Advances in technology are producing more complicated computing problems, and solving those problems means drawing on expertise from many different domains. Today’s software engineers need to work efficiently with teams of diverse experts to think critically and solve problems while also providing leadership to meet project goals.

The Master of Software Engineering prepares graduates to lead software development projects by offering practical education in the latest technologies. Students learn to ensure the delivery of reliable software by studying programming, quality assessment, management and design. Our team of dedicated faculty draws on extensive industry experience so that you can better understand advanced programming languages and new advancements in software engineering.

**GRADUATES ARE PREPARED TO:**

- Apply a systematic, disciplined, quantifiable approach to the cost-effective development, operation and maintenance of software systems to the satisfaction of their beneficiaries.
- Build solutions using different technologies, architectures and life-cycle approaches in the context of different organizational structures, with demonstrated programming expertise in at least one language among Java, C++, and C#.
- Foster the development, adoption and sustained use of standards of excellence for software engineering practices.
- Communicate effectively and think critically about a wide range of issues arising in the context of working constructively on software projects.

― Megan Tsai, Master of Software Engineering Graduate, 2014

Learning Online at Brandeis, Graduate Professional Studies

- Applied course activities mirror relevant skills needed in your field
- Industry-leading faculty create course content
- Small class sizes allow for individualized instruction and timely feedback
- Students and faculty engage in highly interactive online discussions
- Student Advisors provide personalized support
- Three ten-week terms in fall, spring and summer
- Our master’s degrees can be completed in 1.5 to 5 years

“GPS courses are for anyone who wants to advance his or her career, exchange ideas with people from different backgrounds, and catch up on the latest technologies and techniques. **The types of courses offered allow software engineers of different capacities to learn something new.**”

― Megan Tsai, Master of Software Engineering Graduate, 2014
SOFTWARE ENGINEERING STUDENTS

- The median age for the program’s students is 37.
- Program population is 81% male and 19% female.
- Number of states our students represent: 24.
- 836 graduates of this program since it launched in 1997.
- 102 students are currently working towards this degree.

OUR STUDENTS WORK OR HAVE WORKED AT PRESTIGIOUS ORGANIZATIONS SUCH AS:

- BOSE
- Dell
- EMC
- General Dynamics
- Microsoft
- Mitre Corporation
- Raytheon
- Teradyne Inc.

REQUIRED COURSES

- Software Development Methodologies (choose from among 2 courses)
- Software Engineering Fundamentals Course (choose from among 4 courses)
- Design Course (choose from among 4 courses)
- Advanced Programming Course (choose from among 5 courses)

SAMPLE ELECTIVES (SELECT FROM 30 AVAILABLE ELECTIVES)

- Agile Project Management
- Securing Applications, Web Services, and Software-As-A-Service (SaaS)
- Mobile Computing
- Cloud Computing
- Web Development Technologies
- Data Warehousing and Data Mining
- Windows Communication Foundation Programming with C#
- Software Security Testing and Code Assessment
- Network Security

NINE AVAILABLE DEGREE TRACKS

- Web Development/Java
- Web Development/C# and C++
- Enterprise Architecture and Development
- Software Security
- Mobile Development
- Software Development Team Leader
- Software Testing
- Networking
- Virtual Management

Connect with an Enrollment Advisor today to discuss your interest or make a plan to apply. **Call us toll free: 800-618-4681 or apply online.**