

BS Engineering Mechanical Engineering Concentration

Total Major hours at Wheaton: 75 Suggested hours per semester: 16-18

Major Academic Plan (MAP) for Catalog Year 2025-2026

The catalog is the final authority on CATC and major requirements; this is intended as a tool for planning purposes.

Student course sequencing may vary depending on course offerings and other variables.

Fall Semester 1	Spring Semester 1	Summer 1
MATH 235: Calculus I ¹ *	MATH 236: Calculus II*	Consider study, internship or research
PHYS 231: Introductory Physics I ^{F, 1} *	PHYS 232: Introductory Physics II ^{S*}	options –Wheaton In summer program,
ENGR 101: Intro. to Engineering (1) ^F	ENGR 132: Engineering Graphics and CAD	WIN (HoneyRock), Wheaton in the
	(3)	Black Hills, non-major internship,
CORE 101: First Year Seminar		summer research or other options that
CORE 131: Holistic Human Flourishing (1)	COMM 101: Oral Communication (2)	provide work experience, build your
ENGW 103: Writing	BITH or ARCH 211 Old Testament	resume, or grow you personally.
Fall Semester 2	Spring Semester 2	Summer 2
MATH 237: Calculus III*	MATH 333: Differential Equations*	
ENGR 211: Statics ^{F*} (3)	ENGR 212: Dynamics ^{5*} (3)	Consider study, internship or research
ENGR 334: Computer Modeling of	ENGR 214: Innovative Design in Engr. S*	options
Physical Systems (2) ^{F*}	(3)	
ENGR 351 Analog Electronics (2) ^{F*}	(5)	
	Language Core Competency II	
Language Core Competency I	Visual and Performing Arts (2)	
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Fall Semester 3	Spring Semester 3	Summer 3
CHEM 231: General Chemistry I ^F	ENGR 302: Engineering Systems and	Consider study, internship or research
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ENGR 313 Mechanics of Materials (3)	Analysis ⁵ * (2)	options
ENGR 313 Mechanics of Materials ^{F*} (3) ENGR 336: Fluid Mechanics ^{F*} (3)	Analysis ^{5*} (2) ENGR 325: Solid Mechanics (2)	options
		options
ENGR 336: Fluid Mechanics ^{F*} (3)	ENGR 325: Solid Mechanics (2)	options
ENGR 336: Fluid Mechanics ^{F*} (3) ENGR335: Material Science for Engineering ^{F*} (3)	ENGR 325: Solid Mechanics (2) ENGR 338: Thermodynamics & Heat Transfer ^{F*} (3)	options
ENGR 336: Fluid Mechanics ^F *(3) ENGR335: Material Science for	ENGR 325: Solid Mechanics (2) ENGR 338: Thermodynamics & Heat Transfer ^{f*} (3) BITH or ARCH 213 New Testament	options
ENGR 336: Fluid Mechanics ^{F*} (3) ENGR335: Material Science for Engineering ^{F*} (3)	ENGR 325: Solid Mechanics (2) ENGR 338: Thermodynamics & Heat Transfer ^{F*} (3)	options
ENGR 336: Fluid Mechanics ^{F*} (3) ENGR335: Material Science for Engineering ^{F*} (3)	ENGR 325: Solid Mechanics (2) ENGR 338: Thermodynamics & Heat Transfer ^{f*} (3) BITH or ARCH 213 New Testament	Summer 4
ENGR 336: Fluid Mechanics ^{F*} (3) ENGR335: Material Science for Engineering ^{F*} (3) Language Core Competency III Fall Semester 4	ENGR 325: Solid Mechanics (2) ENGR 338: Thermodynamics & Heat Transfer ^{F*} (3) BITH or ARCH 213 New Testament Thematic Core Course ² Spring Semester 4	Summer 4
ENGR 336: Fluid Mechanics ^{F*} (3) ENGR335: Material Science for Engineering ^{F*} (3) Language Core Competency III Fall Semester 4 Elective: Math & Science Elective	ENGR 325: Solid Mechanics (2) ENGR 338: Thermodynamics & Heat Transfer ^{F*} (3) BITH or ARCH 213 New Testament Thematic Core Course ² Spring Semester 4 ENGR 452: Senior Design II (2) ^{S*}	Summer 4 Consider study, internship or research
ENGR 336: Fluid Mechanics ^{F*} (3) ENGR335: Material Science for Engineering ^{F*} (3) Language Core Competency III Fall Semester 4 Elective: Math & Science Elective ENGR 451: Senior Design I ^F	ENGR 325: Solid Mechanics (2) ENGR 338: Thermodynamics & Heat Transfer ^{F*} (3) BITH or ARCH 213 New Testament Thematic Core Course ² Spring Semester 4	Summer 4
ENGR 336: Fluid Mechanics ^{F*} (3) ENGR335: Material Science for Engineering ^{F*} (3) Language Core Competency III Fall Semester 4 Elective: Math & Science Elective	ENGR 325: Solid Mechanics (2) ENGR 338: Thermodynamics & Heat Transfer ^{F*} (3) BITH or ARCH 213 New Testament Thematic Core Course ² Spring Semester 4 ENGR 452: Senior Design II (2) ^{S*}	Summer 4 Consider study, internship or research
ENGR 336: Fluid Mechanics ^{F*} (3) ENGR335: Material Science for Engineering ^{F*} (3) Language Core Competency III Fall Semester 4 Elective: Math & Science Elective ENGR 451: Senior Design I ^F	ENGR 325: Solid Mechanics (2) ENGR 338: Thermodynamics & Heat Transfer ^{F*} (3) BITH or ARCH 213 New Testament Thematic Core Course ² Spring Semester 4 ENGR 452: Senior Design II (2) ^{S*}	Summer 4 Consider study, internship or research
ENGR 336: Fluid Mechanics ^{F*} (3) ENGR335: Material Science for Engineering ^{F*} (3) Language Core Competency III Fall Semester 4 Elective: Math & Science Elective ENGR 451: Senior Design I ^F ENGR 3/4XX: Engineering Elective (4) ^{F*}	ENGR 325: Solid Mechanics (2) ENGR 338: Thermodynamics & Heat Transfer ^{F*} (3) BITH or ARCH 213 New Testament Thematic Core Course ² Spring Semester 4 ENGR 452: Senior Design II (2) ^{S*} ENGR 494: Eng. Ethics Capstone (2) ^{S*}	Summer 4 Consider study, internship or research

Notes or Special Guidance for Majors:

^{*}Course has prerequisite

^F Fall only course

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^S Spring only course

[#]Offered every other year

¹ Classes that meet CATC Thematic Core tags: MATH 231 (AAQR), PHYS 231 (SP), PSYC 101 (SI), ECON 211 (SI). General Engineering majors should use the General BA/BS checklist for CATC. A maximum of 3 tags can count for both CATC and the major.

² Double tagged courses are strongly encouraged for all CATC thematic courses.

⁻All Engineering MAPs are also located on the Engineering Department webpage. Please contact the Engineering Program Director, Jeff Yoder with questions. He can be reached at jeff.yoder@wheaton.edu.