

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

Application Curriculum Code: 0268 (If undecided use: 0229)

Fall 2021

ENGINEERING DESIGN DIVISION

Fall

Spring

MATH 224/225 Calculus I	MATH 226/227 Calculus II (MATH 224/225)
CHEM 111 Chemical Principles (w/lab)	PHYS 131 General Physics I (w/lab) (MATH 224/225)
EDD 111 Intro. to Engineering Design	EDD 112 Intro. Engr. Analysis (EDD 111)
EDD 103 Engineering Communications I	EDD 104 Engr. Comm. II (EDD 103)
General Education Elective (G, P, A, N, H)	General Education Elective (G, P, A, N, H)
(16)	(16)

Final three years of Mechanical Engineering Major

Pre- or Co-requisites shown in parentheses.

Year 2

Fall

Spring

MATH 323 Calculus III (MATH 226/227)	MATH 324 ODEs for Sci/Engrs (MATH 226/227)
PHYS 132 General Physics II (w/lab) (PHYS 131)	ME 211 Solid Mechanics ⁽¹⁾ (ME 273 ⁽¹⁾)
ME 212 ME Programming (EDD 112)	ME 274 Dynamics ⁽¹⁾ (ME 273 ⁽¹⁾)
ME 273 Statics ⁽¹⁾ (PHYS 131)	EECE 260 Circuits (w/lab) (PHYS 132)
General Education Elective (G, P, A, N, H)	Body/Wellness
(17)	(16)

Year 3

Fall

Spring

ME 302 Engr. Analysis (MATH 323 & 324)	ME 303 Engr. Computational Methods (ME 212 & 302)
ME 331 Thermodynamics (PHYS 131)	ME 351 Fluid Mechanics (ME 274 ⁽¹⁾ & 302)
ME 362 Materials Science (CHEM 111, PHYS 132, co: ME 363)	ME 391 Measurements & Instrumentation (w/lab) (ME 211 ⁽¹⁾ , ME 212 & EECE 260)
ME 363 Materials Laboratory (co: ME 362)	ME 392 ME Design (ME 362 & 381)
ME 381 Computer-Aided Engineering (w/lab) (ME 211 ⁽¹⁾ , co: ME 212)	ME 421 Mechanical Vibrations (ME 274 ⁽¹⁾ & 302)
General Education Elective (G, P, A, N, H)	
(17)	(15)

Year 4

Fall

Spring

ME 424 Control Systems in ME (ME 303 & 421)	ME 494 Senior Project II (ME 493, co: ME 499)
ME 441 Heat Transfer (ME 331 & 351)	ME 499 Senior Project II Lab (co: ME 494)
ME 491 ME Lab ⁽³⁾ (ME 351, 391 & 421, co: ME 424 & 441)	ME Elective ⁽²⁾ (ME 400 or above)
ME 493 Senior Project I (ME 351, 391, 392 & 421, co: ME 424, 441 & 498)	ME Elective ⁽²⁾ (ME 400 or above)
ME 498 Senior Project I Lab (co: ME 493)	Technical Elective ⁽²⁾
Technical Elective ⁽²⁾	General Education Elective (G, P, A, N, H)
(15)	(16)

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

⁽²⁾ See ME Tech Elective Requirements Document

⁽³⁾ Offered both fall and spring