MECHANICAL ENGINEERING - AEROSPACE EMPHASIS BS

College of Engineering
UtahStateUniversity

- The following is a sample 4-year plan. Please note that student-specific plans may differ. Consult with your academic advisor for your specific plan.
- For more information on major requirements and technical elective courses, go to catalog.usu.edu and select "Degree Maps."
- Plan designed for Students working less than 20 hours per week.

PRE-PROFESSIONAL PROGRAM

FRESHMAN FALL

COURSE	CR+	SEM+
CHEM 1210* Principles of Chemistry 1	4	FSpSu
CHEM 1215* Principles of Chemistry 1 Lab	1	FSpSu
MATH 1210* Calculus 1	4	FSpSu
MAE 1010* Intro to Mech. Engr.	3	FSp
GENERAL EDUCATION Breadth Course (BAI)	3	FSpSu
TOTAL CREDITS	15	

FRESHMAN SPRING

COURSE	CR+	SEM+
MAE 1200* Engineering Graphics	2	FSp
MATH 1220* Calculus 2	4	FSpSu
PHYS 2210* Physics 1	4	FSpSu
PHYS 2215* Physics 1 Lab	1	FSpSu
CS 1400 or ECE 1400* Computer Science 1	4	FSpSu
TOTAL CREDITS	15	

SOPHOMORE FALL

COURSE	CR+	SEM+
ENGL 2010* Intermediate Writing	3	FSpSu
ENGR 2010* Statics	3	FSpSu
ENGR 2210* Fundamental Electronics	3	FSpSu
MATH 2210* Multivariable Calculus	3	FSpSu
PHYS 2220* Physics 2	4	FSpSu
PHYS 2225* Physics 2 Lab	1	FSpSu
TOTAL CREDITS	17	

SOPHOMORE SPRING

COURSE	CR+	SEM+
ENGR 2030* Dynamics	3	FSpSu
ENGR 2140* Mechanics of Materials	3	FSpSu
MAE 2300* Thermodynamics 1	3	FSp
MAE 2450* Numerical Methods	3	Sp
MATH 2250* Linear Algebra & Diff. Eq.	4	FSpSu
TOTAL CREDITS	16	

PROFESSIONAL PROGRAM

JUNIOR FALL

COURSE	CR+	SEM+
MAE 2160 Material Science	3	FSp
MAE 2165 Material Science Lab	1	FSp
MAE 3600 Engr. Professionalism & Ethics	1	FSp
ENGR 3080 Technical Communication	3	FSp
MAE 3040 Mechanics of Solids	3	F
GENERAL EDUCATION Breadth Course (BHU)	3	FSpSu
MAE 3420 Fluid Mechanics	3	F
TOTAL CREDITS	17	

JUNIOR SPRING

COURSE	CR+	SEM+
MAE 3340 Instr. & Measurements	3	FSp
MAE 3440 Heat Transfer	3	Sp
MAE 4300 Machine Design	3	Sp
GENERAL EDUCATION Breadth Course (BLS)	3	FSpSu
GENERAL EDUCATION Breadth Course (BCA)	3	FSpSu
FUND. OF ENGR. EXAM (FE) Graduation Requirement		
TOTAL CREDITS	15	

SENIOR FALL

COURSE	CR+	SEM+
MAE 4400 Fluids/Thermal Lab	2	FSp
MAE 4800 Capstone Design 1	3	F
TECHNICAL ELECTIVE MAE 5500 **OR** MAE 5560	3	F
TECHNICAL ELECTIVE Aerospace Elective	3	FSp
MAE 5360 Advanced Dynamics	3	F
GENERAL EDUCATION Breadth Course (BSS)	3	FSpSu
TOTAL CREDITS	17	

SENIOR SPRING

COURSE	CR+	SEM+
MAE 4810 Capstone Design 2	3	Sp
TECHNICAL ELECTIVE Aerospace Elective	3	FSp
TECHNICAL ELECTIVE Aerospace Elective	3	FSp
GENERAL EDUCATION Depth Course (DHA)	3	FSpSu
GENERAL EDUCATION Depth Course (DSS)	3	FSpSu
TOTAL CREDITS	15	

TOTAL CREDITS REQUIRED **127**

UNIVERSITY REQUIREMENTS

English 1010 is a University requirement and is a prerequisite for English 2010. An English ACT score of 29+ or an SAT verbal score of 640+ will fulfill the English 1010 requirement.

PRE-PROFESSIONAL PROGRAM (PPRU) REQUIREMENTS

- Complete courses marked with an asterisk (*)
- No more than three total repeats for PPRU courses
- Minimum 2.8 PPRU GPA
- Minimum grade of C- for PPRU courses

PROFESSIONAL PROGRAM (PP) REQUIREMENTS

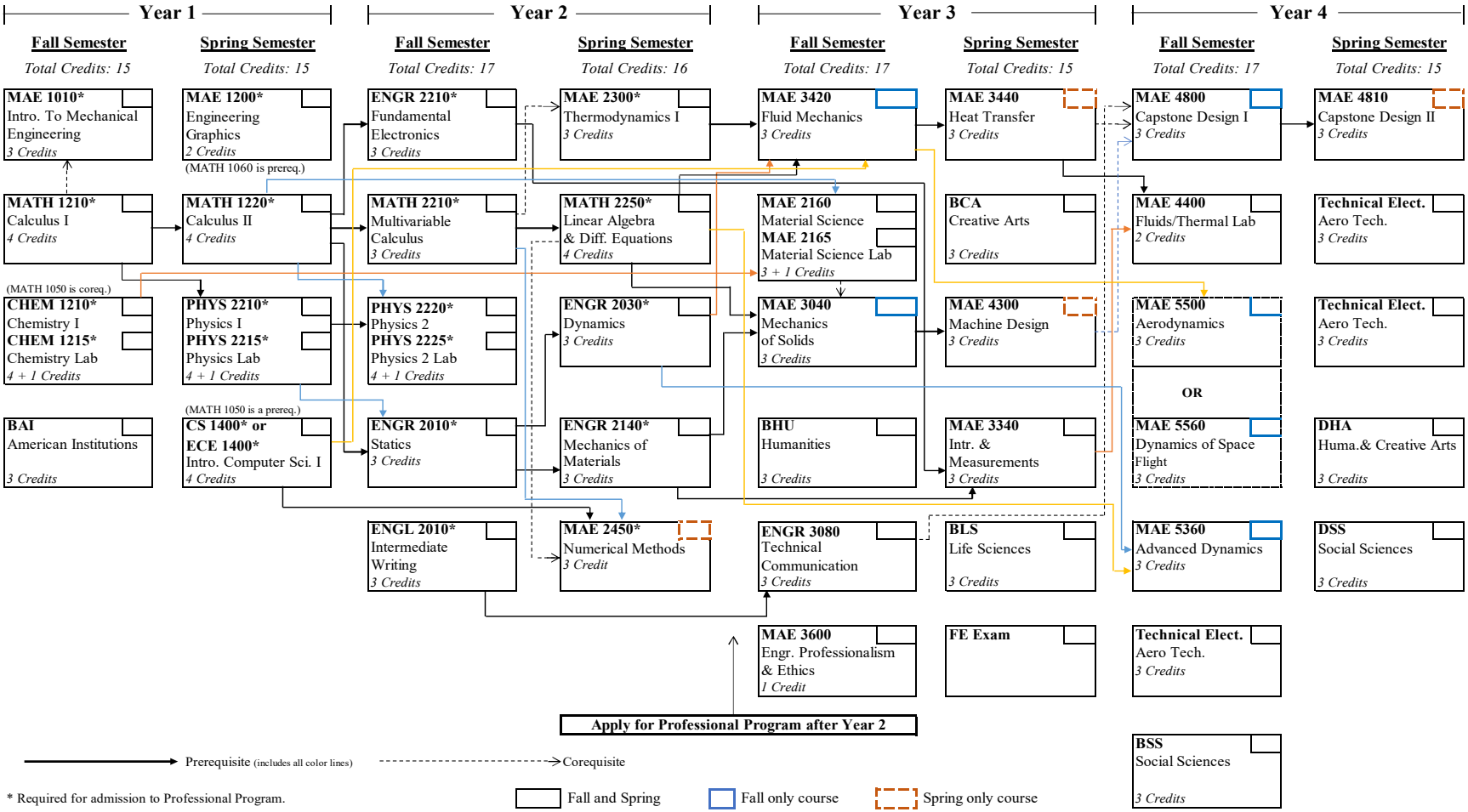
- No more than one total repeat is allowed for each required Professional Program or technical elective course
- Minimum 2.0 Professional GPA
- All courses require a grade of C- or higher

+Abbreviations: (CR) Credits • (SEM) Semester • (F) Fall • (Sp) Spring • (Su) Summer

ACADEMIC YEAR
2023 - 24

College of Engineering
UtahStateUniversity

Any discrepency between this chart and the 2023-24 General Catalog is resolved in favor of the General Catalog.



ACADEMIC YEAR
2023 - 24