


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

Mechanical Engineering Four-Year Plan

First Year		Sophomore		Junior		Senior	
Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
[QUAN] Calculus I MATH 171 *	Calculus II MATH 172 *	Calculus III MATH 273 *	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
[PSCI] Principles of Chemistry I CHEM 105 *	Linear Algebra MATH 220 *	[PSCI] Physics for Scientist & Engr. I PHYS 201 +211 *	Physics for Scientists & Engr. II PHYS 202 +212	Fluid Mechanics MECH 303	Machine Design I MECH 314	Machine Design II MECH 414	MECH Elective Course 4*
Engr. Graphics MECH 103	Intro. Mech. Engr. MECH 101	Statics MECH 211 *	Dynamics MECH 212 *	Intro. to Engineering Materials MECH 309 [M]	Dynamic Systems & Control MECH 348	Thermal Systems Design MECH 402	MECH Elective Course 5*
UCORE [ARTS] Creat. & Prof. Arts	UCORE [HUM] Humanities	Num. Comput. MECH 251	Mechanics of Materials MECH 215 *	[WRTG] Tech. Prof. Writing ENGL 402	Heat Transfer MECH 404	MECH Elective Course 2*	MECH Elective Course 6*
UCORE [ROOT] HIST 105	UCORE [WRTG] ENGL 101	UCORE [SSCI] ECONS 101/102	UCORE [BSCI] Biol. Science		MECH Elective Course 1*	MECH Elective Course 3*	UCORE [DIVR] Diversity
16	14	14	16		15	16	14

Credits

1
2
3

**\*= Required with a full "C" or better to remain in the major. Also, to remain in the major, student must maintain 2.0 cumulative and 2.0 upper-division MECH GPA.**

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

Option Areas:

- Micro/NanoTech: ^ MECH 431, MECH 438, MECH 435, (or MECH 450)
- Design and Mfg: ^ MECH 485, MECH 476, MECH 477, (or MECH 489)
- Renewable Energy: MECH 441, ECE 421, (+ Two additional)

^ Must take at least 3 courses (based on availability) in subject area to complete option area

\*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 439, MECH 477, MECH 476, or MECH 435

Students are admitted to the major when they are MATH 171 ready.

**For details on admission to the major in MECH, see Catalog or contact an ENCS Academic Coordinator.**