

State University of New York at Binghamton
Thomas J. Watson College of Engineering and Applied Science
BS in Mechanical Engineering-Four-Year Program

Fall 2026

Engineering Design Division (Year 1)

Fall (16 cr.)

MATH 224/225 Calculus I
CHEM 111 Chemical Principles (w/lab)
EDD 111 Intro. to Engineering Design
EDD 103 Engineering Communications I
General Education Elective (GL, D, A, N, H)

Spring (16 cr.)

MATH 226/227 Calculus II (MATH 224/225)
PHYS 131 General Physics I (w/lab) (MATH 224/225)
EDD 112 Intro. Engr. Analysis (EDD 111)
EDD 104 Engr. Comm. II (EDD 103)
General Education Elective (GL, D, A, N, H)

Final three years of Mechanical Engineering Major

Pre- or Co-requisites shown in parentheses

Year 2

Fall (17 cr.)

MATH 323 Calculus III (MATH 226/227)
PHYS 132 General Physics II (w/lab) (PHYS 131)
ME 212 ME Programming (EDD 112)
ME 273 Statics⁽¹⁾ (PHYS 131)
General Education Elective (GL, D, A, N, H)

Spring (16 cr.)

MATH 324 ODEs for Sci/Engrs (MATH 226/227)
ME 211 Solid Mechanics⁽¹⁾ (ME 273⁽¹⁾)
ME 274 Dynamics⁽¹⁾ (ME 273⁽¹⁾)
ME 381 Computer Aided Engr (w/lab) (EDD 112)
EECE 260 Circuits (w/lab) (PHYS 132)

Year 3

Fall (17 cr.)

ME 303 Engr. Computational Methods (ME 212, MATH 323, MATH 324)
ME 331 Thermodynamics (PHYS 131)
ME 362 & 363 Materials Science & Lab (CHEM 111, PHYS 132)
ME 392 ME Design (ME 211⁽¹⁾, 362⁽³⁾, 381)
General Education Elective (GL, D, A, N, H)

Spring (16 cr.)

ME 351 Fluid Mechanics (ME 274⁽¹⁾, MATH 323, MATH 324)
ME 364 Manufacturing & Matls Process (ME 362)
ME 391 Measurements & Instrumentation (w/lab)⁽²⁾ (ME 211⁽¹⁾, ME 212⁽³⁾ & EECE 260)
ME 421 Mechanical Vibrations (ME 274⁽¹⁾ & 303⁽³⁾)
ME 484 Design of Mechanical Elements (ME 392)
Body/Wellness

Year 4

Fall (14 cr.)

ME 424 Control Systems in ME (ME 303 & 421⁽³⁾)
ME 441 Heat Transfer (ME 303, 331, 351)
ME 491 ME Lab⁽²⁾ (ME 391⁽²⁾, 421, 424⁽³⁾, 441⁽³⁾)
ME 493 & 498 Senior Project I & Lab (ME 364, 421, 424⁽³⁾, 441⁽³⁾, 484)
Mechanical Engineering Elective⁽⁴⁾

Spring (16 cr.)

ME 494 & 499 Senior Project II & Lab (ME 391⁽²⁾, 493)
Mechanical Engineering Elective⁽⁴⁾
Technical Elective⁽⁴⁾
Technical Elective⁽⁴⁾
General Education Elective (GL, D, A, N, H)

⁽¹⁾ Must be completed with a grade of C- or better to satisfy pre-requisites.

⁽²⁾ Offered in both Fall and Spring.

⁽³⁾ Pre-requisites that can be taken concurrently.

⁽⁴⁾ See ME Tech Elective Requirements Document.