

Bachelor of Science in Electrical & Computer Engineering Technology Program Guide 2019-2020

Student's Name					UID#	UID#				
First	Year		Sem	Grade	(31 annual credit hours) Pre-requisites	Fa	Sp	Su		
ENG	1100	3.0			Academic Writing and ReadingACT 23 or SAT Verbal 530 or WPL 40	*	а	а		
EE	1000	1.0			Intro to Electrical Engineering	*	•	•		
MTH	2300	4.0			Calculus I	\star	а	а		
		3.0			Social Sciences (E-5)Note 7	\star	а	а		
EE	2000	3.0			Digital Design with HDLMPL 40 or MTH 1280 with a minimum grade of C	*	а	•		
EE	2000L	1.0			Digital Design with HDL Laboratory (MPL 40 or MTH 1280 with a minimum grade of C), EE 2000c	*	а	•		
		3.0			Arts/Humanities (E-4)	а	*	•		
CEG	2170	4.0			Introduction to C ProgrammingMTH 1280 or MPL 40	а	*	•		
CEG	2170L	0.0			Introduction to C Programming Lab CEG 2170c	а	*	•		
PHY	2400	4.0			General Physics I(C or higher in EGR 1010 or MTH 2300), PHY 2400Lc, and PHY 2400Rc	а	*	а		
PHY	2400L	1.0			General Physics I Laboratory PHY 2400c	а	*	а		
MTH	2310	4.0			Calculus II MTH 2300	а	*	а		
					Credit Hours per Semester in the Model Program	. 15	16	0		
Seco	nd Yea	ar	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	*	а	а		
PHY	2410L	1.0			General Physics II LaboratoryPHY 2410c	*	а	а		
EE	2010	3.0			Circuit Analysis I(C or better in ENG 1100 and MTH 2310) and PHY 2410/Lc	*	а	•		
EE	2010L	1.0			Circuit Analysis I LaboratoryEE 2010c	*	а	•		
EE	3510	3.0			Continuous and Discrete Linear Systems	*	•	•		
EGR	3350	3.0			Technical Communication for Engineers and ScientistsENG 1100 & full major standing (Note 11)	*	а	•		
CEG	2171	4.0			C++ Programming for Scientists & Engineers	а	*	•		
CEG	2171L	0.0			C++ Programming for Scientists & Engineers Lab	а	*	•		
EE	4120	3.0			Industrial ControlsEE 3510 or EE 3210, & CEG 2170/L or ME 1020	а	*	•		
EE	4120L	1.0			Industrial Controls LabEE 4120c	а	*	•		
EE	3310	3.0			Electronic Devices and CircuitsMTH 2300, (C or higher in EE 2010/L)	а	*	•		
EE	3310L	1.0			Electronic Devices and Circuits Laboratory	а	*	•		
		3.0			Additional Core	а	*	а		
					Credit Hours per Semester in the Model Program	. 16	14	0		
Third	d Year		Sem	Grade	(33 annual credit hours) Pre-requisites	Fa	Sp	Su		
CS	2200	4.0			Discrete Structures and Their AlgorithmsMPL 40 or MTH 1280 C or higher in CS 1200, CS 2200Rc	\star	а	•		
CS	2200R	0.0			Discrete Structures and Their Algorithms Recitation	*	а	•		
CEG	3310	3.0			Computer Organization	*	•	•		
CEG	3310L	1.0			Computer Organization Lab	*	•	•		
CEG	2350	4.0			Operating System Concepts and UsageCEG 2170 or CS1160, or CS 1180	*	а	•		
CEG	2350L	0.0			Operating System Concepts and Usage LabCEG 2170 or CS1160, or CS 1180	*	а	•		
EE	4130	3.0			Continuous Control Systems (C or higher in EE 3210 or ME 3210), MTH 2310	*	а	•		
EE	4130L	1.0			Continuous Control Systems LaboratoryEE 4130c	*	а	•		
EE	4620	3.0			Digital Integrated Circuit Design(C or higher in EE 2000/L & C or higher in EE 3210) or CEG 3320	а	*	•		
EE	4620L	1.0			Digital Integrated Circuit Design LaboratoryEE 4620c	а	*	•		
		3.0			Technical Elective	а	*	а		
CS	3100	3.0			${\sf Data\ Structures\ \&\ Algorithms_(C\ or\ higher\ in\ CS\ 1181,\ CEG\ 3310),\ CEG\ 2350,\ MTH\ 2570\ or\ CS\ 2200}$	а	*	•		
		3.0			Global Traditions/History (E-3)	а	*	а		
EE	4170	3.0			Digital Control Systems	•	*	•		
EE	4170L	1.0			Digital Control Systems LaboratoryEE 4170c	•	*	•		

Credit Hours per Semester in the Model Program......16 17

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

TOTAL PROGRAM CREDIT HOURS

120.0

NOTES:

- 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 2100 or ENG 2140 to meet the program's technical writing requirement.