

# Advanced Engineering Electives

3000-5000 level engineering course with clear biomedical engineering application. Students need to pick from this list or use other courses, if approved by the Biomedical Engineering curriculum committee, to satisfy this requirement.

[BME 4900](#): Independent Study – Credits will vary

Students are asked to prepare this plan **in consultation with their project supervisor**, whose approval verifies that the planned effort justifies the number of proposed credits. Click here for the [BME 4900 Study Proposal Form](#). **Note: this is a fillable form. It may be necessary to open it in a different program for full functionality.** After the form is completed, it should be submitted to Dr. Ian Schneider at [ians@iastate.edu](mailto:ians@iastate.edu) or at 2035 Sweeney Hall. No more than 3 cr. of 4900 credit may be applied to this minor.

[CHE 4400 / BME 4400](#): Biomedical Applications of Chemical Engineering

[EE 3410 / BME 3410](#): BioMEMs and Nanotechnology

[EE 4500 / BME 4500](#): Biosensors

[EE 5410](#): Biomedical Optical Imaging and Spectroscopy

[IE 4470 / BME 4470](#): Biomedical Design and Manufacturing

[IE 5710](#): Occupational Biomechanics

[MATE 4560 / BME 4560](#): Biomaterials

[ME 5500](#): Advanced Biosensors: Fundamentals and Applications