

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

Application curriculum code: 0266  
 (If undecided: 0229)

**FALL 2019**

**ENGINEERING DESIGN DIVISION**

***(The freshman year is common to all engineering majors)***

**Fall**

Math 224/225 Diff Calc/Integ Calc (M)  
 Chem 111 Chemical Principles (L)  
 EDD 111 Intro to Engineering Design (2 credits)  
 EDD 103 Engineering Communications I  
 (2 credits)  
 General Education Elective (G, P, A, N, H)  
 Body/Wellness (Y, S, B)

**Spring**

Math 226/227 IntegTech & App/Inf Ser (Calc I)  
 PHYS 131 General Physics I  
 EDD 112 Intro to Engineering Analysis (2 credits)  
 EDD 104 Engineering Communications II  
 (J) (2 credits)  
 General Education Elective (G, P, A, N, H)  
 Body/Wellness (Y, S, B)

**Final three years of Electrical Engineering Major**

**Year 2**

**Fall**

Math 324 Ordinary Differential Equation  
 PHYS 132 General Physics II  
 CS 211 Programming I for Engineers  
 EECE 251 Digital Logic Design  
 EECE 281 EECE Seminar I

**Spring**

ISE 261 Probabilistic Systems I  
 EECE 260 Electric Circuits  
 EECE 212 Linear Algebra&Eng Programming  
 EECE 287 Sophomore Design

**Year 3**

**Fall**

Math 323 Calculus III  
 EECE 315 Electronics I  
 EECE 301 Signals and Systems  
 EECE 332 Semiconductor Devices  
 EECE 382 EECE Seminar II

**Spring**

EECE 387 Design Lab  
 EECE 323 Electromagnetics  
 EECE 361 Control Systems  
 EECE 377 Communications Systems  
 Professional Elective I

**Year 4**

**Fall**

EECE 487 Senior Project I (O)  
 EECE 486 Senior Project I Lab  
 Technical Elective I  
 General Education Elective (G, P, A, N, H)  
 General Education Elective (G, P, A, N, H)

**Spring**

EECE 488 Senior Project II  
 EECE 489 Senior Project II Lab  
 Technical Elective II  
 Professional Elective II  
 General Education Elective (G, P, A, N, H)

## **Electrical Engineering**

Electrical Engineering, one of the broadest engineering disciplines, is the branch of engineering that focuses on design, analysis and application of electrical and electronic components, circuits, and systems. Electrical Engineers work in the areas of communication systems, and medical imaging systems and sensors, while others are focused on power and energy, such as power transmission and design of electric drives. Both large corporations and small companies hire electrical engineer graduates.

The Bachelor of Science program in Electrical Engineering is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>. Our program covers all areas of electrical engineering and provides a balance between theory and practical application. It prepares graduates for a dynamic career in electrical engineering by providing them with the skills and knowledge for success. The faculty in our department are dedicated to providing the environment and opportunities students need.

Our curriculum is excellent preparation for graduate studies. For qualified undergraduates, we offer an accelerated five-year program that leads to both a BS and an MS degree in electrical engineering or a BS in electrical engineering and a master of business administration.

For more information on the Web, visit:

<https://www.binghamton.edu/electrical-computer-engineering/>

04/08/19