

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

Application curriculum code: 0266

(If undecided: 0229)

FALL 2020

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)
 Physical Activity/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)
 Physical Activity/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/>

04/08/20