

## Computer Engineering Technical Electives

Course	Course Title	Credit	Prerequisites	Terms
CS314	Software Development Methods	3	CS220 with a minimum grade of C; C253 with a minimum grade of C	F, S
CS320 <sup>1</sup>	Algorithms--Theory and Practice	3	CS220 with a minimum grade of C; MATH161 with a minimum grade of C; MATH229 with a minimum grade of C or MATH369 with a minimum grade of C	F, S
CS356	Systems Security	3	CS220 with a minimum grade of C; CS253 with a minimum grade of C; CS270 with a minimum grade of C or ECE251 with a minimum grade of C; STAT201 or STAT204 or STAT301 or STAT307 or STAT311 or STAT315 all with a minimum grade of C	F, S
CS4XX	Any CS course at the 400 level <b>except CS457 and CS470</b>	3-4	Varies - check course description for details	F, S, SS
CS5XX	Any CS course at the 500 level	3-4	Varies - check course description for details	F, S
ECE4XX	Any ECE course at the 400 level	3-4	Varies - check course description for details	F, S
ECE495 <sup>2</sup>	Independent Study	1-3		F, S, SS
ECE5XX	Any ECE course at the 500 level except <b>ECE501, ECE530, ECE531, ECE532, and ECE567</b>	3-4	Varies - check course description for details	F, S
MATH360	Mathematics of Information Security	3	MATH161; MATH229 or MATH369	F
MATH450	Intro to Numerical Analysis I	3	MATH151; MATH255 or MATH261 or CS156 or CS163 or CS164 or CS253	F
MATH451	Intro to Numerical Analysis II	3	MATH151; CS156 or CS163 or CS164 or CS253; MATH340 or MATH345	S
MATH460	Information and Coding Theory	3	(MATH360 and MATH369) or MATH366	S
MECH564	Fundamentals of Robot Mechanics &	3	MECH 417 (will substitute ECE411 and ECE455 - must take both)	S
STAT421	Introduction to Stochastic Processes	3	(MATH229 or MATH369) and STAT420 (will substitute ECE/STAT303 for STAT420)	S

<sup>1</sup> CS320 may count as a Technical Elective ONLY when ECE332 is also taken. ECE332 will be applied towards the Junior Year requirement. The course cannot count as credit towards both requirements.

<sup>2</sup> A total of 3 credits of Independent Study may apply towards total degree requirements. This includes credits awarded for ECE395 and ECE495 combined.

All prerequisites for CS courses are determined and enforced by the Computer Science department