Requirements for the B.S. Degree in Computer Engineering

Department of Computer Science and Engineering, University of Central Arkansas   3/25/22 revised

CENG Required Courses (55 hours)

Number	Title	Prerequisites
ENGR 1301	Intro. Engineering	
CSCI 1470	Computer Science I	MATH 1390
CSCI 1480	Computer Science II	CSCI 1470

ENGR 3416	Microprocessor Sys.	ENGR 3415
ENGR 4311	Senior Design 1	*
ENGR 4312	Senior Design 2 **[Z]**	**
CSCI 4321	Ethical Impl. **[D, R]**	Junior/senior status, CSCI 2320
ENGR 4450	Embedded Systems	ENGR 3416
CSCI 4490	Software Eng. **[Z]**	CSCI 3381

CENG Elective Courses (9 hours)

Number	Title	Prerequisites
ENGR 3340	Image Processing	Junior/senior status
ENGR 3447	Microelectronics	ENGR 2447
ENGR 4315	Signal Processing	ENGR 3301
CSCI 3xxx/4xxx	Any upper division CSCI course***	
CSEC 3xxx/4xxx	Any upper division CSEC course	

Math Required Courses (20 hours)

Number	Title	Prerequisites
MATH 1496	Calculus I	(MATH 1390, 1392)/MATH 1486
MATH 1497	Calculus II	MATH 1496
MATH 2311	Elementary Statistics	MATH 1360/1390
CSCI 2330	Discrete Math.	CSCI 1480
MATH 3320	Linear Algebra **[I]**	MATH 1497/ CSCI 2330
MATH 3331	Differential Eq. I **[C]**	MATH 1497

Science Required Courses (12 hours)

Number	Title	Prerequisites
BIOL 1400 or BIOL 1440	Exp. Concepts in Biology Principles of Biology I	CHEM 1301
PHYS 1441	University Physics I	MATH 1496
PHYS 1442	University Physics II	PHYS 1441

* 2.75 GPA or higher in ENGR and PHYS courses and consent of instructor

** C or better in ENGR 4311 during the previous semester and consent of instructor

*** Except those that are already required

Notes:

1. Prerequisite columns: "A,B" means "A and B"; "A/B" means "A or B".

2. UCA Upper Division Core: Communication **[C]**, Critical Inquiry **[I]**, Diversity **[D]**, Responsible Living **[R]**, Capstone **[Z]**

For additional information, consult your academic advisor or visit https://bit.ly/2FbxMjV