College of Engineering
TEMPLE UNIVERSITY

MS in Bioengineering

Please note that the curriculum outlined below is a guide. All students must meet with their academic advisor to develop a plan of study.

All students are required to take the **core courses** listed below:

ENGR 5737	Systems Physiology for Engineers	
ENGR 5011	Engineering Mathematics I	
ENGR 5719	Introduction to Bioengineering	
ENGR 5721	Cell Biology for Engineers	

All students are required to take at least four **elective courses** from the list below.

ENGR 5311	Deformation and Fracture of Engineering Materials	
ENGR 5741	Biomaterials for Engineers	
ENGR 5012	Engineering Mathematics II	
ENGR 5117	Experimental Methods	
ENGR 5732	Tissue Biomechanics	
ENGR 5511	Fluid Dynamics	
ME 5731	Cardiovascular Fluid Dynamics	
ME 5117	Finite Element Analysis	
ANAT 9100	Seminars in Cell Biology	
ANAT 9105	Cell Biology Research Techniques	
CHEM 8300	Special Topics in Physical Chemistry	
CHEM 5401	Biochemistry	
CHEM 8501	Polymer Chemistry	
ENGR 5033	Probability and Random Processes	
EE 5612	Advanced Microprocessor Systems	
EE 5514	Digital Signal Processing Analysis	
EE 5314	Microelectronics	
EE 8514	Applications in Digital Signal Processing	
EE 5514	Digital Image Processing	

Students completing the thesis option must complete 24 semester hours of course work and 6 semester hours of thesis. Students completing the project option must complete 27 semester hours of course work and 3 semester hours of a research project. Students completing the non-research option, with the permission of the department, are required to take 30 semesters of course work.