Chemical and Biomedical Engineering Arrpoved Graduate Elective List

Subject	Catalog	Title	Notes
BCH	5884	Programming for Chemists and Biochemists	
BCH	5505	Structure and Function of Enzymes	
BCH	5405	Molecular Biology	<=this can be used as a core or an elective for BME
BME	5086	Biomedical Engineering Ethics	
BME	5362	Neural Engineering	
BME	5937	Special Topics	
BME	6530	NMR and MRI Methods in Biology and Medicine	
BSC	5458	Bioinformatics	
BSC	5936	Special Topics	student need to consult with faculty advisor before enrollment
CHM	5450	Polymer Chemistry	
CHM	5454	Polymer Characterization	
CHM	5506	Physical Chemistry of Macomolecules I	
CHM	5585	Experimental Methods in Physical Chemistry	
CHM	5681	Current Topics in Inorganic Chemistry	
CHM	5715	Chemistry of Materials	
CHM	5718	Topics in Materials Chemistry II	
CHM	5904	Focus on Materials Chemistry	
ECH	5052	Research Methods	Does not apply to: PhD or Thesis (required core course)
ECH	5126	Advanced Chemical Engineering Thermodynamics I	<=this can be used as an elective for BME
ECH	5262	Advanced Transport II	
ECH	5820	Polymer Physical Science and Engineering	
ECH	5828	Introduction to Polymer Science and Engineering	
ECH	5841	Advanced Chemical Engineering Mathematics II	
ECH	5934	Special Topics	
EGN	5458	Statistical Applications for Engineering	
EIN	5445C	Technology Entrpreneurship and Commercialization	
EIN	5930	Special Topics	student need to consult with faculty advisor before enrollment
EML	5930	Special Topics	student need to consult with faculty advisor before enrollment
ENC	5457	Writing in the Sciences	
ESI	5525	Modeling and Analysis of Manufacturing and Ind. Sys.	
GMS	6001	Special Topics	student need to consult with faculty advisor before enrollment
ISC	5228	Monte Carlo Methods	

PCB	5137	Advanced Cell Biology	<=this can be used as a core or an elective for BME
PCB	5845	Cell and Molecular Neuroscience	<=this can be used as a core or an elective for BME
PCB	5525	Molecular Biology	<=this can be used as a core or an elective for BME
PCB	5672	Evolution	
PCB	5746	Mammalian Physiology I	<=this can be used as a core or an elective for BME
PCB	5747	Mammalian Physiology II	<=this can be used as a core or an elective for BME
PCB	5796	Sensory Physiology	<=this can be used as a core or an elective for BME
PCB	5835	Neurophysiology	<=this can be used as a core or an elective for BME
PSB	5077	Responsible Conduct of Research	
PSB	5230C	Vetebrate Nueroanatomy	
STA	5323	Distribution Theory and Inference	
STA	5126	Introduction to Applied Statistics	
STA	5106	Computational Methods in Statistics I	
STA	5066	Data Management and Analysis	
PHA	6180	Advanced Pharmaceutics I	FAMU Pharmacy Course
PHA	6181	Advanced Pharmaceutics II	FAMU Pharmacy Course
EML	5514	Electron Microscopy	
EEE	5776	Machine Learning	
EML	5311	Design & Analysis of Control Systems	
EIN	5930	Deep Learning in Practice	
EML	5831	Intro to Mobile Robotics	
EVS	6932	SCIENTIFIC WRITING AND PUBLICATION	School of the Environment Course
GMS	5146	The Immune Response to Infection and Cancer	FSU College of Medicine Course

Notes

1) All 5000 or above level Engineering electives are counted

2) Students need to take minimum 2 electives (6 hours) in the major as the new elective requirements from Spring 2023 and moving forward

3) Only one graded pass and fail class that is outside of the department to be counted as elecvite requirments with faculty advisor and department approval, and students need to notify the gradaute coordinator which pass and fail class that is approved.

edited on 4/11/2023