

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 MATH 235: Calculus I ^{1*} PHYS 231: Introductory Physics I ^{F, 1*} ENGR 101: Intro. to Engineering (1) ^F <i>CORE 101: First Year Seminar</i> <i>CORE 131: Holistic Human Flourishing (1)</i> <i>ENGW 103: Writing</i>	Spring Semester 1 MATH 236: Calculus II* PHYS 232: Introductory Physics II ^{5*} ENGR 132: Engineering Graphics and CAD (3) <i>COMM 101: Oral Communication (2)</i> <i>BITH or ARCH 211 Old Testament</i>	Summer 1 <i>Consider study, internship or research options –Wheaton In summer program, WIN (HoneyRock), Wheaton in the Black Hills, non-major internship, summer research or other options that provide work experience, build your resume, or grow you personally.</i>
Fall Semester 2 MATH 237: Calculus III* ENGR 211: Statics ^{F*} (3) ENGR 334: Computer Modeling of Physical Systems (2) ^{F*} ENGR 351 Analog Electronics (2) ^{F*} <i>Language Core Competency I</i>	Spring Semester 2 MATH 333: Differential Equations* ENGR 212: Dynamics ^{5*} (3) ENGR 214: Innovative Design in Engr. ^{5*} (3) <i>Language Core Competency II</i> <i>Visual and Performing Arts (2)</i>	Summer 2 <i>Consider study, internship or research options</i>
Fall Semester 3 CHEM 231: General Chemistry I ^F ENGR 313 Mechanics of Materials ^{F*} (3) ENGR 336: Fluid Mechanics ^{F*} (3) ENGR335: Material Science for Engineering ^{F*} (3) <i>Language Core Competency III</i>	Spring Semester 3 ENGR 302: Engineering Systems and Analysis ^{5*} (2) ENGR 325: Solid Mechanics (2) ENGR 338: Thermodynamics & Heat Transfer ^{F*} (3) <i>BITH or ARCH 213 New Testament</i> <i>Thematic Core Course²</i>	Summer 3 <i>Consider study, internship or research options</i>
Fall Semester 4 Elective: Math & Science Elective ENGR 451: Senior Design I ^F ENGR 3/4XX: Engineering Elective (4) ^{F*} <i>Visual and Performing Arts (2)</i> <i>BITH 315: Christian Thought*</i>	Spring Semester 4 ENGR 452: Senior Design II (2) ^{5*} ENGR 494: Eng. Ethics Capstone (2) ^{5*} <i>Advanced Integrative Seminar^{2*}</i> <i>Thematic Core Courses (8)²</i>	Summer 4 <i>Consider study, internship or research options</i>

Notes or Special Guidance for Majors:

*Course has prerequisite

^F Fall only course

^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.