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 a B.S. degree in applied mathematics & statistics as well as B.A. degrees in biomedical engineering, computer science, and general engineering. Beginning in the 2022-2023 academic year, the school is also offering a Bachelor of Science degree in Systems Engineering which will seek ABET accreditation when it is eligible to do so.

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

ABET accreditation information for bachelor's degrees is included on an Accreditation tab for each relevant program.

Bachelor's Programs

- Chemical and Biomolecular Engineering, Bachelor of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/chemical-biomolecular-engineering/chemical-biomolecular-engineering-bachelor-science/)
- Civil Engineering, Bachelor of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/civil-engineering/civil-engineering-bachelor-science/)
- Computer Engineering, Bachelor of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-engineering/computer-engineering-bachelor-science/)
- Computer Science, Bachelor of Arts (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-bar)
- Computer Science, Bachelor of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-bs)
- Electrical Engineering, Bachelor of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/electrical-engineering/electrical-engineering-bachelor-science/)
- Engineering Mechanics, Bachelor of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/mechanical-engineering/engineering-mechanics-bachelor-science/)
- Environmental Engineering, Bachelor of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-engineering-bachelor-science/)
- General Engineering, Bachelor of Arts (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/general-engineering/general-engineering-bachelor-arts/)
- Materials Science and Engineering, Bachelor of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/materials-science-engineering/materials-engineering-bachelor-science/)
- Mechanical Engineering, Bachelor of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/mechanical-engineering/mechanical-engineering-bachelor-science/)
- Systems Engineering, Bachelor of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/systems-engineering-bachelor-science/)
- Civil Engineering, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/civil-engineering/civil-engineering-minor/)
- Chemical and Biomolecular Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/chemical-biomolecular-engineering/chemical-biomolecular-engineering-bachelor-science/)
- Civil Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/civil-engineering/civil-engineering-bachelor-science/)
- Computer Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-engineering/computer-engineering-bachelor-science/)
- Computer Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-bar)
- Computer Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-bs)
- Electrical Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/electrical-engineering/electrical-engineering-bachelor-science/)
- Environmental Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-engineering-bachelor-science/)
- General Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/general-engineering/general-engineering-bachelor-arts/)
- Mechanical Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/mechanical-engineering/mechanical-engineering-bachelor-science/)
- Systems Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/systems-engineering-bachelor-science/)

Minors

- Civil Engineering, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/civil-engineering/civil-engineering-minor/)
• Computational Medicine, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/computational-medicine/computational-medicine-minor/)
• Computer Integrated Surgery, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/robotics-computational-sensing/computer-integrated-surgery-minor/)
• Computer Science, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-minor/)
• Energy, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/electrical-computer-engineering/energy-minor/)
• Engineering for Sustainable Development, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/engineering-sustainable-development-minor/)
• Entrepreneurship and Management, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/entrepreneurship-management-minor/)
• Environmental Engineering, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-engineering-minor/)
• Environmental Sciences, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-sciences-minor/)
• Leadership Studies, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/leadership-studies/)
• Marketing and Communications, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/marketing-communications/)
• Robotics, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/robotics-computational-sensing/robotics-minor/)
• Space Science and Engineering, Minor (https://e-catalogue.jhu.edu/arts-sciences/full-time-residential-programs/degree-programs/space-science-engineering/space-science-engineering-minor/)
• System Engineering, Minor (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/ceivl-engineering/systems-engineering-minor/)

Non-Degree Programs
• Professional Communication Program (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/professional-communication/)
• Professional Development Program (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/professional-development/)

Master’s Programs
• Bioengineering Innovation and Design, Master of Science in Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/biomedical-engineering/innovation-design-master-science-engineering/)
• Biomedical Engineering, Master of Science in Engineering (https://e-catalogue.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 (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/chemical-biomolecular-engineering/chemical-biomolecular-engineering-master-science-engineering/)
• Civil Engineering, Master of Science in Engineering (MSE) (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/civil-engineering/civil-engineering-mse/)
• Computer Science, Master of Science in Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-master-science-engineering/)
• Data Science, Master’s Degree (https://e-catalogue.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 (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/electrical-computer-engineering/electrical-computer-science-master-science-engineering/)
• Engineering Management, Master of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/engineering-management-master-science/)
• Geography and Environmental Engineering, Master of Arts (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-health-engineering-master-arts/)
• Geography and Environmental Engineering, Master of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-health-engineering-master-science/)
• Global Innovation and Leadership Through Engineering, Master of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/leadership-education/global-innovation-leadership-engineering-master-science/)
• Materials Science and Engineering, Master of Science in Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/materials-science-engineering/materials-science-engineering-master/)
• Mechanical Engineering, Master of Science in Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/mechanical-engineering/mechanical-engineering-master-science/)
• Occupational and Environmental Hygiene, Master of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/
degree-programs/environmental-health-engineering/occupational-environmental-hygiene-master-sciencce/)

- Robotics, Master of Science in Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/robotics-computational-sensing/robotics-master-science-engineering/)


- Security Informatics, Master of Science/Computer Science, Master of Science in Engineering Dual Master's Program (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/information-security-institute/security-informatics-master-science-computer-science-engineering-dual-program/)

- Systems Engineering, Master of Science (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/civil-engineering/systems-engineering-ms/)

**Doctoral Programs**


- Biomedical Engineering, PhD through the School of Medicine (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/biomedical-engineering/biomedical-engineering-phd/)

- Chemical and Biomolecular Engineering, PhD (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/chemical-biomolecular-engineering/chemical-biomolecular-engineering-phd/)

- Civil and Systems Engineering, PhD (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/civil-engineering/civil-engineering-phd/)

- Computer Science, PhD (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/computer-science/computer-science-phd/)

- Electrical and Computer Engineering, PhD (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/electrical-computer-engineering/electrical-computer-engineering-phd/)

- Engineering, Doctor of Engineering (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/doctor-engineering/engineering-doctor/)

- Geography and Environmental Engineering, PhD (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/environmental-health-engineering/environmental-health-engineering-phd/)


- Mechanical Engineering, PhD (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/mechanical-engineering/mechanical-engineering-phd/)

**Dual Programs**


- Security Informatics, Master of Science/Computer Science, Master of Science in Engineering Dual Master's Program (https://e-catalogue.jhu.edu/engineering/full-time-residential-programs/degree-programs/information-security-institute/security-informatics-master-science-computer-science-engineering-dual-program/)

**Whiting School of Engineering Leadership**

Ed Schlesinger  
*Benjamin T. Rome Dean*

Hedy Alavi  
*Assistant Dean for International Programs*

James Aumiller  
*Senior Associate Dean for Strategic Initiatives*

Megan Barrett  
*Assistant Dean of Engineering Student Affairs*

Karen Borgsmiller  
*Assistant Dean for Pre-Collegiate Programs*

Lori Brady  
*Vice Dean for Faculty*

Harry K. Charles, Jr.  
*Associate Dean for Non-Residential Graduate Education*

Chad Clapsaddle  
*Senior Associate Dean for Finance and Administration*

Andrew Douglas  
*Executive Vice Dean*

Michael Falk  
*Vice Dean for Undergraduate Education*

Joy Goswami  
*Senior Director of Corporate Engagement*

Nathan Graham  
*Assistant Dean for Media and Technology*

Daniel Horn  
*Associate Vice Dean for Professional Education and Lifelong Learning*

Megan Howie  
*Associate Dean for External Relations*

Paul Huckett  
*Assistant Dean for Learning Design and Innovation*

Christine Kavanagh
Associate Vice Dean for Graduate Education and Lifelong Learning

Mary Kay LeMay
Assistant Dean for Marketing and Communications

Lauren McGhee
Assistant Dean of Enrollment and Academic Operations

Constanza Miranda
Assistant Dean for Faculty Undergraduate Mentoring

Larry Nagahara
Vice Dean for Research and Translation

Darlene Saporu
Assistant Dean for Diversity and Inclusion, Whiting School of Engineering

Sridevi Sarma
Vice Dean for Graduate Education and Lifelong Learning

Edward Scheinerman
Vice Dean for Special Projects, Whiting School of Engineering

Alisha Sparks
Interim Executive Director, Center for Educational Outreach

Janet Weise
Associate Dean for Undergraduate Academic Affairs

Kimberley Bassett Zing
Assistant Dean for Undergraduate Academic Advising

Full Faculty directory may be found on the Faculty Directory (https://engineering.jhu.edu/faculty/) page.