriculum

This should be used as a **guide** only. Semester offerings are subject to change.

Year	Autumn	Spring
1	___ MATH 1151 *(Calculus 1)* ..... 5 hr ___ PHYSICS 1250 *(Mechanics, Thermal, Waves)* .... 5 hr ___ ENGR 1181 *(Fundamentals of Engr 1)* ..... 2 hr ___ ENGR 1100.15 *(Engineering Survey)* ..... 1 hr ___ General Education ..... 3 hr	___ MATH 1172 *(Engineering Math A)* ..... 5 hr ___ PHYSICS 1251 *(E&M, Optics, Modern Phys)* .... 5 hr ___ ENGR 1182 *(Fundamentals of Engr 2)* ..... 2 hr ___ ENGR 1221 *(Intro to MATLAB†* ..... 2 hr ___ General Education ..... 3 hr
2	___ MATH 2173 *(Engineering Math B)* ..... 3 hr ___ CHEM 1250 *(Gen Chem for Engineers)* ǂ ..... 4 hr ___ **AEROENG 2200*** *(Intro to AAE 1)* ..... 4 hr ___ MECHENG 2040* *(Statics & Mechanics)* ..... 4 hr ___ General Education ..... 3 hr	___ MATH 2174* *(Lin Alg & Diff Eq)* ..... 3 hr ___ **AEROENG 2201** *(Intro to AAE 2)* ..... 4 hr ___ **AEROENG 2405** *(Thermodynamics)* ..... 3 hr ___ MECHENG 2030* *(Dynamics)* ..... 3 hr ___ ECE 2300* *(Circuits)* ..... 3 hr
3	___ **AEROENG 3520** *(Flight Vehicle Dynamics)* ..... 3 hr ___ **AEROENG 3560** *(Fluids I)* ..... 3 hr ___ **AEROENG 3542** *(Flight Vehicle Structure 1)* ..... 3 hr ___ **AEROENG 3581** *(Numerical Methods)* ..... 3 hr ___ General Education ..... 3 hr	___ **AEROENG 3521** *(Flight Vehicle Control)* ..... 3 hr ___ **AEROENG 3543** *(Flight Vehicle Structure 2)* ..... 3 hr ___ **AEROENG 3570** *(Gasdynamics)* ..... 3 hr ___ **AEROENG 3580** *(Heat Transfer)* ..... 3 hr ___ General Education ..... 3 hr
4	___ **AEROENG 4510** *(Experimental Projects 1)* ..... 2 hr ___ **AEROENG 4515** *(Pre-Dsgn of Atmos Flt Veh)* ..... 3 hr or ___ **AEROENG 4517** (*Space Veh and Systems 1*) .....3 hr ___ **AEROENG 4550** *(Flight Veh Propulsion)* ..... 3 hr ___ Technical Elective ..... 3 hr ___ General Education ..... 3 hr ___ General Education ..... 3 hr	___ **AEROENG 4511***(Experimental Projects 2)* ..... 2 hr ___ **AEROENG 4516** *(Dsgn of Atmos Flt Veh))* ..... 3 hr or ___ **AEROENG 4518** *(Dsgn Space Veh and Sys 2)* ..... 3 hr ___ Technical Elective ..... 3 hr ___ Technical Elective ..... 3 hr ___ General Education ..... 3 hr

Total Hours to complete the degree program = 128

**These required courses can be taken without being admitted to the Aerospace Engineering major program.*
†CSE 1222 (3 credit hours) can substitute for ENGR/CSE 1221.
ǂ *CHEM 1210 can substitute for CHEM 1250.*

Courses in **bold face** are only offered during the listed term.

All students must satisfy a 32 credit hour minimum for math and basic sciences. Students should consult with the MAE Undergraduate Academic Advisors to ensure this minimum is met.

Acceptance Criteria

Acceptance into this program is based on a holistic review of the student's record including an essay. Admission to major is considered only after a student has taken at least 12 credit hours of letter grade in their undergraduate career at OSU and have completed or are in progress for the following courses: MATH 1151, 1172; ENGR 1181, 1182; PHYSICS 1250, (or their equivalents).

Applications are accepted Autumn and Spring semester ONLY.

Technical and Other Electives

Please contact an MAE Undergraduate Academic Advisor for information about Technical Elective options.

General Education Requirement

Writing and Communication

English 1110.xx 3 hr

Second Writing Course 3 hr

Social Science

Must choose each course from a distinct subgroup of this category.

3 hr

3 hr

Literature

3 hr

Visual and Performing Arts

3 hr

Historical Study

3 hr

Second Historical Study or Cultures and Ideas

3 hr

Social Diversity in the U.S. or Global Diversity

Some courses may overlap with another GE category, See course list.

0 / 3 hr

Ethics

Some courses may overlap with another GE category, See course list.

0 / 3 hr

Optional: Foreign Language

Foreign Language 1103 Course: credit (including EM) for a foreign language sequence through 1103, or credit for a foreign language course with a prerequisite of 1103, can be used to satisfy the Cultures & Ideas Gen Ed category.

Foreign Language Minor Courses: completion of a foreign language minor permits a student to overlap up to 6 credit hours between the Gen Ed and minor. A curricular petition must be submitted to the student's program, which will forward it to the college for review. The courses must meet the spirit of the Gen Ed category for which overlap is requested.

Optional: University Capstone

Completion of a Social Science 3597 or 4597 can be substituted for a Social Science general education course in any subgroup. Completion of an Arts & Humanities 3597 or 4597 can be substituted for a Visual/Performing Arts general education course.

See the list of approved general education courses for additional details: www.advising.engineering.osu.edu.