



Personalize your degree path with 7 unique concentrations



Open doors to advanced career opportunities



Pursue part-time or full-time studies

Doctor of Philosophy in Computer Science and Engineering

Where vision and innovation meet engineering expertise

Your perseverance and passion have put you on the path to professional success. Now, you're ready to dive deep into the emerging frontiers of modern technology. When you pursue your Ph.D. in Computer Science and Engineering at UB, you elevate your knowledge and skills to new heights — polishing your expertise and exploring exciting new concepts to prepare for a rewarding future as a leader in your field.

Advance your studies at UB

At University of Bridgeport, our Ph.D. in Computer Science and Engineering will help you develop and refine a dynamic set of skills — preparing you for roles in diverse fields ranging from higher education to industry development. Through a rigorous, comprehensive curriculum taught by leading industry experts, you'll explore in-depth, cutting-edge Engineering concepts — positioning yourself as a sought-after expert capable of solving today's engineering challenges. Moreover, thanks to our small class sizes, you'll receive the individualized guidance and support you deserve as you work on your dissertation.

Tailor your studies to your career goals

At UB, you'll have the freedom to carve a career path that aligns with your professional goals and interests. Choose from 7 unique concentrations, including:

- Computer architecture and VLSI and FPGA
- Design, modeling, and simulation of embedded and integrated systems and device applications
- Electromechanical systems prototyping and optimization
- Robotics, automation, machine perception, and sensing
- Software engineering, Web development, and computational sciences
- Systems and computer security and biometrics
- Mobile communications, cloud computing, Internet of Things (IoT), and networking



Admission requirements

Required materials

- Complete the application for enrollment at bridgeport.edu/apply
- Official transcript for the last degree earned
 - To be considered for a scholarship, you must submit transcripts from each institution attended
- Two letters of recommendation
 - Letters must come directly from employers, professors, or professional associates. Your recommenders should comment on your work ethic, academic or professional experience in your field of choice, and how you would positively contribute to the School of Engineering.
- Personal statement
 - In 250-500 words, describe your aptitude and motivation for graduate study in your area of specialization, including your preparation for this field of study, your academic plans or research interests in your chosen area of study, and your future career goals. Please be specific about why the Ph.D. in Computer Science and Engineering degree at University of Bridgeport would be a good intellectual fit for you.
- Resumé
- GRE scores
 - A minimum score of 150 in verbal and a minimum score of 165 in quantitative

Curriculum preview

For full curriculum, visit the University of Bridgeport course catalog.

Core requirements	
CPSE 692	Special Topics in Computer Science
CPSE 693	Special Topics in Computer Engineering
CPSE 694	Written Comprehensive Examinations
CPSE 698	Teaching Requirement
CPSE 699	Seminar (Oral Exam)
CPSE 710	Ph.D. Dissertation

View all courses offered and read full course descriptions in our course catalog (bridgeport.edu/academics/course-catalog).

The University of Bridgeport is accredited by the New England Commission of Higher Education. The University also is accredited by the Connecticut Office of Higher Education.

Dissertation

To remain on track as you pursue your Ph.D., you must satisfy the following dissertation requirements:

- Selection of a dissertation advisor
- Written dissertation proposal
- Completion of the seminar requirement and working on the proposed research topic
- Formation of dissertation committee
- Approval of the dissertation by the dissertation committee
- Successful completion of the dissertation defense
- Submission of dissertation to the School of Engineering

Additional academic requirements

- Eight (3-credit hours) courses at the 500 or 600 level in the discipline, excluding independent studies. In addition, two (3-credit hours) courses at the five-hundred or six-hundred level from the Technology Management Department are required to satisfy the Information Technology Globalization Track requirement. Only courses with at least a B grade can be counted towards satisfying the course requirements.
- A two-semester teaching practice requirement (3 credit hours each), for which students are to register with no fees. The students will be expected to teach lower undergraduate level classes, and/or assist professors as teaching assistants (i.e., perform a significant teaching role), thus giving Ph.D. graduates experience for an academic teaching career.
- At least 15 semester hours of dissertation research, culminating in a dissertation proposal defense and dissertation defense.
- Comprehensive examination: written and oral (proposal defense).
- Publication of at least two journal papers, or one journal paper and two refereed conference papers, within the course of the Ph.D. topic research. These publications are not required to be single authored by the student and they might be co-authored with members of the dissertation committee. The journals and conferences are expected to meet quality metrics established by the Department of Computer Science and Engineering.