WHEATON COLLEGE
For Christ & His Kingdom

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.

Fall Semester 1	**Spring Semester 1**	**Summer 1**
MATH 235: Calculus I[1]* PHYS 231: Introductory Physics I[F, 1]* ENGR 101: Intro. to Engineering (1)[F] *CORE 101: First Year Seminar* *CORE 131: Holistic Human Flourishing (1)* *ENGW 103: Writing*	MATH 236: Calculus II* PHYS 232: Introductory Physics II[S]* ENGR 132: Eng. Graphics and CAD (3) *COMM 101: Oral Communication (2)* *BITH or ARCH 211 Old Testament*	*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.*
Fall Semester 2	**Spring Semester 2**	**Summer 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*] *Language Core Competency I* *Visual and Performing Arts (2)*	MATH 333: Differential Equations* ENGR 212: Dynamics[S]* (3) ENGR 214: Inno. Design in Engr.[S]* (3) ENGR 271: Biology for Engineers (2)[3] *Language Core Competency II*	*Consider study, internship or research options*
Fall Semester 3	**Spring Semester 3**	**Summer 3**
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) *Language Core Competency III*	ENGR 302: Engineering Systems and Analysis[5]* (2) ENGR 373: Biomechanics (3) ENGR 374: Biomedical Device Design (3) *BITH or ARCH 213 New Testament* *Thematic Core Course[2]*	*Consider study, internship or research options*
Fall Semester 4	**Spring Semester 4**	**Summer 4**
ENGR 451: Senior Design I [F] ENGR 3/4XX: Engineering Elective (3)[F]* *Visual and Performing Arts (2)* *BITH 315: Christian Thought**	ENGR 452: Senior Design II (2)[S]* ENGR 494: Eng. Ethics Capstone (2)[S]* *Advanced Integrative Seminar[2]** *Thematic Core Courses (8)[2]*	*Consider study, internship or research options*

Notes or Special Guidance for Majors:

*Course has prerequisite
[F] Fall only course

Last updated: 3/18/2025

[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.

[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.