



Bioengineering at CMC

Christian Medical College, Vellore

Bioengineering at CMC involves design of medical devices and artificial organs, mathematical analysis of physiological processes, biomechanics of musculoskeletal systems, etc. Bioengineering has engineering at its core, and includes the disciplines of physics, mechanics, electronics, and computational methods *applied* to physiology and medicine.

The Bioengineering department in CMC works closely with several other departments in the institute and the current work ranges across physiological measurement, systems modelling, prostheses design, biomechanical analysis, and biomedical signal processing.

The academic program in Bioengineering leads to the degrees of MS and PhD. All aspiring candidates should have an undergraduate degree in engineering, preferably Electrical, Electronics, Mechanical, Computer Science or equivalent. Doctoral aspirants require a Masters degree in engineering, and should have some exposure to advanced biology. A qualifying score in **GATE** score is required.

Lecture and seminar based courses on Instrumentation, Imaging Systems, Physiological Systems, Signal Processing, etc., are taught as part of the basic training. Both the MS Bioengineering and PhD are specialized engineering programs with emphasis on research. MS candidates will undertake a research project of one year duration, while PhD candidates will undertake a substantially larger research problem. Students will interact closely with at least one of the clinical or basic science departments to formulate a research problem.

These degrees will equip you to apply quantitative and engineering methods to solve healthcare problems. Career prospects include academic research and teaching careers as well as R&D in the medical devices industry.

Interested candidates applying for **MS Bioengineering and PhD** should submit their biodata to **The Registrar Christian Medical College, Bagayam, Vellore -632002.**

Last date for receiving application: 20 April 2007

Eligible candidates will be called for a written test followed by interview.

Stipend will be given to the selected candidates.

<http://www.cmcvellore.ac.in>
<http://www.cmcvellore.res.in>