

**Name:** \_\_\_\_\_ **UID:** \_\_\_\_\_ **Reviewed by:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Directions:**

Refer to the WSU Catalog and BSECET Program description on the back side of this sheet and create a list of courses by term. Meet with a program advisor to review the graduation plan at the start of the program and periodically throughout to make sure all courses satisfy requirements for Wright State University, the College of Computer Science and Engineering, and the Department of Electrical Engineering. The model below is a 4-year plan for a student who begins without prior college credit.

**Year 1. ECET pre-major. Beginning math, science, electrical engineering, and WSU Core.**

Course	CR	WSU Core	Sem	Gr	Title	(Prerequisites)
ENG 1100	3	E1			Academic Writing and Reading .....	(ACT 23 or SAT Verbal 530 or WPL 40)
	3	E5, IW/MC			WSU Core: Any Social Science (Non-EC) .....	(see catalog)
MTH 2240	4	E2			Applied Calculus .....	(MTH 1350 or MPL 40)
CS 1180/L	4				Computer Science I and Lab (recommended) .....	(MPL 40 or MTH 1280 minimum of C)
EE 1000	1				Intro to Electrical Engineering .....	(enrolled in CECS)
STT 2640	4	E2 (Add'l)			Elementary Statistics .....	(MPL 30)
PHY 1110/L/R	5	E6			Principles of Physics I and Lab and Recitation .....	(MTH 1280 or MPL 40)
CS 1181/L	4				Computer Science II and Lab (recommended) ....	(CS 1180 minimum of C and MTH 1280 or MPL 40)
	28				Credit hours per semester in the model program: Fa (15), Sp (13)	

**Year 2. ECET pre-major and beginning full-major. Math, science, electrical engineering, and WSU Core.**

Course	CR	WSU Core	Sem	Gr	Title	(Prerequisites)
CS 2200/R	4				Discrete Structures and Their Algorithms and Recitation.....	(CSE Department approval)
PHY 1120/L/R	5	E6			Principles of Physics II and Lab and Recitation .....	(PHY 1110)
EE 2000/L	4				Digital Design with HDL and Lab.....	(MPL 30 or MTH 1280 minimum of C)
EE 2011/L	4				Analog Circ. Techs. and Lab ... (ENG 1100 min. of C, MTH 2240 min. of C and PHY 1120/L as co-req)	
	3	E4, IW/MC			WSU Core: Any Arts/Humanities.....	(see catalog)
CEG 2350/L	4				Operating System Concepts and Usage.....	(CS 1180)
CEG 3310/L	4				Computer Organization.....	(CS 1181 minimum of C)
EE 3510	3				Continuous and Discrete Linear Systems I.....	(EE 2011/L minimum of C and MTH 2240)
	31				Credit hours per semester in the model program: Fa (17), Sp (14)	

**Year 3. ECET full-major. Advanced math, electrical engineering, and WSU Core.**

Course	CR	WSU Core	Sem	Gr	Title	(Prerequisites)
	4	E6 (Add'l)			WSU Core: CHM 1210/L/R, BIO 1120/L or 1150/L.....	(see catalog)
EGR 3350	3	E1			Tech Comm for Engineers & Comp Scientists.....	(ENG 1100)
EE 3310/L	4				Elec. Devices & Circuits and Lab.....	(EE 2011/L minimum of C and MTH 2240)
EE 4120/L	4				Industrial Controls & Automation and Lab .....	(CS 1180)
	3	E3, IW/MC			WSU Core: Any Global Traditions (Interdisciplinary Global Studies) .....	(see catalog)
CS 3100	3				Data Structures and Algorithms.....	(CS 1181 minimum of C and CEG 3310 and CS 2200)
EE 4130/L	4				Continuous Control Systems and Lab.....	(EE 3510 minimum of C and MTH 2240)
EE 4620/L	4				Dig. Integrated Circuit Design with PLDs and FPGAs and Lab .....	(EE 2000/L minimum of C)
	3				4000-level CS/CEG/EE course, excludes senior design/team project/internship.....	(see catalog)
	32				Credit hours per semester in the model program: Fa (15), Sp (17)	

**Year 4. ECET full-major. Electrical engineering senior design and WSU Core.**

Course	CR	WSU Core	Sem	Gr	Title	(Prerequisites)
	3	E3			WSU Core: CLS 1500 or HST 1100 or HST 1200.....	(see catalog)
EE 4910	3				Electrical Engr. Senior Design Project I .....	(Department approval)
	4				4000-level CS/CEG/EE course w/lab, excludes senior design/team project/internship ..	(see catalog)
	4				Department approved Tech Elective .....	(see catalog)
	3	E5, IW/MC			WSU Core: Any Social Science (EC recommended).....	(see catalog)
EE 4920	3				Electrical Engr. Senior Design Project II .....	(Department approval)
	3				Department approved Tech Elective .....	(see catalog)
	3				Department approved Tech Elective .....	(see catalog)
	3				General Elective.....	(see catalog)
	29				Credit hours per semester in the model program: Fa (14), Sp (15)	

The Bachelor of Science in Electrical and Computer Engineering Technology (BSECET) program requires 120 hours of course work from Wright State University (WSU) Core, Pre-major, Full-major, Technical Electives, Senior Design, and General Elective courses.

**A. 43 hours of WSU Core (see Table 1).**

WSU Core consists of at least 38 hours (Hrs) from six areas called Elements and includes two integrated writing (IW) and two multicultural competency (MC) courses.

Reference: <https://www.wright.edu/academic-affairs/programs/general-education/program-requirements>.

**Table 1. WSU Core courses in BSECET program.**

<i>WSU Core by Element</i>	<i>Hrs</i>	<i>Acceptable in BSECET</i>
E-1 Communications – 1st year	3	ENG 1100
E-1 Communications – 2nd year	3	EGR 3350 or ENG 2140
E-2 Mathematics	4	MTH 2240
E-3 Global Traditions – History	3	CLS 1500 or HST 1100 or HST 1200
E-3 Global Traditions – Interdisciplinary Global Studies	3	Any E-3 (IW,MC) course
E-4 Arts/Humanities	3	Any E-4 (IW,MC) course
E-5 Social Science (1st category)	3	Any E-5 (IW,MC) course in Economics (EC)
E-5 Social Science (2nd category)	3	Any E-5 (IW,MC) non-econ (EC) course
E-6 Natural Science with lab	5	PHY 1110/L/R
E-6 Natural Science with lab	5	PHY 1120/L/R
Additional WSU Core from E-2	4	STT 2640 (preferred) or STT 1600 or EGR 1010
Additional WSU Core from E-6	4	BIO 1120 or BIO 1150 or CHM 1210/L/R
<b>Total hours from WSU Core</b>	<b>43</b>	

**B. 17 hours of Pre-major courses (see Table 2).**

Students are admitted with pre-major status to the College of Computer Science and Engineering upon completion of 24 or more semester hours of college-level work, a 2.25 cumulative GPA at Wright State and in all academic work, a C or higher in ENG 1100, and completion of the following courses with grades of C or higher: CEG 2170 or CS 1160 or CS1180, PHY 1110/1100L, and MTH 2240. Promotion to full-major occurs upon completion of the pre-major courses listed in Table 2.

**Table 2. Pre-major courses in BSECET program.**

<i>Course</i>	<i>Hrs</i>	<i>Prerequisites</i>
EE 1000 Introduction to Electrical Engineering	1	CECS student
EE 2000 Digital Design with HDL	3	MTH 2300 (minimum of C)
EE 2000L Digital Design with HDL Lab	1	EE 2000 co-requisite
EE 2011 Analog Circuit Techniques	3	PHY 1120/L co-req and MTH 2240 (minimum of D)
EE 2011L Analog Circuit Techniques Lab	1	EE 2011 co-requisite
CS 2200 Discrete Structures & Their Algo.	4	CSE Department approval
CS 2200R Disc. Structures & Their Algo. Recit.	0	CS 2200 co-requisite
Plus one computer programming course:		
CS 1180 Computer Science I with Lab, or CEG 2170 Intro to C Prog. for Sci. & Engrs. or CS 1160 Intro to Computer Programming I, or	4	CS 1180/L is preferred MTH 2300 satisfies programming course prerequisites
<b>Total hours from pre-major</b>	<b>17</b>	

**C. 41 hours of Full-major courses (see Table 3).**

Before registering for full-major ECET courses listed in Table 3, students must satisfactorily complete the courses listed in Section B including the BSECET pre-major courses listed in Table 2.

**Table 3. Full-major courses in BSECET program.**

<i>Course</i>	<i>Hrs</i>	<i>Acceptable for BSEE</i>
CS 1181 Computer Science II	4	CS 1180 (minimum of C) and (MTH 1280 (minimum of D) or equivalent)
CS 1181 Computer Science II Lab	0	
CS 3100 Data Structures and Algorithms	3	CS 1181 (minimum of C) and CEG 3310 (minimum of D) and CS 2200 (minimum of D)
CEG 2350 Operating Syst. Concepts & Usage	4	CS 1160 (minimum of D) or CS 1180 (minimum of D) or CEG 2170 (minimum of D)
CEG 2350 Oper. Syst. Concepts & Usage Lab	0	
CEG 3310 Computer Organization	4	CS 1181 (minimum of C)
CEG 3310 Computer Organization Lab	0	
EE 3510 Continuous & Discrete Linear Sys.	3	EE 2011 (minimum of C) and MTH 2240 (minimum of D)
EE 3310 Electronic Devices & Circuits	3	EE 2011 and EE 2011L (each minimum of C) and MTH 2240 (minimum of D)
EE 3310L Electronic Devices & Circuits Lab	1	
EE 4120 Industrial Controls & Automation	3	CS 1160 (minimum of D) or CS 1180 (minimum of D) or CEG 2170 (minimum of D)
EE 4120L Indst. Controls & Automation Lab	1	
EE 4130 Continuous Control Systems	3	EE 3510 (minimum of C) and MTH 2240 (minimum of D)
EE 4130L Continuous Control Systems Lab	1	
EE 4620 Digital Integrated Circuit Design with PLDs and FPGAs	3	EE 2000 and EE 2000L (each minimum of C)
EE 4620L Digital Integrated Circuit Design with PLDs and FPGAs Lab	1	
CS/CEG/EE 4000-level courses with at least one lab and excluding EE 4910, EE 4920, EE 4810, EE 4820, EE 4830	7	See catalog for individual courses
<b>Total hours from full-major</b>	<b>41</b>	

**D. 10 hours of Technical Electives.**

Students complete 2000+ level courses from College of Engineering and Computer Science, or College of Science and Math, or College of Business. Science courses must be natural or physical science courses. Students may take one of the following 1000-level courses: EGR1010, MTH1350, CS1161, CS1181, or ME1020. Redundant coursework (e.g. ISE 2211, MS 2040, STT 3630, STT 2640) will not be accepted. Technical electives may include 1 semester hour of internship credit (EE4810, EE4820, or EE4830), and may include 3 hours of study abroad (EGR4980) with department approval.

**E. 6 hours of EE Senior Design Project.**

Students must complete BSECET Full-major courses listed in Table 3 and have an overall WSU GPA of 2.0 to receive EE Department approval to register for EE 4910 and EE 4920.

**Table 4. Senior Design courses in BSECET program.**

<i>Course</i>	<i>Hrs</i>	<i>Prerequisites</i>
EE 4910 EE Senior Design Project I	3	EE Department approval
EE 4920 EE Senior Design Project II	3	EE Department approval
<b>Total hours of senior design</b>	<b>6</b>	

**F. 3 hours of General Elective courses.**

General Elective courses may be selected from all WSU courses at the 1000 level or above. Courses may not be redundant with any course in WSU Core, Pre-major, Full-major, or Technical Electives.