

# Supplemental Focus Area of Study for CprE

In order to declare a CprE Focus Area of Study a student must take six credits in the category

- Courses marked with a + are required and can be substituted for a student's EE technical elective; --for EE substitution, student must take two courses in that focus area.
- Courses marked with an asterisk \* are recommended for the focus area
- Refer to the CprE Technical Elective list for semester, credit and pre-requisite(s) information

COURSES	COURSE TITLE	
<b>Software</b>		
+SE 319	Software Construction & User Interfaces	(substitute for EE technical elective)
SE 329*	Software Project Management	
SE 339*	Software Architecture & Design	
SE 409	Software Requirements Engineering	
SE 416	Software Evolution & Maintenance	
SE 417	Software Testing	
SE 419X	Software Tools for Large Scale Data Analysis	
<b>Software Systems</b>		
Cpr E 426	Intro to Parallel Algorithms & Programming	(substitute for EE technical elective)
CprE 458*	Real-Time Systems	
CprE 450*	Distributed Systems & Middleware	
<b>Embedded Systems</b>		
CprE 388*	Embedded Systems II: Mobile Platforms	
CprE 488*	Embedded Systems Design	
CprE 458	Real-Time Systems	
<b>Networking</b>		
+CprE 489	Computer Networking & Data Comm	(substitute for EE technical elective)
CprE 531*	Information Systems Security	
CprE 454*	Distributed & Network Operating Systems	
CprE 458	Real-Time Systems	
CprE 530	Advanced Protocols & Network Security	
<b>Security</b>		
+CprE 431	Basics of Information System Security	(substitute for EE technical elective)
CprE 454*	Distributed & Network Operating Systems	
CprE 530*	Advanced Protocols & Network Security	
CprE 532	Information Warfare	
<b>VLSI</b>		
EE 224	Signals and Systems I (EE Tech Elect)	
CprE 330*	Integrated Electronics	
CprE 465*	Digital VLSI Design	
CprE 388	Embedded Systems II: Mobile Platforms	
CprE 488	Embedded Systems Design	