



Bioelectromagnetics: Principles and Applications



**A short course by Professor Christian Schuster
Hamburg University of Technology (TUHH)**

The field of bioelectromagnetics can be loosely defined as the science of electromagnetic field interaction with biological tissue. It is a subdiscipline of biomedical engineering and has many connections to medical and biological imaging, electrotherapy, electrophysiology, biophysics, bioelectronics, electromagnetic compatibility, and safety as well as electrochemistry.

In this short course at Georgia Tech, students will learn to explain the basic principles, relationships, and methods of bioelectromagnetics including the most important physical phenomena and measurement methods like ECG, MRI, and CT-scans. Specifically students will learn to apply various methods to characterize the behavior of electromagnetic fields in biological tissue, and they will be able to assess the most important effects that these models predict.

All course materials will be made available.

August 10th-12th | 10:00 a.m. - 1:00 p.m.

Pettit Building Room 102A

August 15th-16th | 10:00 a.m. - 1:00 p.m.

Van Leer Building Room 256

Register at <https://b.gatech.edu/3INs7gU>

