



Bachelor of Science in Electrical Engineering Pre-Med

Program Guide
2017-2018

Student's Name _____ UID# _____

First Year	Sem	Grade	(40 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 EE and EP.....	★	•	•
MTH 2300	4.0	___	___	Calculus I.....MTH 1350 or MPL 50	★	a	a
BIO 1120	4.0	___	___	Cells and GenesWPL 30, BIO1120Lc	★	a	•
BIO 1120	1.0	___	___	Cells and Genes LabBIO1120c	★	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	•
CHM 1210	3.0	___	___	General Chemistry I.....CHM 1010 Min Grade of D & MPL 30, CHM1210Lc; CHM1210Rc	★	a	a
CHM 1210L	2.0	___	___	General Chemistry I Lab....CHM 1010 Min Grade of D & MPL 30, CHM1210c; CHM1210Rc	★	a	a
CHM 1210R	0.0	___	___	General Chemistry I Recitation.....CHM1210c; CHM1210Lc	★	a	a
CEG 2170	4.0	___	___	Introduction to C ProgrammingMTH 1280 or MPL 40	a	★	•
CHM 1220	3.0	___	___	General Chemistry II.....CHM 1210 & CHM 1210L Min Grade of D, CHM1220Lc; CHM1220Rc	a	★	a
CHM 1220L	2.0	___	___	General Chemistry II Lab....CHM 1210 & CHM 1210L Min Grade of D, CHM1220c; CHM1220Rc	a	★	a
CHM 1210R	0.0	___	___	General Chemistry I Recitation.....CHM1220c; CHM1220Lc	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.....					22	18	0

Second Year	Sem	Grade	(37 annual credit hours)	Pre-requisites	Fa	Sp	Su
PHY 2410	4.0	___	___	General Physics II.....MTH 2310c, PHY 2400, PHY 2410Lc, and PHY 2410Rc	★	a	a
PHY 2410L	1.0	___	___	General Physics II Laboratory.....PHY 2410c	★	a	a
EE 2010	3.0	___	___	Circuit Analysis IC or better in ENG 1100 and MTH 2310 & PHY 2410/Lc	★	a	•
EE 2010L	1.0	___	___	Circuit Analysis I Laboratory.....EE 2010c	★	a	•
MTH 2320	4.0	___	___	Calculus IIIMTH 2310	★	a	a
CHM 2110	3.0	___	___	Organic Chemistry I.....CHM 1220 & CHM 1220L Min Grade of D, CHM 2110Lc; CHM2110Rc	★	a	•
CHM 2110L	2.0	___	___	Organic Chemistry I Lab....CHM 1220 & CHM 1220L Min Grade of D, CHM 2110c; CHM2110Rc	★	a	•
CHM 2110R	0.0	___	___	Organic Chemistry I Recitation.....CHM 2110c; CHM 2110Lc	★	a	•
EE 3210	3.0	___	___	Linear Systems I.....(C or higher in EE 2010/L), (C or higher in CEG 2170), MTH 2310	a	★	•
EE 3310	3.0	___	___	Electronic Devices and Circuits.....MTH 2300, (C or higher in EE 2010)	a	★	•
EE 3310L	1.0	___	___	Electronic Devices and Circuits Laboratory.....EE 3310c	a	★	•
EGR 3350	3.0	___	___	Technical Communication for Engineers and Scientists.....ENG 1100 & full major standing (Note 9)	a	★	a
MTH 2350	4.0	___	___	Differential Equations with Matrix Algebra.....MTH 2310	a	★	a
CHM 2120	3.0	___	___	Organic Chemistry II.....CHM 2110 & CHM 2110L Min Grade of D, CHM 2120Lc; CHM2120Rc	a	★	•
CHM 2120L	2.0	___	___	Organic Chemistry II Lab....CHM 2110 & CHM 2110L Min Grade of D, CHM 2120c; CHM2120Rc	a	★	•
CHM 2120R	0.0	___	___	Organic Chemistry II Recitation.....CHM 2120c; CHM 2120Lc	a	★	•
Credit Hours per Semester in the Model Program.....					18	19	

Third Year					Sem Grade (22 annual credit hours)		Pre-requisites	Fa	Sp	Su
EE	3450	3.0	___	___	Introduction to Electromagnetics.....	(C or higher in EE2010/L), PHY 2410/L, MTH 2320	★	a	•	
EE	3450L	1.0	___	___	Intro to Electromagnetics Laboratory	EE 3450c	★	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	4000	3.0	___	___	Linear Systems II.....	(C or higher in EE 3210), MTH 2310	★	a	•	
EE	4210	3.0	___	___	Digital Communication.....	EE 3210, EE 3260c	a	★	•	
EE	4210L	1.0	___	___	Digital Communication Laboratory EE 4000	EE 4210c	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 Laboratory	EE 4620c	a	★	•	
EE	3260	3.0	___	___	Random Signals and Noise.....	(C or higher in EE 4000), MTH 2350 3210	a	★	•	
Credit Hours per Semester in the Model Program.....								11	11	

Third Year Rec					Sem Grade (Recommended for MCAT preparation)		Pre-requisites	Fa	Sp	Su
ANT	3100	4.0	___	___	Human Structure and Function I.....	CHM 1020 or CHM 1210 Min Grade of C, ANT 3100Lc	★	a	•	
ANT	3100L	0.0	___	___	Human Structure and Function I Lab.....	CHM 1020 or CHM 1210 Min Grade of C, ANT 3100c	★	a	•	
ANT	3120	4.0	___	___	Human Structure and Function II.....	ANT 3100 Min Grade of C, ANT 3200Lc	a	★	•	
ANT	3120L	0.0	___	___	Human Structure and Function II Lab.....	ANT 3100 Min Grade of C, ANT 3100c	a	★	•	
Credit Hours per Semester in the Model Program.....								4	4	

Fourth Year					Sem Grade (21 annual credit hours)		Pre-requisites	Fa	Sp	Su
EE	4910	2.0 iw	___	___	Senior Design Project	Note 8 Department Permission	★	•	•	
SOC	2000	3.0	___	___	Introduction to Sociology.....	(IW, Social Science)	★	a	a	
PSY	1010	4.0	___	___	Introduction to Psychology.....	(Social Science) (PSY1010Lc)	★	a	a	
PSY	1010L	0.0	___	___	Introduction to Psychology Lab.....	(Social Science) (PSY1010c)	★	a	a	
___	___	3.0	___	___	Global Traditions/History (E-3).....	(Note 5)	★	a	a	
EE	4920	3.0 iw	___	___	Senior Design Project II.....	EE 4910	•	★	•	
___	___	3.0	___	___	Arts/Humanities (E-4).....	(Note 5)	a	★	a	
___	___	3.0	___	___	Global Traditions (E-3).....	(Note 5)	a	★	a	
Credit Hours per Semester in the Model Program.....								12	9	0

Fourth Year Rec					Sem Grade (Recommended for MCAT preparation)		Pre-requisites	Fa	Sp	Su
BIO	1150	4.0	___	___	Organisms and Ecosystems.....	WPL 30, BIO1150Lc	a	★	•	
BIO	1150	1.0	___	___	Organisms and Ecosystems Lab	BIO1150c	a	★	a	
Credit Hours per Semester in the Model Program.....								0	5	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 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 and or additional pre-requisite requirements.
6. In addition to ENG 1100 and EGR 3350 or ENG 2140, all students are required to complete two Integrated Writing "iw" courses from the Wright State Core. Students must also complete two Multicultural Competence courses "MC" courses from the Wright State Core. Refer to the university catalog for additional information.
7. Additional technical electives may include 1 semester hour of internship credit (EE4810, EE4820, or EE4830).
8. **Senior Design I (EE 4910) requires Department Permission.** Students can only be admitted to S.D. if they have completed at least 30 hours of EE course work or they are within two semesters of completing the BSEE program on an advisor approved program of study.
9. Student may take EGR 3350 or ENG 2100 or ENG 2140 to meet the program's technical writing requirement.