

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

Application Curriculum Code: 0843  
 (If undecided use: 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 Computer 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**

EECE 301 Signals and Systems  
 EECE 315 Electronics I  
 EECE 351 Digital Systems Design  
 Math 314 Discrete Math  
 EECE 382 EECE Seminar II

**Spring**

EECE 387 Design Lab  
 EECE 359 Computer Comm and Networking  
 CS 212 Programming II for Engineers  
 General Education Elective (G, P, A, N, H)

**Year 4**

**Fall**

EECE 487 Senior Project I (O)  
 EECE 486 Senior Project I Lab  
 CS 311 Operating Systems Concepts  
 Technical Elective I  
 General Education Elective (G, P, A, N, H)

**Spring**

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

## **Computer Engineering**

Computer Engineering (CoE) is one of the core engineering disciplines. The roots of computer engineering lie in electrical engineering and are enriched by computer science. A computer engineer analyzes and designs electronic circuits and components, microprocessors and software, and integrates hardware and software into larger systems. Computer engineers work in many industries, including aerospace, automobile, computer, defense, electronics, information technology, networking, and telecommunications.

The Bachelor of Science program in Computer Engineering is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>. The program provides a balance between hardware and software and between theory and application. It prepares graduates for a dynamic career in computer engineering by providing you the skills and knowledge for success. A large number of laboratory-based courses in the curriculum provide hands-on learning opportunities. The faculty are dedicated to providing the environment and opportunities required for you to succeed.

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 computer engineering or a BS in computer engineering and a master of business administration.

For more information on the Web, visit:

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

04/08/19