Program Overview:
The Professional Master of Engineering (M.Eng) program’s Biomedical Engineering Concentration, also known as BioENGINE (BioEngineering, Innovation, & Entrepreneurship), is designed to provide rigorous and practical hands-on team-based training in biomedical innovation, entrepreneurship / intrapreneurship and commercialization. BioENGINE will train students through experiential learning to become experts and leaders in developing biomedical devices and technologies.

Program Features:
- 3-course sequence focused on the innovation, building, and launching of a medical technology business.
- Program staff available to facilitate job searches, industrial networking, career development.
- Student choose 6 technical electives on timely, relevant biomedical engineering topics, taught by experts in the field.
- Comprehensive Capstone design sequence where students design-build-test new medical technology, with faculty and industry mentors.
- Regularly interact and network with industry through symposiums, lectures, design projects, and company site visits.
- Graduates receive Master of Engineering degree in 9-12 months
Entrepreneurship/Leadership (3-course sequence):
Topics may include: customer discovery, product development, design and manufacturing, writing proposals and business plans, successful team building, marketing a new idea/product, intellectual property, and regulatory issues.

Technical Electives (select 6 courses):
- BME 210P Molecular and Cellular Engineering
- BME 212P Cardiovascular Tissue Engineering
- BME 220P Sensory Motor Systems
- BME 234P Neuroimaging Data Analysis
- BME 262P Microimplants
- BME 295P Nanotechnology for Biomedicine
- BME 295P Bio-spectroscopy
- BME 295P Neural Time Series
- BME 295P Coding in the Brain
- BME 211P Microscale Tissue Engineering
- BME 221P Quantitative Physiology: Organ Transport Systems
- BME 233P Dynamic Systems in Biology and Medicine
- BME 238P Spectroscopy and Imaging of Biological Systems
- BME 240P Intro Clinical Medicine for Biomedical Engineering
- BME 251P Engineering Medical Optics
- BME 260P Microfluidics and Lab-on-a-Chip
- BME 295P Cardiovascular Device Technologies
- BME 295P Ophthalmology Biomedical Engineering

Design Project (3 quarters/12 units highly recommended):
Capstone Design sequence where teams of students, mentored by faculty and industry representatives, will:
- Survey unmet needs in the medical technology business space
- Define FDA design control requirements and product specifications
- Explore market entry strategies and commercialization
- Determine optimal technical solution
- Fabricate and test a prototype in UC Irvine’s world class facilities and laboratories
- Present project development results at the Device Design Symposium at UCI Beall Applied Innovation
- Option to extend project into 4th quarter (summer or fall)

Apply online: [http://engineering.uci.edu/MEng](http://engineering.uci.edu/MEng)
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