

COMBINED MAJOR IN MECHANICAL ENGINEERING AND PHYSICS
BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING
CURRICULUM OUTLINE - Class of 2025

Sample Only – Actual Curriculum Sequence May Deviate from Sample

	FALL			SPRING			SUMMER 1		SUMMER 2	
Year 1	CHEM1151	General Chem. for Engrs.	4	ENGW1111	College Writing	4	Vacation	Vacation		
	CHEM1153	Recitation for CHEM1151	0	GE 1502	Cornerstone Eng. 2	4				
	GE 1000	Intro to Eng'g	1	MATH1342	Calculus 2 for Engrs.	4				
	GE 1501	Cornerstone Eng. 1	4	PHYS1165	Physics 2	4				
	MATH1341	Calculus 1 for Engrs.	4	PHYS1166	Physics 2 Lab	1				
	PHYS1161	Physics 1	4							
	PHYS1162	Physics 1 Lab	1							
Year 2 AA	MATH2321	Calculus 3 for Engrs.	4	ENCP2000	Intro to Eng'g., Coop	1	Vacation	Co-op		
	MATH2341	Diff. Eq./Lin. Alg.	4	ME2340	Material Science	4				
	ME2350	Statics	4	ME2341	Lab for ME2340	1				
	PHYS2371	Electronics	4	ME2355	Mech. of Materials	4				
	PHYS2372	Electronics Lab	0	ME2356	Lab for ME2355	1				
				ME2380	Thermodynamics	4				
				ME2381	Recitation for ME 2380	0				
				PHYS2303	Modern Physics	4				
Year 3 AA		Co-op		*ENGW3302	Adv. Writ. in the Tech. Prof.	4	ME3475	Fluid Mech.	4	Co-op
				ME3455	Dynamics	4	PHYS3600	Adv. Physics Lab	4	
				ME3456	Lab for ME3455	1				
				ME4508	ME Computation	4				
				PHYS3602	Elect. & Magnetism 1	4				
Year 4 AA		Co-op		ENCP3000	Prof. Issues in Eng'g.	1	ME4550	ME Design	4	Co-op
				ME4505	Meas. Analysis. Thermal	4	MEIE4701	Capstone Design 1	1	
				ME4506	Lab for ME4505	1	Elective	General Elective	4	
				ME4555	Syst. Analysis & Control	4				
				ME4570	Thermal Sys. Analysis Design	4				
				**PHYS3601	Classical Dynamics	4				
Year 5 AA		Co-op		MEIE4702	Capstone Design 2	5				
				PHYS5318	Principles of Exp. Physics	4				
				PHYS xxxx	Adv. Physics Elective	4				
				Elective	General Elective	4				

Revised 5/13/20

*ENGW3315 is an acceptable substitution.

**PHYS3601 Classical Dynamics is offered fall and spring semesters of even years only. Please meet with an academic advisor to discuss scheduling options for Year 4 of odd years.

NUPath Requirements: Interpreting Culture (IC), Societies and Institutions (SI), Differences and Diversity (DD) and Integration Experience (EX) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements and should use General Electives to do so.

Advanced physics electives: (PHYS 4606, PHYS 4621, PHYS 4623, PHYS 4651, PHYS 4652, PHYS 5111, PHYS 5113, PHYS 5114, PHYS 5116, PHYS 5260)

- PHYS 2303 offered every fall, spring, and summer 2
- PHYS 2371/2372 offered every fall
- PHYS 3600 offered every summer 1 and summer 2
- PHYS 3601 offered spring and fall (even years)
- PHYS 3602 offered every fall and spring
- PHYS 4115 offered every fall and spring
- PHYS 4305 offered every spring and summer 2 (even years)
- PHYS 4651 offered spring and fall (odd years)
- PHYS 4652 offered every spring
- PHYS 5318 offered every spring

[Please consult with your Academic Advisor, found here.](#)

Degree requirements can be found in the academic catalog and DARS provides a degree audit for students.