



“Become a Pitt Bioengineer to combine your creativity, innovation, technical skills, and passion for healthcare to advance medical products.”

– Mark Redfern, PhD
Interim Chair, Department of Bioengineering
William Kepler Whiteford Professor

Professional Master of Science in Bioengineering **Medical Product Engineering (MS-MPE)**

Application Deadlines: Domestic July 1 – International April 1

WHY STUDY MPE AT THE UNIVERSITY OF PITTSBURGH?

Pitt’s professional **MS in Bioengineering – Medical Product Engineering (MS-MPE)**, applies engineering innovation to the identification of and solution to challenges in health care delivery in the medical industry. Students have the opportunity to work with the renowned University of Pittsburgh Medical Center in a city that has been named a U.S. tech hub to watch.

The program is offered by Pitt’s nationally ranked Department of Bioengineering in conjunction with the University of Pittsburgh Center for Medical Innovation (CMI). We offer hands-on, practical experience in medical product design and development that will prepare you for an industrial or academic career in the medical product engineering sector.

The 30-credit MS-MPE program leads student teams through all the steps to developing new products for the clinical marketplace. Through lectures, industry workshops, and real-world projects guided by highly-supportive clinical mentors, our students learn to apply methods of problem discovery and structured ideation to develop innovative solutions.

Upon graduation, 80 percent of our students enter industry careers with the remainder going to further graduate work, medical school, and other related fields.

TRANSLATIONAL RESEARCH PROGRAMS IN THE SWANSON SCHOOL

The Center for Medical Innovation (CMI) is part of the innovation ecosystem which supports the commercial translation of new university-based medical technologies. Since its inception in 2012, the CMI has invested over \$1.5 million in 78 projects to develop novel medical technologies. The CMI works closely with the MS in Bioengineering – MPE program to provide career-building opportunities for the next generation of innovators, managers, and developers.

In collaboration with Pitt’s Innovation Institute, the Coulter Program is an on-campus biomedical accelerator housed in the Department of Bioengineering. They provide support to researchers interested in the commercial translation of their biomedical innovations.

The COVID-19 pandemic has engendered a wave of new and adaptive technologies to address the need for personal protective equipment (PPE), ventilators and other innovations – some of which were developed here at the University of Pittsburgh and the Swanson School of Engineering.

A postsecondary degree can help protect against unemployment during times of economic downturn. Become a competitive candidate in the job market by boosting your resume with an **MS in Bioengineering – Medical Product Engineering**.

ADMISSIONS REQUIREMENTS

A Bachelor of Science degree in a STEM discipline.

Deadline for fall 2023 admissions

July 1. We encourage applicants to submit earlier as we review applications and make admissions decisions on a rolling basis.

FOR MORE INFORMATION AND TO APPLY

engineering.pitt.edu/graduate

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ENGINEERING
GRADUATE & ONLINE PROGRAMS

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Professional Master of Science in Bioengineering Medical Product Engineering (MS-MPE)

Required for professional MS-MPE (30 credits)

- Four courses in Medical Product Engineering/Innovation (12 credits)
- Medical Ethics (3 credits)
- Graduate Engineering Mathematics or Statistics (3 credits)
- Graduate Engineering/Science Electives (12 credits)

Full-time students are recommended to complete a part-time internship (paid, unpaid, or for credit) with an industry partner or related entity.

The 30-credit MS-MPE program can be completed in 12-16 months as a full-time student, depending on participation in an internship.

Dual Degree – MBA/MS-MPE

Take your MS-MPE degree to the next level through Pitt's **Dual MBA/MS-Engineering Joint-Degree Program** offered by the Joseph M. Katz Graduate School of Business and the Swanson School of Engineering. Contact persons listed to the right or visit <https://business.pitt.edu/mba/dual-degree-mba-and-ms/> for more information about this program's application requirements.

Graduate Certificate in Medical Product Innovation (C-MPI)

For those seeking a shorter alternative to the MS-MPE program, we offer a 15-credit Graduate Certificate in Medical Product Innovation (C-MPI) program. Anyone who holds at least a 4-year baccalaureate degree is eligible to apply. This is a great option for working professionals in the healthcare industry looking to enrich their career.

Required for Graduate Certificate in Medical Product Innovation (15 credits)

- Two courses in Medical Product Innovation (6 credits)
- Medical Ethics (3 credits)
- Entrepreneurship/Engineering Management (3 credits)
- Legal Aspects of Medical Product Innovation (3 credits)

DELIVERY	TOTAL CREDITS	ENTRANCE EXAM	ADDITIONAL ADMISSIONS REQUIREMENTS
<ul style="list-style-type: none"> • On-Campus 	<ul style="list-style-type: none"> • MS-MPE – 30 • C-MPI – 15 	<ul style="list-style-type: none"> • GRE optional • TOEFL, IELTS or Duolingo scores (<i>required for international students</i>) 	<ul style="list-style-type: none"> • Minimum two letters of recommendation • College transcripts

For more information, please contact:

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