State University of New York at Binghamton Thomas J. Watson College of Engineering and Applied Science <u>BS in Biomedical Engineering Four-Year-Program</u>

Application Code: 274

(If undecided use: 0229)

FALL 2024

Engineering Design Division

(The freshman year is common to all engineering majors)

MATH 226/227

Fall

Spring

MATH 224/225Diff Calc/Int Calc(M)CHEM 111Chemical Principles (L)EDD 111Introduction to Engineering DesignEDD 103Engineering Communications I

General Education Elective (A, D, G, N)

Biomedical Engineering with MCAT Preparation FALL 2024 <u>Year 1</u> Engineering Design Division

(The freshman year is common to all engineering majors)

	Fall		<u>Spring</u>
MATH 224/225	Calculus I (M)	MATH 226/227	Calculus II (MATH 225)
CHEM 111	Chemical Principles (L)	PHYS 131	General Physics I Calculus-based (MATH 225)
EDD 111	Introduction to Engineering Design	EDD 112	Introduction to Engineering Analysis (J) (EDD 111)
EDD 103	Engineering Communications I	EDD 104	Engineering Communications II (EDD 103)
General Education Elective (A, D, G, N)		BIOL 113	Intro to Cell & Molecular Biol, or General Education Elective (A, D, G, N)

Body/Wellness

Body/Wellness

Year 2

Fall

** Students who are planning on taking the MCAT, must choose two additional BME depth electives from any of the other BME concentration.

BME Major Concentrations:

Students are required to select an area of emphasis to gain more in-depth knowledge and specialty training in biomedical engineering. Students must take any two courses from the list of courses prescribed in each concentration to declare their concentration. Courses chosen from a concentration fulfill the BME Depth Electives.

Biomaterials and Bio-pharmaceutical Technology Concentration (Choose two courses to declare this concentration)

- BME 486 Neuroengineering (Spring) (BME 201)
- BME 483 Tissue Engineering (Fall) (BME 313, BME 201, BIOL 113) (Co-req: BME 433)
- BME 473 Advanced B