

**Requirement Sheet Key**

◆ = Upper-Division Admission Requirements

**Mathematics (24 Credits)**

◆ MATH 124 (5cr) - Calculus I  
◆ MATH 125 (5cr) - Calculus II  
◆ MATH 126 (5cr) - Calculus III  
MATH 307 (3cr) - Differential Equations  
MATH 308 (3cr) - Matrix Algebra  
One course from the following:  
MATH 309 (3cr) - Linear Analysis  
-OR-  
MATH 324 (3cr) - Adv. Multivariable Calculus  
(AMATH 351/352/353 may substitute for MATH 307/308/309)

**Natural Sciences (25 Credits)**

◆ CHEM 142 (5cr) - General Chem I with Lab  
◆ CHEM 152 (5cr) - General Chem II with Lab  
◆ PHYS 121 (5cr) - Mechanics with Lab  
◆ PHYS 122 (5cr) - Electro/Oscillatory with Lab  
PHYS 123 (5cr) - Waves with Lab

**Written & Oral Communications (12 Credits)**

◆ English Comp (5cr) - English Composition  
ENGR 231 (3cr) - Intro to Technical Writing  
Additional composition writing or ME 354 (4cr)

**Visual, Literary & Performing Arts/  
Individuals & Society (VLPA/I&S) (24 Credits)**

10 credits of VLPA  
10 credits of I&S  
4 credits of VLPA or I&S  
3 credits of Diversity (DIV)  
(DIV can overlap with VLPA or I&S)

**Engineering Fundamentals (31 Credits)**

◆ AA 210 (4cr) - Engineering Statics  
◆ CEE 220 (4cr) - Mechanics of Materials  
◆ ME 230 (4cr) - Kinematics & Dynamics  
AMATH 301 (4cr) - Beg. Scientific Computing  
ME 123 (4cr) - Intro to Visualization and CAD  
MSE 170 (4cr) - Fundamentals of Materials Science  
EE 215 (4cr) - Fundamentals of EE  
IND E 315 (3cr) - Probability & Statistics for Engineers  
-OR-  
MATH/STAT 390 (3cr) - Statistical Methods in Engr. & Sci.

**ME Core Courses (45 Credits)**

ME 323 (5cr) - Engineering Thermodynamics  
ME 331 (4cr) - Intro to Heat Transfer  
ME 333 (5cr) - Intro to Fluid Mechanics  
ME 354 (5cr) - Mechanics of Materials Lab  
ME 355 (4cr) - Intro to Manufacturing Processes  
ME 356 (4cr) - Machine Design Analysis  
ME 373 (5cr) - Intro to System Dynamics  
ME 374 (5cr) - Systems Dynamic Analysis & Design  
ME 395 (4cr) - Intro to Mechanical Design  
ME 495 (4cr) - Mechanical Engineering Design

**Mechanical Option Courses (19 Credits)**

See ME Advising Guide online for list of courses.

**Total Credits Required for Graduation (180 Credits)****Early Admission Requirements**

1. Early Admission is an option for Autumn Quarter only.
2. Students must be enrolled at UW Seattle.
3. MATH 124, 125, & 126 or equivalent.
4. 10 credits of physical sciences + accompanying lab:  
CHEM 142, 152  
PHYS 121, 122, 123
5. 5 credits of English Composition.
6. 15 of the above credits must have been completed at UW.

**Application Deadlines**

Early Admission and Upper-Division - July 1st



# Mechanical Engineering Sample Curriculum

University of Washington

<https://me.washington.edu>

*\*\*This is a **sample** four-year plan. It is intended to provide a framework for students to reference as they create their own individual academic plan.\*\**

<u>Freshman - Autumn Quarter</u>		<u>Freshman - Winter Quarter</u>		<u>Freshman - Spring Quarter</u>	
◆ Math 124 - Calculus I	5	◆ Math 125 - Calculus II	5	◆ Math 126 - Calculus III	5
◆ Chem 142 - Chem & Lab I	5	◆ Chem 152 - Chem & Lab II	5	◆ PHYS 121 - Mechanics & Lab I	5
◆ English Composition	5	VLPA/I&S	5	VLPA/I&S	5
Quarter Total	15	Quarter Total	15	Quarter Total	15

<u>Sophomore - Autumn Quarter</u>		<u>Sophomore - Winter Quarter</u>		<u>Sophomore - Spring Quarter</u>	
◆ AA 210 - Engineering Statics	4	◆ ME 230 - Kinematics/Dynamics	4	◆ CEE 220 - Mechanics of Materials	4
◆ PHYS 122 - Electro & Lab I	5	MATH 308 - Matrix Algebra	3	MATH 324 - Adv. Multi. Calculus	3
ME 123 - Intro to Visualizn. & CAD	4	PHYS 123 - Waves & Lab I	5	-OR- MATH 309 - Linear Analysis	
MATH 307 - Differential Equations	3	VLPA/I&S	4	AMATH 301 - Scientific Computing	4
				ENGR 231 - Technical Writing	3
Quarter Total	16	Quarter Total	16	Quarter Total	14

<u>Junior - Autumn Quarter</u>		<u>Junior - Winter Quarter</u>		<u>Junior - Spring Quarter</u>	
ME 323 - Thermodynamics	5	ME 333 - Intro to Fluid Mechanics	5	ME 355 - Intro to Manuf. Processes	4
MSE 170 - Fund. of Materials Science	4	ME 354 - Behavior of Engr Materials	5	ME 374 - System Dynamics	5
EE 215 - Fund. of Electrical Engr.	4	ME 373 - Intro to System Dynamics	5	IND E 315 - Prob. & Stats for Engrs.	3
VLPA/I&S	3			ME Senior Elective	4
Quarter Total	16	Quarter Total	15	Quarter Total	16

<u>Senior - Autumn Quarter</u>		<u>Senior - Winter Quarter</u>		<u>Senior - Spring Quarter</u>	
ME 331 - Intro to Heat Transfer	4	ME 356 - Machine Design Analysis	4	ME 495 - Mechanical Engr. Design	4
ME 395 - Intro to Mech. Design	4	ME Senior Elective	3	ME Senior Elective	4
ME Senior Elective	4	ME Senior Elective	4	VLPA/I&S	4
VLPA/I&S	3	Free Elective	4		
Quarter Total	15	Quarter Total	15	Quarter Total	12

**Bold face** courses are required for upper-division admission.  
See ME Advising Guide online for list of senior electives.

**For more information contact:**

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