

ME 313 First Plan—AY 20-21

Bachelor of Science in Mechanical Engineering

Suggested 4 Year Course Plan

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR			
FALL	WINTER	SPRING	FALL	WINTER	SPRING	FALL	WINTER	SPRING	FALL	WINTER	SPRING	
Math / Science Requirements												
CALCULUS		LIN ALG	CALC IV	DIF EQ I								
MTH 251	MTH 252	MTH 261	MTH 254	MTH 256								
CHEM CH 221	CHEM CH 222	SCIENCE ELECTIVE¹	PHYSICS									
CH 227	CH 228		PH 211	PH 212	PH 213							
			PH 214	PH 215	PH 216							
Engineering / Computer Science Requirements												
FRESHMAN ENGINEERING			STATICS EAS 211	STREN OF MAT EAS 212	DYNAMICS EAS 215	PROP OF MAT ME 213/L	SVY MFC PROF ME 240/L	APPLIED FLUID THERMO ME 322	CAPSTONE			
ME 120	ME 121	ME 122							ME 491	ME 492	ME 493	
					ELECT CIRC ECE 241/L	DESIGN MACH ME 314	HEAT TRANS ME 323	DOE ME 488	ENGR MEAS ME 411/L	APPROVED ME ELECTIVE		
						GEO MODEL ME 250/L	FLUID MECH ME 320/L	APPROVED ME ELECTIVE	APPROVED ME ELECTIVE			
						MECH ANALYS ME 313	SYS DYN MODEL ME 351	APPROVED ME ELECTIVE				
						ENGR THERMO ME 321		APPROVED ME ELECTIVE				
						PROG. ME 350						
General Education Requirements												
FRESHMAN INQUIRY			SOPHOMORE INQUIRY²						TECH REPORT WRITING WR 327	UNST UP DIV CLUST	UNST UP DIV CLUST	
UNST 1X1	UNST 1X1	UNST 1X1	UNST 2XX	UNST 2XX	UNST 2XX							
									BA 306U OR EC 314U			
EXPLANATION												

CREDIT HOURS

2020-2021

- | | |
|---|--|
| 1 | Shaded Area = Core Admission Requirements |
| 2 | ME 491 & 492 fulfill UNST Capstone |
| 3 | Transfer students with more than 30 credits must complete WR 121 and COMM 220 instead of FRINQ |
| 4 | Students may substitute Physics 221-223 for Physics 211-213 if completed prior to Fall 2018 |

Refer to the PSU Bulletin for General Education Requirements

¹ Approved Science Elective: Any course from Biology, Environmental Science & Management, Chemistry, Geology or Physics not explicitly listed as a degree requirement or Upper Division Cluster course (CH 104-106, PH 201-203, PH 221-223 are also excluded)

² At least one of the following: UNST 220, UNST 222 (preferred), UNST 239

General Education Requirements Undergraduate Engineering Programs

There are **two** (2) separate sets of general education requirements:

- University Requirements
- Maseeh College of Engineering and Computer Science (MCECS) Requirements

You must satisfy **BOTH** sets of requirements.

University Requirements

- A. Freshmen entering with 29 or fewer prior university/college credits must complete all University Studies Requirements, including freshman and sophomore inquiry sequences and upper division cluster courses
- B. Continuing and transfer students with 30-89 prior university/college credits must complete the following program:
 - Sophomore Inquiry: 30-59 credits, three courses; 60-74 credits, two courses; 75-89 credits, one course. The upper division cluster must be linked with one of these Sophomore Inquiry courses.
 - Upper Division Cluster: three courses
- C. Continuing and transfer students with 90 or more prior university/college credits must complete the following program:
 - University Studies requirements beginning with Upper Division Cluster Courses (*it is strongly recommended that students also take the single Sophomore Inquiry courses that is linked to the chosen Upper Division Cluster*)
- D. Continuing and transfer students with 135 or more prior university/college credits are not required to complete the Upper Division Cluster*

Placement For Transfer Students

Credits Transferred	University Studies Placement
0-29 Credits	Freshman Inquiry
30-59 Credits	3 Sophomore Inquiries
60-74 Credits	2 Sophomore Inquiries
75-89 Credits	1 Sophomore Inquiries
90-134	Upper Division Cluster
135+ credits*	NA*

*Only applicable to students admitted to PSU Fall 2020 or later. Students admitted Summer 2020 or earlier who have completed 135+ credits will still be required to complete the Upper Division Cluster.

Maseeh College of Engineering and Computer Science General Education Requirements

- A. Transfer students must complete a minimum of 27 credits of University Studies courses and/or Arts and Letters/Social Science courses at either their previous college or PSU in addition to the 12 credits of required upper division cluster courses that must be taken at PSU
- B. Transfer students who have not taken Freshman Inquiry must have completed:
 - **For Computer, Electrical, and Mechanical:** WR 121 and COMM 220 or equivalent course
 - **For Civil and Environmental:** WR 121, WR 227, and COMM 100 or 220 (recommended)
- C. Mechanical Engineering students must complete BA 306U Essentials of Finance or EC 314U Public & Private Investment Analysis
 - Students may use BA 306U as a University Studies course in the following cluster:
 - Design Thinking/Innovation/Entrepreneurship
 - Students may use EC 314U as a University Studies course in the following clusters:
 - Community Studies
 - Design Thinking/Innovation/Entrepreneurship
 - Knowledge, Values and Rationality

Students should consult with their academic advisor regarding these requirements.