Computer Engineering, BSCEG

Graduation Planning Strategy (GPS) 2024-2025

WRIGHT STATE UNIVERSITY | COMPUTER SCIENCE AND ENGINEERING

Name & UID: _____

Program Total: 120

Make Full Major Admission Appointment with your advisor after successfully completing ENG1100, CS1180, CS1181, and MTH2570 or CS2200 with a with a grade of C or above; a Wright State University 2.25 GPA and 24 or more semester hours.

Year One

* Minimum grade of C required

Course		Cr	Semester	Grade	Course Name	Prerequisites
CS1180/L*	IW	4			Computer Science I	MPL40 or MTH1280
ENG1100*		3			Academic Writing and Reading	
EGR 1980		3			First Year Seminar	
CS2200/R* OR MTH2570*		4			Discrete Structures & their Algorithms	MPL40 or MTH1280
					Discrete Mathematics for Computing	MTH 1280 or MPL40
CS1181/L*	IW	4			Computer Science II	CS1180* and (MTH1280 or MPL40)
MTH2300*		4			Calculus I	MPL50 or MTH1350
CEG2350/L		4			Operating System Concepts & Usage	CS1160 or CS1180 or CEG2170
CS1000		3			Technology & Society	None
		3			Wright State Core	Suggested Arts / Humanities

Total Credit Hours 32

Year Two

Course		Cr	Semester	Grade	Course Name	Prerequisites
CEG3310/L*		4			Computer Organization	CS1181* or (CEG2170* and (CEG3320 or EE2000))
PHY2400/L/R		5			General Physics I	EGR1010* or MTH2300
MTH2310*		4			Calculus II	MTH2300
CEG3320/L OR EE 2000/L*	IW	4			Digital System Design	CS1180 or CS1160 or CEG2170 and (MTH1280 or MPL40)
					Digital Design with HDL	
CS3100*		3			Data Structures & Algorithms	CS1181* and CEG3310* and (MTH2570 or CS2200)
PHY2410/L/R		5			General Physics II	PHY2400 and MTH2300 and MTH2310 (MTH2310 can be taken concurrently)
MTH2350		4			Differential Equations with Matrix Algebra	MTH2310
EGR3350 OR ENG2140	FM	3			Technical Communications for Egr & CS	ENG1100 or ENG1110 or ENG1130 or ENG1140
					Research, Tech Writing & Presentation for Sci & Egr	ENG1100* or ENG1110* or ENG 1130* or ENG1140* (cannot take if have credit for ENG2100)

Total Credit Hours 32

Year Three

Course		Cr	Semester	Grade	Course Name	Prerequisites
		3			Wright State Core	Suggested History
CEG4330/L OR EE 4620/L OR CEG 4324/L	FM	4			Microprocessor-Based Embedded Systems	CEG3320 or (EE2000 and (CEG2170 or CS1160 or CS1180))
					Digital Integrated Circuit design with PLDS & FPGAs	EE 2000/L C minimum or CEG 3320
EE2010/L*		4			Analog Circuit Theory	MTH 2300* or EGR 1010/L*
CEG4350	FM	3			Operating System Internals and Design	CS3100* and CEG3310* and CEG2350
ISE2211 OR		3			Statistics for Engineers	EGR1010 or MTH2300
STT3600					Applied Statistics I	MTH2310 (can be taken concurrently)
EE3210*		3			Linear Systems I	EE2010/L* and MTH2310*
		3			Wright State Core	Suggested Element Social Science
		3			3000 - level CS/CEG/EE Technical Elective	
	FM	3			4000 - level CS/CEG/EE Technical Elective	

Total Credit Hours 29

Year Four

Course		Cr	Semester	Grade	Course Name	Prerequisites
EE3310/L		4			Electronic Devices and Circuits	EE2010/L* or EE2011/L*
CEG4980	IW FM	3			Team Projects I	(CS3100* and (EGR3350 or ENG2140) or (CEG3400 and CS3170 and (EGR3350 or ENG2140)) and Department Permission
	FM	3			4000 - level CS/CEG/EE Technical Elective	
		3			General Elective	
		3			Wright State Core	Suggested Element Social Science
	FM	3			4000 - level CS/CEG/EE Technical Elective	
CEG4981	FM	3			Team Projects II	CEG 4980
		3			General Elective	
		3			General Elective	

Total Credit Hours 28

Additional Natural Science (8 credit hours)

BIO 1120/L, BIO 1150/L, CHM 1210/L/R, CHM 1220/L/R, EES 2510, or EES 2550

A minimum of two core courses must be designated as MC and IW. A minimum of two courses in the major must be IW.

Computer Science, Computer Engineering or Electrical Engineering Tech Electives (12 credit hours) 3 credit hours of 3000 level and 9 credit hours of 4000 level classes from CS or CEG Some technical electives require additional pre-requisites please check specific course descriptions.

General Electives (8 credit hours) General Elective courses may be any course taken for credit. Can use 2 crdt hrs of KNH for General Elective

Notes: CONSULT uAchieve for complete and updated course listings