Biomedical Engineering

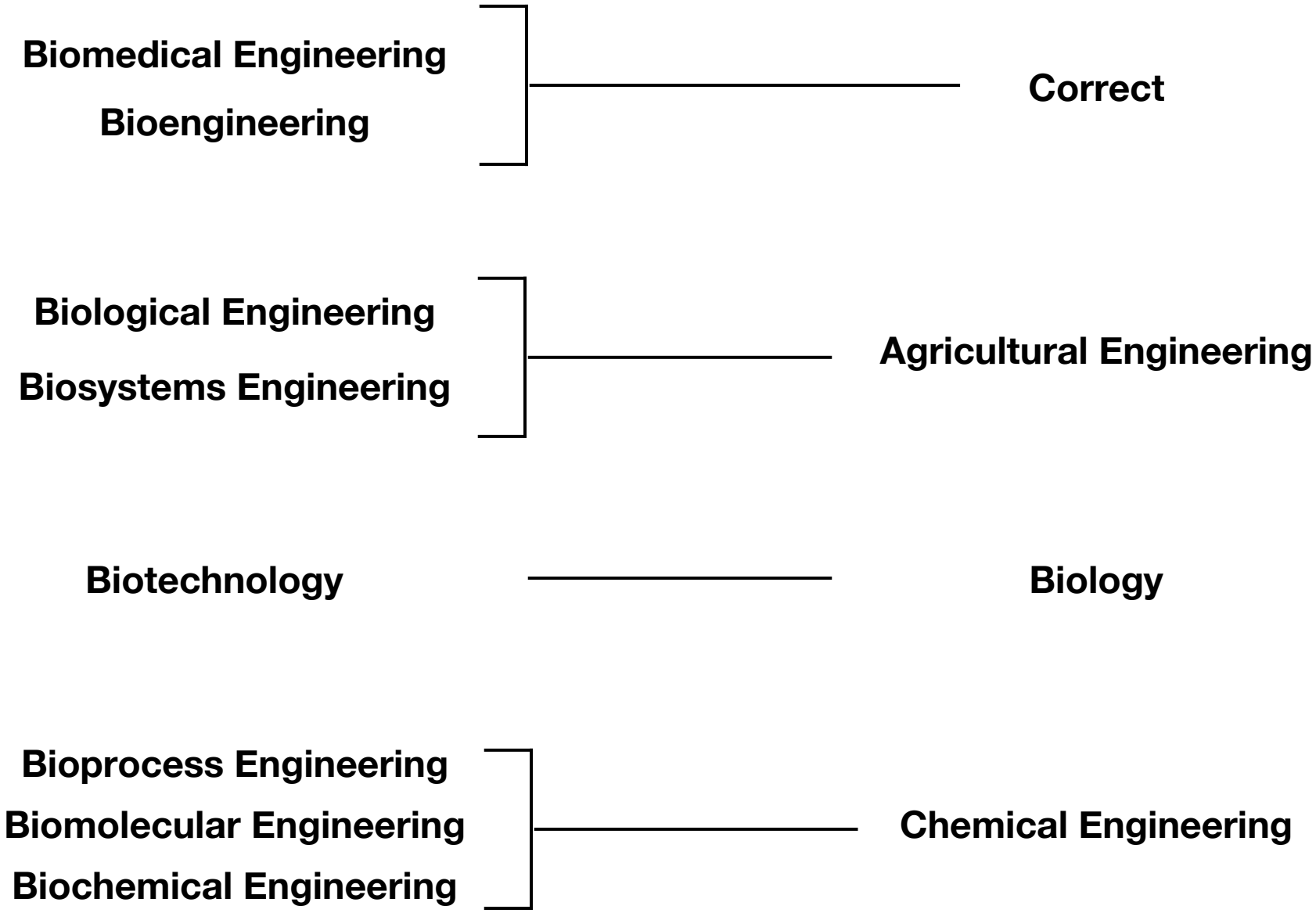
Biomedical engineers bridge the medical and engineering disciplines providing an overall enhancement of health care. Biomedical engineers design and build innovative devices (artificial limbs and organs, new-generation imaging machines, advanced prosthetics and more) and improve processes for genomic testing, or making and administering drugs.

https://www.bmes.org/content.asp?contentid=140

As their title suggests, biomedical engineers work at the intersection of engineering, the life sciences and healthcare. These engineers take principles from applied science (including mechanical, electrical, chemical and computer engineering) and physical sciences (including physics, chemistry and mathematics) and apply them to biology and medicine.

https://www.embs.org/about-biomedical-engineering/

BME Branding



Fields of Specialization

BMES

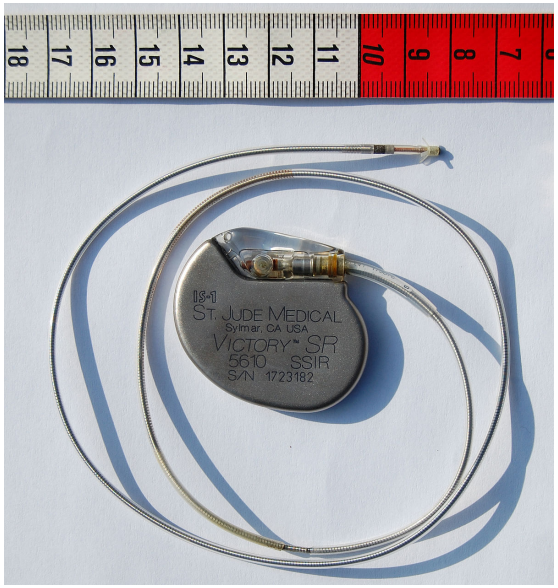
Biomedical Electronics
Biomechatronics
Bioinstrumentation
Biomaterials
Biomechanics
Bionics
Cellular, Tissue, and Genetic Engineering
Clinical Engineering
Medical Imaging
Orthopaedic Bioengineering
Rehabilitation Engineering
Systems Physiology
Bionanotechnology
Neural Engineering

AIMBE

Bioinformatics
Bioinstrumentation
Biomaterials
Biomechanics
Biomechatronics
Biomimetics
Bionanotechnology
Biotechnology
Clinical Engineering
Bioprocess Engineering
Medical Imaging
Neuroengineering
Orthopaedics & Rehabilitation
Pharmaceutical Engineering
Synthetic Biology
Systems Biology
Systems Physiology
Telehealth
Tissue Engineering & Regenerative Medicine

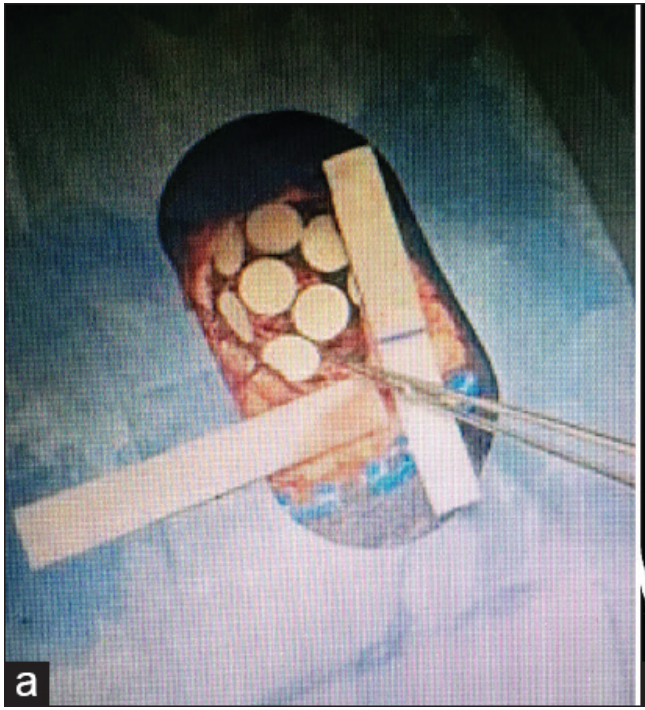
Biosystems

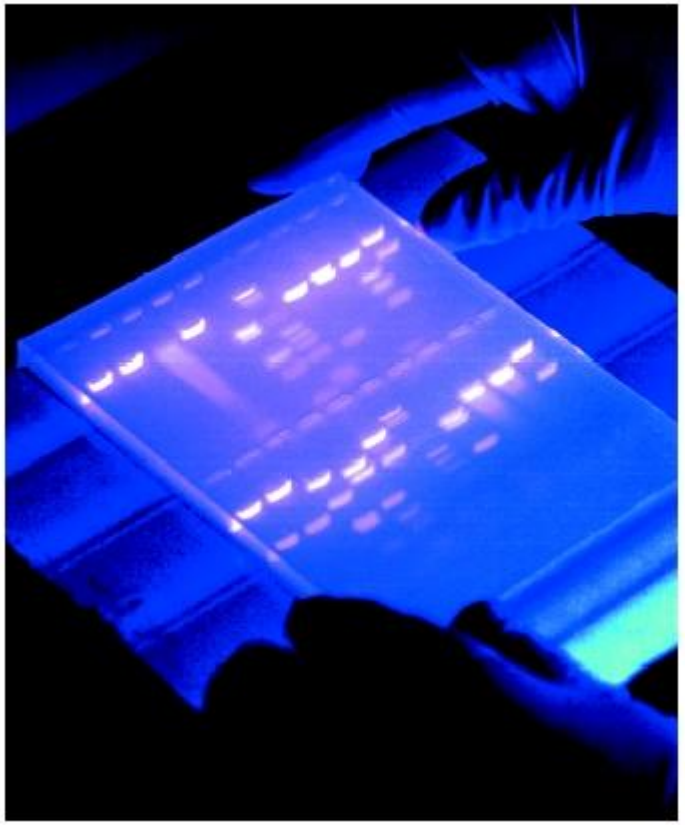
Design of medical instrumentation and devices, biomechanics, and signal analysis.



Biomolecular

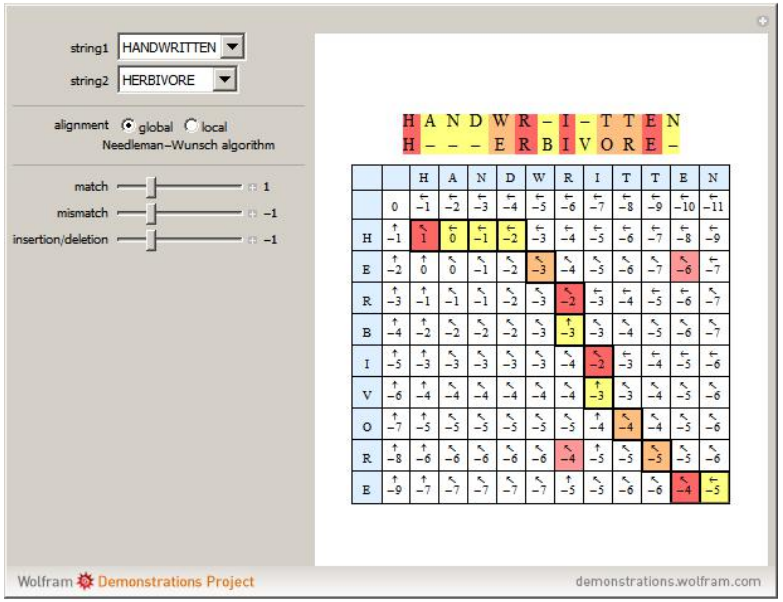
Application of biomolecular technology to medicine and applied technology.

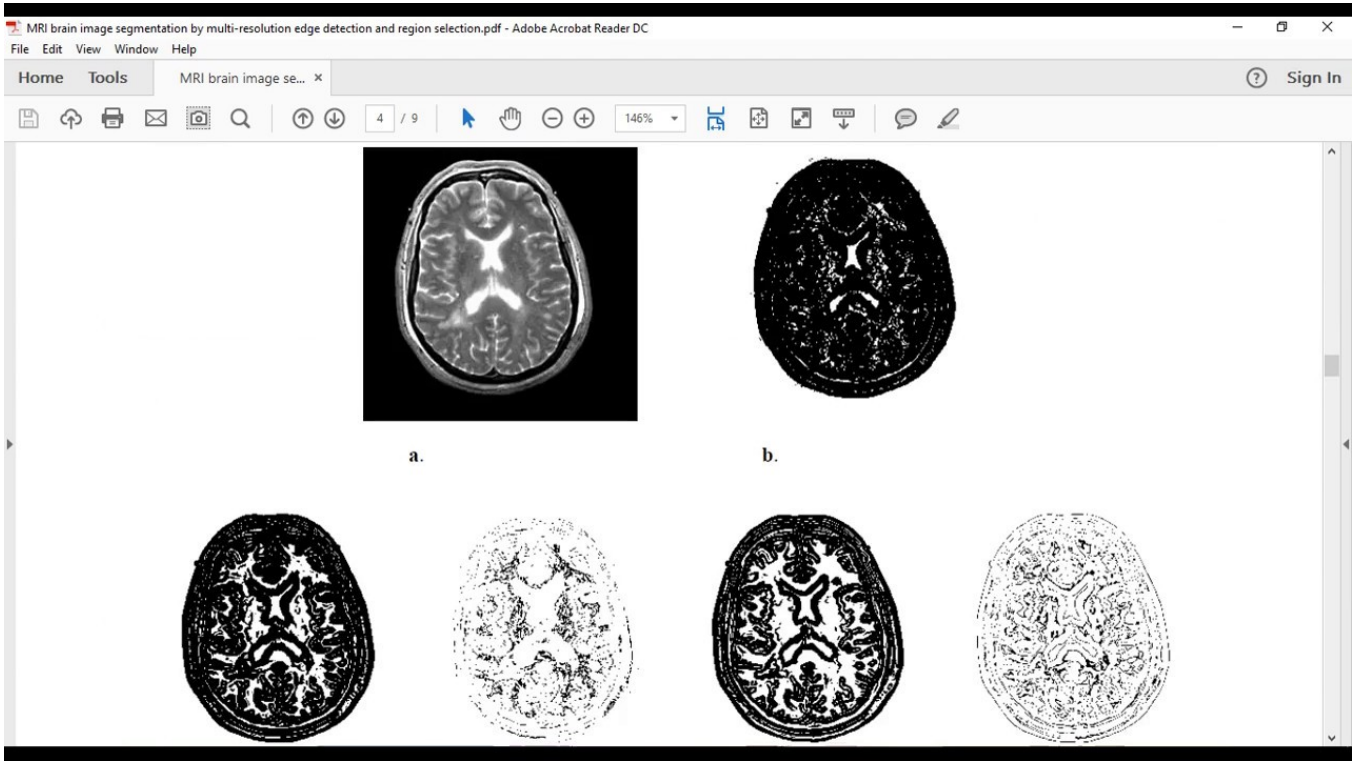


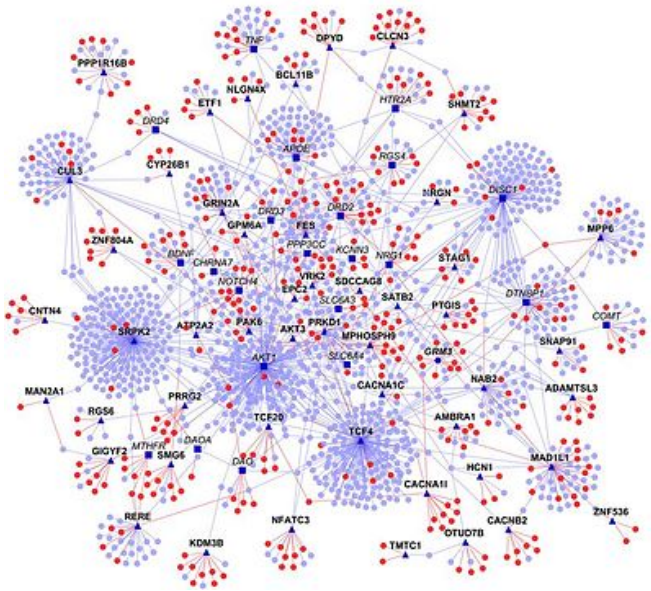


Bioinformatics

Application of big data analytics to genome sequencing, medical imaging and large data management.







After Graduation

IF	THEN
Graduate School	Undergraduate research Summer research
Medical School	Undergraduate research Summer research Health Professions Advising Office (HPAO)*
Law School	Research Industry experience Pre-Law Advising Office
Industry	Summer Internships Co-Op Research