Carnegie Mellon Biomedical Engineering

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What is Biomedical Engineering?

• Intersection of biology and medicine with “traditional” engineering disciplines
  • Mechanical Engineering
  • Electrical Engineering
  • Materials Science
  • Computer science
  • More…
Our Students Have Different Backgrounds

- Engineering
- Biological sciences
- Other sciences
- Mathematics
CMU Research Strengths

Biomaterials

Tissue/Organ Engineering

Cardiopulmonary Medical Devices

Neural Engineering

Medical Robotics

Biomedical Imaging
Bioengineered Organs Initiative

News  Research  About  Faculty  Join us  Support us  Contact us  Events

About bioengineered organs
Explore our research
Learn about our faculty

Constructing longer life
Course Focus Areas

- Physiology and Cellular/Molecular Biology
- Biomaterials and Tissue Engineering
- Biomechanics
- Biomedical Imaging and Bioinformatics
- Neuroengineering
Graduate Programs

- PhD
- MS
  - Practicum option (course-based)
  - Research option
  - Engineering & Technology Innovation Management (ETIM)
  - Technology Ventures (MSTV)
  - CS + BME Dual Masters
PhD Direct Entry Requirements

• ≈ 5 years
• 100% paid for (tuition & stipend)
• 7-9 formal classes
• Rest of time dedicated to research
Practicum Masters Requirements

• 9-16 months
• Tuition – fellowship are available (GEM)
• Course work
  • 7-9 formal classes
  • One project (clinical, research)
Joint Programs (ETIM, MSTV, CS + BME)

- 9 months of BME courses (7-9)
- One year of the additional program
  - Innovation management
  - Technology ventures
  - Computer science
Research Masters Requirements

• ≈ 21 months

• Tuition – fellowship are available (GEM)

• Course work
  • 6-8 formal classes
  • Remainder is research