



BS Engineering Biomedical 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.

<p>Fall Semester 1</p> <p>MATH 235: Calculus I^{1*} PHYS 231: Introductory Physics I^{F, 1*} ENGR 101: Intro. to Engineering (1)^F</p> <p>CORE 101: First Year Seminar CORE 131: Holistic Human Flourishing (1) ENGW 103: Writing</p>	<p>Spring Semester 1</p> <p>MATH 236: Calculus II* PHYS 232: Introductory Physics II^{5*} ENGR 132: Eng. Graphics and CAD (3)</p> <p>COMM 101: Oral Communication (2) BITH or ARCH 211 Old Testament</p>	<p>Summer 1</p> <p><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></p>
<p>Fall Semester 2</p> <p>MATH 237: Calculus III* ENGR 211: Statics^{F*} (3) ENGR 334: Computer Modeling of Physical Systems (2)^{F*} ENGR 351 Analog Electronics (2)^{F*}</p> <p>Language Core Competency I Visual and Performing Arts (2)</p>	<p>Spring Semester 2</p> <p>MATH 333: Differential Equations* ENGR 212: Dynamics^{S*} (3) ENGR 214: Inno. Design in Engr.^{S*} (3) ENGR 271: Biology for Engineers (2)³</p> <p>Language Core Competency II</p>	<p>Summer 2</p> <p><i>Consider study, internship or research options</i></p>
<p>Fall Semester 3</p> <p>CHEM 231: General Chemistry I^F ENGR 313 Mechanics of Materials^{F*} (3) ENGR 371: Biomaterials*(3) ENGR 372: Cell and Tissue Eng. ^{F*(3)}</p> <p>Language Core Competency III</p>	<p>Spring Semester 3</p> <p>ENGR 302: Engineering Systems and Analysis^{S*} (2) ENGR 373: Biomechanics (3) ENGR 374: Biomedical Device Design (3)</p> <p>BITH or ARCH 213 New Testament Thematic Core Course²</p>	<p>Summer 3</p> <p><i>Consider study, internship or research options</i></p>
<p>Fall Semester 4</p> <p>ENGR 451: Senior Design I ^F ENGR 3/4XX: Engineering Elective (3)^{F*}</p> <p>Visual and Performing Arts (2) BITH 315: Christian Thought*</p>	<p>Spring Semester 4</p> <p>ENGR 452: Senior Design II (2)^{S*} ENGR 494: Eng. Ethics Capstone (2)^{S*}</p> <p>Advanced Integrative Seminar^{2*} Thematic Core Courses (8)²</p>	<p>Summer 4</p> <p><i>Consider study, internship or research options</i></p>

Notes or Special Guidance for Majors:

*Course has prerequisite

^F Fall only course

⁵ 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.

³ ENGR 27: biology for Engineers (2) is the required Math/Science course for the Biomedical Engineering concentration.

- Please contact the Engineering Program Director, Jeff Yoder with questions. He can be reached at jeff.yoder@wheaton.edu.