



**WRIGHT STATE
UNIVERSITY**

Bachelor of Science in Electrical & Computer Engineering Technology

Program Guide 2019-2020

Student's Name _____ UID# _____

First Year		Sem	Grade	(31 annual credit hours)	Pre-requisites	Fa	Sp	Su
ENG	1100	3.0	___	___	Academic Writing and Reading.....ACT 23 or SAT Verbal 530 or WPL 40	★	a	a
EE	1000	1.0	___	___	Intro to Electrical Engineering.....	★	•	•
MTH	2300	4.0	___	___	Calculus I.....MTH 1350 or MPL 50	★	a	a
___	___	3.0	___	___	Social Sciences (E-5).....Note 7	★	a	a
EE	2000	3.0	___	___	Digital Design with HDLMPL 40 or MTH 1280 with a minimum grade of C	★	a	•
EE	2000L	1.0	___	___	Digital Design with HDL Laboratory... (MPL 40 or MTH 1280 with a minimum grade of C), EE 2000c	★	a	•
___	___	3.0	___	___	Arts/Humanities (E-4).....Note 7	a	★	•
CEG	2170	4.0	___	___	Introduction to C ProgrammingMTH 1280 or MPL 40	a	★	•
CEG	2170L	0.0	___	___	Introduction to C Programming Lab.....CEG 2170c	a	★	•
PHY	2400	4.0	___	___	General Physics I.....(C or higher in EGR 1010 or MTH 2300), PHY 2400Lc, and PHY 2400Rc	a	★	a
PHY	2400L	1.0	___	___	General Physics I Laboratory.....PHY 2400c	a	★	a
MTH	2310	4.0	___	___	Calculus II.....MTH 2300	a	★	a
Credit Hours per Semester in the Model Program.....						15	16	0

Second Year		Sem	Grade	(30 annual credit hours)	Pre-requisites	Fa	Sp	Su
PHY	2410	4.0	___	___	General Physics IIMTH 2310c, PHY 2400, PHY 2410Lc, and PHY 2410Rc	★	a	a
PHY	2410L	1.0	___	___	General Physics II LaboratoryPHY 2410c	★	a	a
EE	2010	3.0	___	___	Circuit Analysis I(C or better in ENG 1100 and MTH 2310) and PHY 2410/Lc	★	a	•
EE	2010L	1.0	___	___	Circuit Analysis I LaboratoryEE 2010c	★	a	•
EE	3510	3.0	___	___	Continuous and Discrete Linear Systems.....C or better in EE 2010/L	★	•	•
EGR	3350	3.0	___	___	Technical Communication for Engineers and Scientists...ENG 1100 & full major standing (Note 11)	★	a	•
CEG	2171	4.0	___	___	C++ Programming for Scientists & Engineers.....C or higher in CEG 2170, CEG 2171Lc	a	★	•
CEG	2171L	0.0	___	___	C++ Programming for Scientists & Engineers Lab.....CEG 2171c	a	★	•
EE	4120	3.0	___	___	Industrial ControlsEE 3510 or EE 3210, & CEG 2170/L or ME 1020	a	★	•
EE	4120L	1.0	___	___	Industrial Controls LabEE 4120c	a	★	•
EE	3310	3.0	___	___	Electronic Devices and Circuits.....MTH 2300, (C or higher in EE 2010/L)	a	★	•
EE	3310L	1.0	___	___	Electronic Devices and Circuits Laboratory.....EE 3310c	a	★	•
___	___	3.0	___	___	Additional CoreNote 7	a	★	a
Credit Hours per Semester in the Model Program.....						15	15	0

Third Year		Sem	Grade	(33 annual credit hours)	Pre-requisites	Fa	Sp	Su
CS	2200	4.0	___	___	Discrete Structures and Their Algorithms...MPL 40 or MTH 1280 C or higher in CS 1200, CS 2200Rc	★	a	•
CS	2200R	0.0	___	___	Discrete Structures and Their Algorithms Recitation.....CS 2200c	★	a	•
CEG	3310	3.0	___	___	Computer Organization.....CEG 2170, EE 2000/L	★	•	•
CEG	3310L	1.0	___	___	Computer Organization Lab.....CEG 3310Lc	★	•	•
CEG	2350	4.0	___	___	Operating System Concepts and Usage.....CEG 2170 or CS1160, or CS 1180	★	a	•
CEG	2350L	0.0	___	___	Operating System Concepts and Usage Lab.....CEG 2170 or CS1160, or CS 1180	★	a	•
EE	4130	3.0	___	___	Continuous Control Systems (C or higher in EE 3210 or ME 3210), MTH 2310	★	a	•
EE	4130L	1.0	___	___	Continuous Control Systems Laboratory.....EE 4130c	★	a	•
EE	4620	3.0	___	___	Digital Integrated Circuit Design...(C or higher in EE 2000/L & C or higher in EE 3210) or CEG 3320	a	★	•
EE	4620L	1.0	___	___	Digital Integrated Circuit Design LaboratoryEE 4620c	a	★	•
___	___	3.0	___	___	Technical Elective.....Note 9	a	★	a
CS	3100	3.0	___	___	Data Structures & Algorithms...(C or higher in CS 1181, CEG 3310), CEG 2350, MTH 2570 or CS 2200	a	★	•
___	___	3.0	___	___	Global Traditions/History (E-3).....Note 7..	a	★	a
EE	4170	3.0	___	___	Digital Control SystemsEE 4130/L	•	★	•
EE	4170L	1.0	___	___	Digital Control Systems Laboratory.....EE 4170c	•	★	•
Credit Hours per Semester in the Model Program.....						16	17	0

Fourth Year		Sem	Grade	(26 annual credit hours)		Pre-requisites	Fa	Sp	Su
EE	4910	3.0	iw	_____	_____	Senior Design Project INote 10 Department Permission	★	•	•
_____	_____	4.0	_____	_____	_____	Technical Elective.....Note 9	★	•	•
_____	_____	3.0	_____	_____	_____	Technical Elective.....Note 9	★	•	•
_____	_____	3.0	_____	_____	_____	Global Traditions (E-3).....Note 7	★	a	a
EE	4920	3.0	iw	_____	_____	Senior Design Project II.....EE 4910	•	★	•
_____	_____	4.0	_____	_____	_____	Technical ElectiveNote 9	•	★	•
_____	_____	3.0	_____	_____	_____	Technical ElectiveNote 9	a	★	•
_____	_____	3.0	_____	_____	_____	Social Sciences (E-5)Note 7	a	★	a
Credit Hours per Semester in the Model Program.....							13	13	0

TOTAL PROGRAM CREDIT HOURS

120.0

NOTES:

1. **Advising is mandatory in order to assure timely completion of the program.** Please see a department advisor as soon as possible to ensure enrollment in the proper courses.
2. Students must meet full major requirements (24+ credit hours completed, 2.25 cumulative grade point average, C or higher in ENG 1100, PHY 2400/2400L, CEG 2170, and (EGR 1010 or MTH 2300) before being allowed to complete junior or senior level coursework.
3. In the right hand columns, (★) denotes the model schedule for a full-time student, (a) denotes "tentatively available", and (•) denotes "not available"
4. **The course(s) on the right side of the guide denote a prerequisite or a co-requisite course.** A course number followed by "c", such as (PHY ####c), denotes a co-requisite (can or must be taken at the same time).
5. See the Undergraduate Catalog for the Wright State Core requirements.
6. In addition to ENG 1100 and EGR 3350 or ENG 2140, students are required to complete two Integrated Writing "iw" courses from the Wright State Core. This may include the "iw" course EGR 1010.
7. Students must also complete two Multicultural Competence courses "MC" courses from the Wright State Core. Refer to the university catalog for additional information.
8. Student must complete at least one focus area in its entirety.
9. Technical electives are 2000+ level courses from colleges of Engineering, Science and Math, or Business. Science courses should be natural or physical science courses. Students may take one of the following 1000-level courses: EGR1010, MTH1350, EGR1980, CS1160, CS1180, or ME1020. Redundant coursework (i.e. ISE 2211, MS 2040, STT 3630, STT 2640) will not be accepted. In addition, technical electives may include 1 semester hour of internship credit (EE4810, EE4820, or EE4830). The department also has a suggest list of technical elective course above.
10. **Senior Design I (EE 4910) requires Department Permission.** Students who have 30 hours or less remaining in the program or are within two semesters of completing the BSEE program, on an advisor-approved program of study, can register for Senior Design.
11. Student may take EGR 3350 or ENG 2140 to meet the program's technical writing requirement.