

State University of New York at Binghamton
Thomas J. Watson College of Engineering and Applied Science
BS in Mechanical Engineering-Four-Year Program
Application Curriculum Code: 0268 (If undecided use: 0229)
Fall 2025

Engineering Design Division (Year 1)

<u>Fall</u>		<u>Spring</u>	
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, D, A, N, H)		General Education Elective (G, D, A, N, H)	
(16 cr.)		(16 cr.)	

Final three years of Mechanical Engineering Major

Pre- or Co-requisites shown in parentheses

Year 2

<u>Fall</u>		<u>Spring</u>	
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)	ME 381	Computer Aided Engr (w/lab) (EDD 112)
General Education Elective (G, D, A, N, H)		EECE 260	Circuits (w/lab) (PHYS 132)
(17 cr.)		(16 cr.)	

Year 3

<u>Fall</u>		<u>Spring</u>	
ME 303	Engr. Computational Methods (ME 212, MATH 323, MATH 324)	ME 351	Fluid Mechanics (ME 274 ⁽¹⁾ , MATH 323, MATH 324)
ME 331	Thermodynamics (PHYS 131)	ME 364	Manufacturing & Matls Process (ME 362)
ME 362 & 363	Materials Science & Lab (CHEM 111, PHYS 132)	ME 391	Measurements & Instrumentation (w/lab) ⁽²⁾ (ME 211 ⁽¹⁾ , ME 212 ⁽³⁾ & EECE 260)
ME 392	ME Design (ME 211 ⁽¹⁾ , 362 ⁽³⁾ , 381)	ME 421	Mechanical Vibrations (ME 274 ⁽¹⁾ & 303 ⁽³⁾)
General Education Elective (G, D, A, N, H)		ME 484	Design of Mechanical Elements (ME 392)
(17 cr.)		Body/Wellness (16 cr.)	

Year 4

<u>Fall</u>		<u>Spring</u>	
ME 424	Control Systems in ME (ME 303 & 421 ⁽³⁾)	ME 494 & 499	Senior Project II & Lab (ME 391 ⁽²⁾ , 493)
ME 441	Heat Transfer (ME 303, 331, 351)	Mechanical Engineering Elective ⁽⁴⁾	
ME 491	ME Lab ⁽²⁾ (ME 391 ⁽²⁾ , 421, 424 ⁽³⁾ , 441 ⁽³⁾)	Technical Elective ⁽⁴⁾	
ME 493 & 498	Senior Project I & Lab (ME 364, 421, 424 ⁽³⁾ , 441 ⁽³⁾ , 484)	Technical Elective ⁽⁴⁾	
Mechanical Engineering Elective ⁽⁴⁾		General Education Elective (G, D, A, N, H)	
(14 cr.)		(16 cr.)	

⁽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.