

FULL-TIME, ON-CAMPUS UNDERGRADUATE AND GRADUATE PROGRAMS (HOMEWOOD)

About Engineering at Johns Hopkins

Engineering education at Johns Hopkins began with the establishment of an engineering school in 1913. Throughout its history, the Whiting School has maintained close ties with the Krieger School of Arts and Sciences, which has led pioneering education and research since the Faculty of Philosophy was assembled in 1876. The Whiting School of Engineering provides its students with an education and research environment that fosters a lifetime ability to create and apply new knowledge and to contribute to their professions.

The Whiting School offers 10 ABET-accredited programs in engineering leading to the Bachelor of Science degree: biomedical engineering, chemical and biomolecular engineering, civil engineering, computer engineering, computer science, electrical engineering, engineering mechanics, environmental engineering, materials science and engineering, and mechanical engineering. The school also offers B.S. and B.A. degrees in applied mathematics & statistics as well as B.A. degrees in biomedical engineering, computer science, and general engineering.

Our commitment to advanced study and research yields outstanding programs that lead to masters and doctoral degrees. In the descriptions that follow, each department lists its faculty and their research, research facilities, graduate programs, and the elementary and advanced courses they offer. More details can be obtained from the departmental websites, through the Whiting School homepage at <http://engineering.jhu.edu> (<http://engineering.jhu.edu/>).

Accreditation

The following Bachelor of Science programs in the Whiting School of Engineering are accredited by the Engineering Accreditation Commission of ABET: Biomedical Engineering, Chemical and Biomolecular Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Mechanics, Environmental Engineering, Materials Science and Engineering, and Mechanical Engineering.

The Bachelor of Science program in Computer Science is accredited by the Computing Accreditation Commission of ABET.

Bachelor's Programs

- Applied Mathematics and Statistics, Bachelor of Arts (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/applied-mathematics-statistics/applied-mathematics-statistics-bachelors-degrees/>)
- Applied Mathematics and Statistics, Bachelor of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/applied-mathematics-statistics/applied-mathematics-statistics-bs/>)
- Biomedical Engineering, Bachelor of Arts (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/biomedical-engineering/biomedical-engineering-bachelor-arts/>)
- Biomedical Engineering, Bachelor of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/biomedical-engineering/biomedical-engineering-bachelor-science/>)

programs/biomedical-engineering/biomedical-engineering-bachelor-science/)

- Chemical and Biomolecular Engineering, Bachelor of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/chemical-biomolecular-engineering/chemical-biomolecular-engineering-bachelor-science/>)
- Civil Engineering, Bachelor of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/civil-engineering/civil-engineering-bachelor-science/>)
- Computer Engineering, Bachelor of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/electrical-computer-engineering/computer-engineering-bachelor-science/>)
- Computer Science, Bachelor of Arts (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-ba/>)
- Computer Science, Bachelor of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-bs/>)
- Electrical Engineering, Bachelor of Arts (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/electrical-computer-engineering/electrical-engineering-bachelor-arts/>)
- Electrical Engineering, Bachelor of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/electrical-computer-engineering/electrical-engineering-bachelor-science/>)
- Engineering Mechanics, Bachelor of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/mechanical-engineering/engineering-mechanics-bachelor-science/>)
- Environmental Engineering, Bachelor of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-engineering-bachelor-science/>)
- General Engineering, Bachelor of Arts (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/general-engineering/general-engineering-bachelor-arts/>)
- Materials Science and Engineering, Bachelor of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/materials-science-engineering/materials-engineering-bachelor-science/>)
- Mechanical Engineering, Bachelor of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/mechanical-engineering/mechanical-engineering-bachelor-science/>)

Minors

- Accounting and Financial Management, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/accounting-financial-management-minor/>)
- Applied Mathematics and Statistics, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/applied-mathematics-statistics/applied-mathematics-statistics-minor/>)
- Civil Engineering, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/civil-engineering/civil-engineering-minor/>)

- Computational Medicine, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/computational-medicine/computational-medicine-minor/>)
- Computer Integrated Surgery, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/robotics-computational-sensing/computer-integrated-surgery-minor/>)
- Computer Science, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-minor/>)
- Computer-Integrated Surgery, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/electrical-computer-engineering/computer-integrated-surgery-minor/>)
- Engineering for Sustainable Development, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/engineering-sustainable-development-minor/>)
- Entrepreneurship and Management, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/entrepreneurship-management-minor/>)
- Environmental Engineering, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-engineering-minor/>)
- Environmental Sciences, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-sciences-minor/>)
- Leadership Studies, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/leadership-studies/>)
- Marketing and Communications, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/marketing-communications/>)
- Robotics, Minor (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/robotics-computational-sensing/robotics-minor/>)
- Computer Science, Master of Science in Engineering (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-master-science-engineering/>)
- Data Science, Master's Degree (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/applied-mathematics-statistics/data-science-masters-degree/>)
- Electrical and Computer Engineering, Master of Science in Engineering (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/electrical-computer-engineering/electrical-computer-master-science-engineering/>)
- Engineering Management, Master of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/engineering-management-master-science/>)
- Financial Mathematics, Master of Science in Engineering (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/applied-mathematics-statistics/financial-mathematics-master-science-engineering/>)
- Geography and Environmental Engineering, Master of Arts (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-health-engineering-master-arts/>)
- Geography and Environmental Engineering, Master of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-health-engineering-master-science/>)
- Geography and Environmental Engineering, Master of Science in Engineering (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-health-master-science-engineering/>)
- Materials Science and Engineering, Master of Science in Engineering (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/materials-science-engineering/materials-science-engineering-master/>)
- Mechanical Engineering, Master of Science in Engineering (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/mechanical-engineering/mechanical-engineering-master-science/>)
- Occupational and Environmental Hygiene, Master of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/occupational-environmental-hygiene-master-science/>)
- Robotics, Master of Science in Engineering (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/robotics-computational-sensing/robotics-master-science-engineering/>)
- Security Informatics, Master of Science (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/information-security-institute/security-informatics-master-science/>)
- Security Informatics, Master of Science/Applied Mathematics and Statistics, Master of Science in Engineering Dual Master's Program (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/information-security-institute/security-informatics-master-science-applied-mathematics-statistics-engineering-dual-program/>)
- Security Informatics, Master of Science/Computer Science, Master of Science in Engineering Dual Master's Program (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/information-security-institute/security-informatics-master-science-computer-science-master-science-engineering-dual-program/>)

Master's Programs

- Applied Mathematics and Statistics, Master of Science in Engineering; Master of Arts (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/applied-mathematics-statistics/applied-mathematics-statistics-master-science-engineering/>)
- Bioengineering Innovation and Design, Master of Science in Engineering (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/biomedical-engineering/innovation-design-master-science-engineering/>)
- Biomedical Engineering, Master of Science in Engineering (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/biomedical-engineering/biomedical-engineering-master-science-engineering/>)
- Chemical and Biomolecular Engineering, Master of Science in Engineering (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/chemical-biomolecular-engineering/chemical-biomolecular-engineering-master-science-engineering/>)
- Civil Engineering, MSE (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/civil-engineering/civil-engineering-mse/>)

programs/information-security-institute/security-informatics-master-science-computer-science-engineering-dual-program/)

- Security Informatics, Master of Science/Master of Health Sciences Dual Master's Program (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/information-security-institute/security-informatics-master-science-health-dual-program/>)

Doctoral Programs

- Applied Mathematics and Statistics, PhD (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/applied-mathematics-statistics/applied-mathematics-statistics-phd/>)
- Biomedical Engineering, PhD through the School of Medicine (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/biomedical-engineering/biomedical-engineering-phd/>)
- Chemical and Biomolecular Engineering, PhD (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/chemical-biomolecular-engineering/chemical-biomolecular-engineering-phd/>)
- Civil Engineering, PhD (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/civil-engineering/civil-engineering-phd/>)
- Computer Science, PhD (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-phd/>)
- Electrical and Computer Engineering, PhD (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/electrical-computer-engineering/electrical-computer-engineering-phd/>)
- Engineering, Doctor of Engineering (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/doctor-engineering/engineering-doctor/>)
- Geography and Environmental Engineering, PhD (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-health-engineering-phd/>)
- Materials Science and Engineering, PhD (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/materials-science-engineering/materials-science-engineering-phd/>)
- Mechanical Engineering, PhD (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/mechanical-engineering/mechanical-engineering-phd/>)

Dual-Degree Programs

- Security Informatics, Master of Science/Applied Mathematics and Statistics, Master of Science in Engineering Dual Master's Program (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/information-security-institute/security-informatics-master-science-applied-mathematics-statistics-engineering-dual-program/>)
- Security Informatics, Master of Science/Computer Science, Master of Science in Engineering Dual Master's Program (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/information-security-institute/security-informatics-master-science-computer-science-engineering-dual-program/>)
- Security Informatics, Master of Science/Master of Health Sciences Dual Master's Program (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/information-security-institute/security-informatics-master-science-health-dual-program/>)

time-residential-programs/degree-programs/information-security-institute/security-informatics-master-science-health-dual-program/)

Certificate Programs

- Nano-Biotechnology, Certificate of Advanced Study (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/nanobio-technology/nano-bio-certificate-advanced-study/>)

Non-Degree Programs

- Computational Medicine, Pre-Doctoral Training Program (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/computational-medicine/computational-medicine-pre-doctoral-training-program/>)
- Professional Communication Program (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/professional-communication/>)
- Professional Development Program (<http://e-catalog.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/professional-development/>)