

Washington State University Vancouver School of Engineering and Computer Science  
 Bachelor of Science in Mechanical Engineering

Mechanical Engineering Four-Year Plan

Freshman		Sophomore		Junior		Senior	
Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
[QUAN] Calculus I	Calculus II	Linear Algebra Math 220 <b>C</b>	Differential Equations Math 315	Thermodynamics  Mech 301	Introduction to Design & Mfg.  Mech 310*	Mech. Sys. Des. I Mech 416 [M]	[CAPS] Mech. Sys. Des. II Mech 417
Math 171	Math 172	Calculus III Math 273 <b>C</b>		Fluid Mechanics Mech 303	Machine Design I Mech 314*	Machine Design II Mech 414*	Technical Elective Mech 4xx
[PSCI] Principles of Chemistry I Chem 105 <b>C</b>	[PSCI] Principles of Chemistry II Chem 106	[PSCI] Physics for Scientist & Engr. I Physics 201 <b>C</b>	[PSCI] Physics for Scientists & Engr. II Physics 202	Introduction to Electronic Circuits Mech 304	Dynamic Systems & Control Mech 348*	Thermal Systems Design Mech 402	Option Course X.3 Mech 4xx
Engr. Graphics Mech 103	Intro. Mech. Engr. Mech 101	Statics Mech 211 <b>C</b>	Dynamics Mech 212 <b>C</b>	Intro. to Engineering Materials Mech 309 [M]	Heat Transfer Mech 404*	Technical Elective Mech 4xx	
		Num. Comput. Mech 251	Mechanics of Materials Mech 215 <b>C</b>	[WRTG] Tech. Prof. Writing English 402	Option Course X.1 Mech 4xx	Option Course X.2 Mech 4xx	
	UCORE [HUM] Humanities			<i>Complete Writing Portfolio (No credit)</i>			UCORE [ARTS] Creat. & Prof. Arts
UCORE [ROOT] History 105	UCORE [WRTG] English 101	UCORE [SSCI] EconS 101/102	UCORE [BSCI] Biol. Science				UCORE [DIVR] Diversity
13	16	16	16	15	16	14	15

Credits
1
2
3

**C = Req'd for certification & must be "C" grade or better.** All upper-division MECH courses must be completed with a minimum 2.0 average GPA. Please refer to the WSU Catalog for all official program requirements.

Shaded lower division courses are required for some subsequent coursework (see catalog descriptions)

**Technical elective and option areas** (X.1, X.2, X.3, respectively):

Micro/NanoTech: ^ Mech 431 Mech 438 Mech 450 Mech 435  
 Design and Mfg: ^ Mech 485 Mech 476 Mech 489 Mech 477  
 Mechatronics: Mech 405 Mech 467 Mech 468

Renewable Energy: Mech 441 ECE 421 (+Two additional)  
 ^ Must take at least 3 courses in subject area to complete track

At least one elective must be a project with realization course, chosen from this list: Mech 405, ECE 421, Mech 441, Mech 442, Mech 450, Mech 468, Mech 439, Mech 477, or Mech 476

\*Requires certification as a Mech major