The Master of Science in Computer Engineering provides students with a complete understanding of the design tradeoff and the relationships between hardware and software in the computer world required to solve today’s challenges.

The Master’s Degree in Computer Engineering is a course of study intended to prepare individuals whose undergraduate background is in computer or electrical engineering for advanced professional work in the field and for further study leading to a doctorate.

Emphasis is placed on current state-of-the-art applications including parallel computing, image processing, VLSI design, sensing, robotics, mobile computing, automation and network security.

Customized study plans are available for students to allow them to earn the M.S. in Computer Engineering while pursuing either the Ph.D. in Computer Science and Engineering or the Ed.D. in Education.

About UB

The University of Bridgeport is an international, doctoral-intensive, comprehensive university, offering award-winning academic programs in a variety of innovative undergraduate and graduate degree programs. Our 50-acre, seaside campus overlooks Long Island Sound on Connecticut’s corporate Gold Coast, and is within easy driving distance of New York City and Boston.

Our student-faculty ratio is 15:1, and our full- and part-time faculty members include Fulbright Scholars, National Science Foundation Fellows, Ford Fellows, National Endowment for the Humanities Fellows, American Council for Learned Societies Scholars and Phi Beta Kappa Scholars. Some 52 percent of our students are members of minorities and students from more than 80 countries live and learn within our community.
Program of Study
There is a core of 15 credits (5 courses), including Advanced Object-Oriented Programming, Introduction to Computer Architecture, Data Communications, Introduction to VLSI Design or FPGA Synthesis, and Applied Digital Signal Processing, and 12 to 15 elective credits (4 to 5 courses) in one of the concentration areas.

Dual Degrees
The department offers the opportunity to acquire dual graduate degrees along with the M.S. degree in Computer Engineering. Candidates for these dual Master’s Degree programs are typically required to complete a total of 48-52 credit hours to satisfy the requirements of two masters degrees. This implies 15-19 credit hours in addition to the 33 hours required for the M.S. degree in Computer Engineering.

Program Core Courses
- CS 400 Object Oriented Programming Using C++
- CpE 510 Introduction to Computer Architecture
- CpE 448D Introduction to VLSI Design or CpE 447 Logic Synthesis Using FPGAs
- EE 443 Applied Digital Signal Processing
- CpE 471 Data and Computer Communications

Concentration Areas
- Advanced Applications and Systems Programming
- Bio-Medical Engineering
- CAD/CAM
- Computer and Information Security
- Computer Communications and Networking
- E-Commerce
- Microelectronics and Computer Architecture
- Modern Data Base Systems
- Network Security
- Robotics and Automation
- Signal and Image Processing
- Software Engineering
- Very Large Scale Integration (VLSI)
- Wireless and Mobile Communications