

Name: _____

UID: _____

Guide may be subject to program change

First Year	CR	IWMC	Sem	Gr	Title	Fa	Sp	Su
UVC 1010	1.0				First Year Seminar-----	*	*	*
CHM 1210 ^(C)	3.0				General Chemistry I (E-E)----- (H S CHM, or CHM 1010), (MTH 1280 or ALEKS level 46), CHM 1210Lc	*	a	a
CHM 1210L ^(C)	2.0				General Chemistry I Lab----- CHM 1210c	*	a	a
MTH 2300 ^(C)	4.0				Calculus I (Element B)-----MTH 1350 or MPL 50 or ALEKS 76	*	a	a
ENG 1100 ^(C)	3.0				English (Element A)-----ACT 23 or SAT Verbal 530 or WPL 40	*	a	*
CS 1160(D)	4.0				Intro to Computer Programming----- MPL 30 or DEV 0970 Minimum Grade of P, CS1160L(c)	a	*	*
PHY 2400 ^(C)	4.0				General Physics I (Element E)----- (MTH 2300 or EGR 1010 C or better), PHY 2400Lc	a	*	a
PHY 2400L ^(C)	1.0				General Physics Lab (Element E additional)-----PHY 2400c	a	*	a
MTH 2310	4.0				Calculus II (Element B additional)-----MTH 2300	a	*	a
PSY 1010	4.0	IW			Intro to Psychology (Element D, IE, IW)-----PSY 1010Lc	a	*	a

Credit Hours Per Semester in the Model Program

13 17 0

Second Year	CR	IWMC	Sem	Gr	Title	Fa	Sp	Su
ME 2120 ^(C)	3.0				Statics-----EGR 1010 or MTH 2300 and PHY 2400, ME 2120Rc	*	a	*
ANT 2100 ^(C)	4.0				Human Anatomy and Physiology I-----ANT 2100Lc	*	a	*
OR								
ANT 3100 ^(C)	4.0				Human Structure & Function I----- (CHM 1020 or CHM 1210 C or better), ANT 3100Lc	*	a	a
MTH 2350	4.0				Differential Equations w/Matrix Algebra-----MTH 2310	*	a	a
CHM 1220	3.0				General Chemistry II (Element E additional)-----CHM 1210, CHM 1210L, CHM 1220Lc	*	a	a
CHM 1220L	2.0				General Chemistry II Lab- (Element E additional)-----CHM 1220c	*	a	a
ANT 2120 OR	4.0				Human Anatomy and Physiology II-----ANT 2100 C or Better, ANT 2100Lc	*	*	a
ANT 3120	4.0				Human Structure & Function II-----ANT 3100 C or Better, ANT 3120Lc	*	*	a
PHY 2410	4.0				General Physics II (Element E additional)-----PHY 2400, MTH 2300, {MTH 2310}, PHY 2410Lc	a	*	a
PHY 2410L	1.0				General Physics II Lab (Element E additional)-----PHY 2410c	a	*	a
	3.0				WSU Core Arts & Humanities (Element C)-----	a	*	a
ME 3120	3.0				Mechanics of Materials-----ME 2120 (min grade of C), and CS 1160	a	*	*

Credit Hours Per Semester in the Model Program

16 15 0

Third Year	CR	IWMC	Sem	Gr	Title	Fa	Sp	Su
EE 2010 ^(C)	3.0				Analog Circuit Theory-----EGR 1010(min grade of C), or MTH 2300 (min grade of C), EE2010Lc	*	a	a
EE 2010L ^(C)	1.0				Analog Circuit Theory Lab----- EGR 1010(min grade of C), or MTH 2300 (min grade of C), EE2010c	*	a	a
BME 4440	4.0				Biomaterials-----CHM 1220 and (ANT 2120 or ANT 3120), BME 4440Lc	*	*	*
ISE 2211	3.0				Statistics for Engineers-----EGR 1010 or MTH 2300	*	a	a
EGR 3350	3.0				Tech Comm for Engineers & Computer Scientists (Element A additional)-----ENG 1100	*	a	*
OR								
ENG 2140	3.0				Rsrch, Tech Writing & Prestation for Scientists and Egr-----ENG 1100 min grad C or ENG 1130 Min Gr C or ENG 1140 Min Gr C	*	a	*
EE 3310	3.0				Electronic Devices and Circuits-----EE 2010 and EE 2010L C or better and MTH 2300, EE 3310Lc	a	*	*
EE 3310L	1.0				Electronic Devices and Circuits Lab-----EE 2010 and EE 2010L C or better and MTH 2300, EE 3310c	a	*	*
EE 3510	3.0				Continuous and Discrete Linear Systems-----EE 2010 C or better and EE 2010L C or better	a	*	*
BME 4421(D)	3.0				Biotransport----- (ANT 2120 or ANT 3120), MTH 2350, CS 1160 and (BME 3212 or ME 2120)	*	*	*
	3.0				**Department Approved Technical Elective-----	a	*	a
ISE 3540 or CS 3840	3.0				Applied Machine Learning-----CS 1160 and (ISE 2211 and MTH 2300)*See back for full list	*	*	*

Credit Hours Per Semester in the Model Program

14 16 0

Fourth Year	CR	IWMC	Sem	Gr	Title	Fa	Sp	Su
BME 4550	4.0				Bioinstrumentation-----ANT 2120 or ANT 3120), EE 3310, EE 3510, BME 4550Lc	*	*	*
	3.0				**Department Approved Technical Elective-----	*	a	a
ISE 4310	3.0				Ergonomics-----ISE 2211	*	*	*
BME 4910(D)	3.0	IW			Senior Design I-----EE 3310, BME 4440, (EGR 3350 or ENG 2140)	*	*	*
BME 4470	3.0				Design of Medical. Devices-----BME 4440 min grade of D	*	*	*
BME 4920(D)	3.0	IW			Senior Design II-----BME 4910	*	*	*
	3.0				**Department Approved Technical Elective-----	a	*	a
	3.0				WSU Core Arts/Humanities (Element C)-----	a	*	a
	3.0				WSU Core Social Science (Element D)-----	a	*	a
	2.0				Additional WSU Core-----	a	*	a

Credit Hours Per Semester in the Model Program

16 14 0

Total Semester Credit Hours = 121.0

Meets or exceeds ABET minimum requirements of 37.5% engineering credit hours(45 semester credit hours).

General Information:

1. **Curriculum A** prepares the graduate for the engineering industry employment. Graduates are also prepared for graduate training in biomedical engineering or in a traditional engineering area.
2. **Curriculum B** also prepares students for entrance test requirements for medical, osteopathic, dental, or veterinary schools. Graduates are also well prepared to pursue graduate training in engineering or the life sciences.
3. **Program Planning** - the student, in cooperation with his/her advisor, should use a Program Guide and the corresponding catalog to plan his/her program. Any problem which arises in connection with a particular Program Guide should be referred to the student's advisor.

Additional Requirements:

- Students are required to have two Multicultural Competence (MC) courses from any of the Wright State Core MC designated courses, Study Abroad courses, or Service Learning courses.
- Students are also required to have two Integrated Writing (IW) courses from the Wright State Core.

Notes:

1. **Use this guide, advisor consultations, and the Undergraduate Catalog to carefully plan a program of study.** Most courses are offered only once or twice a year. Complete mathematics and physics courses early since they are prerequisite to many engineering courses. Delaying these courses may delay completion of the program. Pay close attention to prerequisite and corequisite information listed on the right of the guide.
2. **In the right-hand columns:**
(*) denotes courses in a model program with a non-conflicting schedule for a full-time student.
(a) denotes courses likely to be available.
(•) denotes courses normally not available. Check the Class Schedule for current information.
3. Prerequisites to a course in { } may be taken concurrently with the course.
4. Course number followed by "c" denotes a corequisite course.
5. Independent Study, or Undergraduate Research including Departmental Honors research can fulfill a maximum of four credit hours of TE requirements. Internships can fulfill a maximum of three credit hours or TE requirements.
6. ^(C) = A C or higher is required to move to full major status for CHM 1210/1210(L) or PHY 2400/2400(L) and (MTH 2300), and ENG 1100. Also C or higher is required for ME 2120, (ANT 2100 or ANT 3100), and EE 2010/2010(L) for course pre-requisites.
7. Full list of prerequisites for ISE 3540 and CS 3840 are (CS 1160 or CS 1180 or CEG 2170 or ME 1020) and (ISE 2211 or STT 3600 or STT 3700) and MTH 2300
8. **Additional Core Requirements**
Within the 36 credit hours of the Wright State Core students must successfully complete the following:
 - One Global Inquiry (GI) course
 - Two inclusive Excellence (IE) courses
 - One to two Integrated Writing (IW) courses. To meet degree requirements all students must complete a minimum of three IW courses by choosing either (a) one in the Core and two in the major or (b) two in the Core and one in the major. Students who do not make choices within the 36 required hours of the Core to fulfill the GI, IE and IW requirements will take additional Core hours beyond the minimum of 36.