## **BME-EE+L&O Technical Electives**

Technical Electives (TEs) are designed to provide additional breadth and depth in the Biomedical and partner major degrees. BME-EE-L&O students take 9 credits of ECE TEs chosen from the following lists.

Key:			
F - Fall	* Available Every Other Year (Even)		
S - Spring	** Available Every Other Year (Odd)		
SS - Summer			
See below for information on how to obtain course overrides			

Note: 1. Classes otherwise required for the degree are not allowed for TE credit.

2. Course availability changes frequently. Please check with individual departments regarding course availability.

●BME-EE-L&O	students must take 9 credits of ECE TEs from the fo	llowing list:		
ECE Technical Electives				
COURSE	NAME	TERM	CR	
ECE 312	Linear System Analysis II	S	3	
ECE/MATH 430	Fourier and Wavelet Analysis with Apps	S	3	
ECE471A	Semiconductor Physics	F	1	
ECE471B	Semiconductor Junctions	F	1	
ECE495 (A-C) <sup>2</sup>	Independent Study	F, S,	1-6	
ECE 503	Ultrafast Optics	S	3	
ECE 504	Physical Optics	F	3	
ECE 505	Nanostructures: Fundamentals & Applications	F	3	
ECE 506	Optical Interferometry & Laser Metrology	F	3	
ECE 507	Plasma Physics and Applications	S	3	
ECE/BIOM 517	Advanced Optical Imaging	F	3	
ECE/BIOM 518	Biophotonics	F	3	
ECE/BIOM 526	Biological Physics	F	3	
ECE 546	Laser Fundamentals & Devices	S	3	
ECE 572	Semiconductor Transistors	S	1	
ECE 573	Semiconductor Optoelecronics Laboratory	S	3	
ECE 574	Optical Properties in Solids	S	3	
MATH 419	Introduction to Complex Variables	F	3	
PH 315	Modern Physics Lab	S	2	
PH 425	Advanced Physics Lab	S	2	
PH 452	Intro to Quantum Mechanics II	S	3	
PH 462	Statistical Physics	F	3	

ECE 48X and 58X (experimental) courses in Lasers and Optics may also be available; check with your ECE Adviser

<sup>2</sup> A maximum total of 3 credits of 495 Independent Study may be applied towards EE technical elective degree requirements.

• For 500-level ECE courses, you should be able to register if you meet the pre-requisistes. If you need an override, forward permission to Courtney.Johnsrud@colostate.edu

◆ To request overrides for other courses (e.g. 500-level or prereq override), email the course professor or the department teaching the course.

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