State University of New York at Binghamton
Thomas J. Watson College of Engineering and Applied Science

BS in Computer Engineering-Four-Year Program

Application Curriculum Code: 0843
(If undecided use: 0229)

FALL 2020

ENGINEERING DESIGN DIVISION

(The freshman year is common to all engineering majors)

Fall		Spring	
Math 224/225	Diff Calc/Integ Calc (M)	Math 226/227	IntegTech & App/Inf Ser (Calc I)
Chem 111	Chemical Principles (L)	PHYS 131	General Physics I
EDD 111	Intro to Engineering Design (2 credits)	EDD 112	Intro to Engineering Analysis (2 credits)
EDD 103	Engineering Communications I (2 credits)	EDD 104	Engineering Communications II (J) (2 credits)
General Education Elective (G, P, A, N, H)		General Education Elective (G, P, A, N, H)	
Physical Activity/Wellness (Y, S, B)		Physical Activity/Wellness (Y, S, B)	

Final three years of Computer Engineering Major

Year 2

Fall		Spring	
Math 324	Ordinary Differential Equation	ISE 261	Probabilistic Systems I
Phys 132	General Physics II	EECE 260	Electric Circuits
CS 211	Programming I for Engineers	EECE 212	Linear Algebra&Eng Programming
EECE 251	Digital Logic Design	EECE 287	Sophomore Design
EECE 281	EECE Seminar I		

Year 3

Fall		Spring	
EECE 301	Signals and Systems	EECE 387	Design Lab
EECE 315	Electronics I	EECE 359	Computer Comm and Networking
EECE 351	Digital Systems Design	CS 212	Programming II for Engineers
Math 314	Discrete Math	General Education Elective (G, P, A, N, H)	
EECE 382	EECE Seminar II		

Year 4

Fall		Spring	
EECE 487	Senior Project I (O)	EECE 488	Senior Project II
EECE 486	Senior Project I Lab	EECE 489	Senior Project II Lab
CS 311	Operating Systems Concepts	Technical Elective II	
Technical Elective I		General Education Elective (G, P, A, N, H)	
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, automotive, 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/

04/27/20