#### **Approved by Faculty Senate 4/15/10**

### UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 8 Spring 2010

#### ---REQUIREMENTS---

The requirements listed below reflect the undergraduate major curricular changes approved by the Catalog Subcommittee since approval of the last Undergraduate Major Change Bulletin. All curricula are printed in their entirety under the headings Current and Proposed, respectively. The column to the far right indicates the date each change becomes effective.

Heading	Current	Proposed	Effective Date
A minor in biology requires a minimum of 20 hours in Biol coursework including Biol 106, 107, 301 and 8 additional hours at the 300-level or above. No more than 2 hours in Biol 495, 496 or 499 may be included in the 20 hours. 10 credit hours must be earned in residence at WSU. Students who major in biology or zoology cannot be granted a minor in biology.		A minor in biology requires a minimum of 20 hours in Biol coursework including Biol 106, 107, 301 and 8 additional hours at the 300-level or above. No more than 2 hours in Biol 490, 491, 494, 495, 496 or 499 may be included in the 20 hours. At least 9 hours must be upper-division and taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. A minimum cumulative 2.00 gpa is required in all coursework taken in the minor. Students who major in biology or zoology cannot be granted a minor in biology.	8-10
Biological Sciences, revise minor in Zoology	Requires a minimum of 20 hours, including Biol 106, 107, and one of 321, 322, or 324; and 8 additional hours of biological sciences courses focused on animals. No more than 2 hours of Biol 496, 497, 498, or 499 may be included in the 20 hours. Credit hours for the minor must include 9 hours taken in residence at WSU or through WSU-approved education abroad or educational exchange courses.	A minor in zoology requires a minimum of 20 hours, including Biol 106, 107; one of 321, 322, or 324; and 8 additional hours of Biol courses focused on animals. No more than 2 hours of Biol 490, 491, 494, 495, 496, 497 or 499 may be included in the 20 hours. At least 9 hours must be upper-division and taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. A minimum cumulative 2.00 gpa is required in all coursework taken in the minor. Students who major in biology or zoology cannot be granted a minor in biology.	8-10
Electrical Engineering & Computer Science, revise graduation requirements in Computer Engineering	Computer Engineering Requirements (129-Hours) Students may apply for certification into the Bachelor of Science in Computer Engineering degree program after completion of Biol 102 or Chem 105; Cpt S 121, 122; EE 214; Math 171, 172, 216; Phys 201, 202.  No courses listed in this schedule of study may be taken on a pass/fail basis. All	Computer Engineering Requirements (123 Hours) Students may apply for certification into the Bachelor of Science in Computer Engineering degree program after completion of Chem 105; Cpt S 121, 122; EE 214; Math 171, 172, 216; Phys 201, 202.  No courses listed in this schedule of study may be taken on a pass/fail basis. All	8-10

	listed E E and Cpt S courses, require electives, and prerequisites to these		listed E E and Cpt S courses, requi electives, and prerequisites to these		
			f courses must be completed with a grade of		
C or better.			C or better.		
	First Year		First Year		
	First Term	Hours	First Term	Hours	
	Chem 105 [P] (GER)	4	Chem 105 [P] (GER)	4	
	Cpt S 121	4	Cpt S 121	4	
	Engl 101 [W] (GER)	3	Engl 101 [W] (GER)	3	
	Math 171 [N] (GER)	4	Math 171 [N] (GER)	4	
	Second Term	Hours	Second Term	Hours	
	Cpt S 122	4	Cpt S 122	4	
	Math 172	4	Math 172	4	
	Math 216	3	Math 216	3	
	Phys 201 [P] (GER)	4	Phys 201 [P] (GER)	4	
	Second Year		Second Year		
	First Term	Hours	First Term	Hours	
	Cpt S 223	3	E E 214	4	
	E E 214	4	GenEd 110 or 111 [A] (GER)	3	
	GenEd 110 or 111 [A] (GER)	3	Math 220	2	
	Math 220	2	Math 273	2	
	Math 273	2	Phys 202 [P] (GER)	4	
	Phys 202 [P] (GER)	4	Second Term	Hours	
	Second Term	Hours	Cpt S 223	<u>3</u>	
	E E 234	4	E E 234	4	
	E E 261	3	E E 261	3	
	E E 262	1	E E 262	1	
	GenEd 110 or 111 [A] (GER)	3	GenEd 110 or 111 [A] (GER)	3	
	Intercultural Studies [I,G,K]	3	Math 315	3	
	<del>(GER)</del>		Complete Writing Portfolio		
	Math 315	3	Third Year		
	Complete Writing Portfolio		First Term	Hours	
	Third Year		E E 311	3	
	First Term	Hours	E E 321	3	
	E E 311	3	E E 324	4	
	E E 321	3	E E 352	<u>3</u>	
	E E 324	4	Engl 402 [W] or 403 [W] (GER)	$\frac{3}{3}$	
	EE331	3	Second Term	Hours	
	Engl 402 [W] or 403 [W] (GER)	3	Biological Sciences [B] (GER)	3 or 4	
	Second Term	Hours	Cpt S 360	4	
	Biological Sciences [B] (GER)	3 or 4	E E 334	3	
	Cpt S 360	4	Engineering Science Elective <sup>1</sup>	3	
	E E 334	3	Stat 360	3	
	Engineering Science Elective <sup>1</sup>	3	Suit 500		
			Fourth Year		

Stat 360	3
Fourth Year	
First Term	Hours
Approved Cpt E Technical Electives <sup>2</sup>	3
Arts & Humanities [H,G] (GER)	3
Cpt S 455	3
Design I	3
E E 415	2
EconS 101 [S] or EconS 102 [S] (GER)	3
Second Term	Hours
Approved Cpt E Technical Electives <sup>2</sup>	6
Cpt S 460 or 466	3
E E 416 [M]	3
Tier III Humanities or Social Sciences Course [T] (GER)	3

#### Footnotes

First Term

Electives<sup>2</sup>

Design I

E E 415

(GER)

Second Term

Electives<sup>2</sup>

(GER) E E 416 [M]

Approved Cpt E Technical

Arts & Humanities [H,G] (GER)

EconS 101 [S] or EconS 102 [S]

Approved Cpt E Technical

Intercultural Studies [I,G,K]

Tier III Humanities or

<sup>1</sup> Choose from E E 341, E E 351, ME 301, or MSE 302.

Social Sciences Course [T] (GER) <sup>3</sup>

<sup>2</sup> Technical electives must all be 300 or 400 level courses and must be chosen with an advisor's approval.

#### Footnotes

- <sup>1</sup> Choose from E E 341, E E 351, ME 301, or MSE 302.
- <sup>2</sup> Technical electives must all be 300 or 400 level courses and must be chosen with an advisor's approval.

# Electrical Engineering Requirements (128-Hours)

Students may apply for certification into the Bachelor of Science in Electrical Engineering degree program after completion of the following courses with a grade of C or better: Chem 105; Cpt S 251; E E 214, 221; Engl 101; Math 171, 172, 220, 273; Phys 201, 202.

No courses listed in this schedule of study may be taken on a pass/fail basis. All listed E E and Cpt S courses and prerequisites to these courses must be completed with a grade of C or better.

#### First Year

First Term	Hours
Chem 105 [P] (GER)	4
Engl 101 [W] (GER)	3
Engr 120	2

## Electrical Engineering Requirements (123 Hours)

Students may apply for certification into the Bachelor of Science in Electrical Engineering degree program after completion of the following courses with a grade of C or better: Chem 105; Cpt S 121 or 251; Cpt S 122 or E E 221; E E 214; Engl 101; Math 171, 172, 220, 273; Phys 201, 202.

8-10

Hours

3

3

3

Hours

<u>3</u>

3

No courses listed in this schedule of study may be taken on a pass/fail basis. All listed E E and Cpt S courses and prerequisites to these courses must be completed with a grade of C or better.

#### First Year

First Term	Hours
Chem 105 [P] (GER)	4
Engl 101 [W] (GER)	3

Electrical
Engineering &
Computer Science,
revise graduation
requirements in
Electrical
Engineering

GenEd 110 [A] or 111 [A] (GER)	3	Engr 120	2	
Math 171 [N] (GER)	4	GenEd 110 [A] or 111 [A] (GER)	3	
Second Term	Hours	Math 171 [N] (GER)	4	
CptS 251	3	Second Term	Hours	
GenEd 110 [A] or 111 [A] (GER)	3	<u>CptS 121</u>	<u>4</u>	
Math 172	4	Math 172	4	
Math 220	2	Math 220	2	
Phys 201 [P] (GER)	4	Phys 201 [P] (GER)	4	
Second Year		Second Year		
First Term	Hours	First Term	Hours	
Biological Sciences [B] (GER)	3	Cpt S 122	4	
E E 214		E E 214	± 4	
E E 221	2	Math 273	2	
Math 273	2	Phys 202 [P] (GER)	4	
	4	Second Term	Hours	
Phys 202 [P] (GER)	-		.	
Second Term		E E 234	4	
E E 234		E E 261	3	
E E 261	3	E E 262	1	
E E 262	1	EconS 101 [S] or EconS 102 [S] (GER)	3	
EconS 101 [S] or EconS 102 [S] (GER)	3	GenEd 110 [A] or 111 [A] (GER)	<u>3</u>	
Engineering Science I <sup>+</sup>	3	Math 315	3	
Math 315	3	Complete Writing Portfolio		
Complete Writing Portfolio	5			
		Third Year		
Third Year		First Term	Hours	
First Term	Hours		3	
Arts & Humanities [H,G] (GER)	3		3	
E E 311	3	E E 331	3	
E E 321	3	E E 352	3	
E E 331	3	Engineering Science Elective I <sup>1</sup>	<u>3</u>	
E E 352	3	Second Term	Hours	
Stat/Math 360	3	E E 341	3	
Second Term	Hours	E E 361	3	
E E 341	3	Engineering Science II <sup>1</sup>	3	
EE351	3	Math 360	3	
E E 361	3	Track Elective <sup>2</sup>	3	
E E 362 [M]	2	E41- X/		
Engineering Science II <sup>1</sup>	3	Fourth Year	T.T	
Engl 402 [W] or 403 [W] (GER)	3	First Term	Hours	
Foundle Wage		Biological Sciences [B] (GER)	3	
Fourth Year	11	E E 415	3	
First Term	Hours	Engl 402 [W] or 403 [W] (GER)	<u>3</u>	
E E 415	2	Intercultural Studies [I,G,K] (GER)	3	
E E 489 Intercultural Studies [I,G,K]	3	Track Electives <sup>2</sup>	<u>6</u>	
microniurai Studies [1,0,N]	3		<u> </u>	

			~		
	(GER)	2	Second Term	Hours	
	Probability and Stat Elective	$e^2$ 3	Arts & Humanities [H,G] (	(GER) <u>3</u>	
	Technical Electives <sup>3</sup>	3	E E 416 [M]	3	
	Second Term	Hours	<u>Track</u> Electives <sup>2</sup>	6	
	E E 416 [M]	3	Tier III Humanities or	_	
	Technical Electives <sup>3</sup>	9	Social Sciences Course [T]	(GER) 3	
	Tier III Humanities or	2			
	Social Sciences Course [T]	(GER) 3	Footnotes		
			<sup>1</sup> Choose from C E 211, M	E 212 M E	
	Footnotes		301, or MSE 302.	2212, 1112	
	<sup>1</sup> Choose from C E 211, M	E 212, M E	<sup>2</sup> Students follow one of fo		
	301, or MSE 302.		an emphasis in their degr		
	<sup>2</sup> Select from E E 432, 451	*	power, microelectronics,		
	<sup>3</sup> 6 of the required 12 hours electives must be 400 lev		general. See your acader an approved list.	inc advisor for	
	engineering courses. Tecl				
	must be selected with an	<del>advisor's</del>			
	approval.				
	First Year		First Year		
	First Term	Hours	First Term	Hours	
	Biol 102 [B] (GER)	4	Biol 102 [B] or 106 [B] or	4	
	Chem 105 [P] (GER)	4	107 [B] (GER)	7	
	English 101 [W] (GER)	3	Chem <u>101 or</u> 105 [P] (GER)	4	
	GenEd 110 [A] (GER)	3	English 101 [W] (GER)	3	
	Stat 205 [N] (GER)	3	GenEd 110 [A] (GER)	3	
	G 1 T	**	Stat 205 [N]	3	
	Second Term	Hours	or 212 [N] (GER)		
	Chem 106 [P] (GER)	4	Second Term	Hours	
	ComSt 102 [C] (GER)	3	Chem <u>102 or</u> 106 [P] (GER)	4	
	GenEd 111 [A] (GER)	3	ComSt 102 [C] (GER)	3	
	MvtSt 262 or Biol 315	3	GenEd 111 [A] (GER)	3	
Nutrition & Exercise	Psych 105 [S] (GER) Second Year	3	MBioS 101	4	
Physiology, revise	First Term	Hours	Psych 105 [S] (GER)	3	8-10
graduation	Biol 251	4	Second Year		
requirements	Chem 345	4	First Term	Hours	
	Intercultural Studies		Biol 251	4	
	[I,G,K] (GER)	3	Chem 345	4	
	Phil 260 [H] (GER)	3	Intercultural Studies [I,G,K] (GER)	3	
	Second Term	Hours	Phil 260 or 365 [H] (GER)	3	
	Arts & Humanities [H,G] or			_	
	Social Sciences [S,K] (GER)	3	Second Term	Hours	
	FSHN 233	3	Arts & Humanities [H,G] or	3	
	MBioS-101	4	Social Sciences [S,K] (GER)	5	
	MBioS 303	4	<u>MBioS</u> 233	3	
	Complete Writing Portfolio		MBioS 303	4	
			MvtSt 262 or Biol 315	<u>4</u>	
	Third Term	Hours	Complete Writing Portfolio		

Summer Session @WSU			
Spokane	4	Third Term	Hours
-ExMet 320		Summer Session @WSU	
Third Year		Spokane	4
First Term	Hours	<u>NEP</u> 320	
ExMet 300	2	Third Year	
ExMet 340	3	First Term	Hours
ExMet 400 [M]	3	<u>NEP</u> 300 [M]	2
ExMet 427	3	<u>NEP</u> 340	3
ExSci 463	4	<u>NEP</u> 400	3
		<u>NEP</u> 427	3
Second Term	Hours	<u>NEP</u> 463	4
ExMet 362	3		
ExMet 402	2	Second Term	Hours
ExMet 435	4	<u>NEP</u> 362	3
ExMet 465 [M]	3	<u>NEP</u> 402	2
ExSci 476	3	<u>NEP</u> 435	4
Fourth Year		<u>NEP</u> 465 [M]	3
First Term	Hours	<u>NEP</u> 476	3
Engl 402 [W] (GER)	3	Fourth Year	
ExMet 458	3	First Term	Hours
ExMet 473	3	<u>NEP</u> 458	3
ExMet 478	3	<u>NEP</u> 473	3
ExMet 479	3	<u>NEP</u> 478	3
		<u>NEP</u> 479	3
Second Term	Hours		
ExMet 450	3	Second Term	Hours
ExMet 470	3	<u>NEP</u> 450	3
ExMet 480	3	<u>NEP</u> 470	3
Tier III Course [T] (GER)	3	<u>NEP</u> 480	3
Third Term	Hours	Tier III Course [T] (GER)	3
ExMet 490	10	Third Term	Hours
2		<u>NEP</u> 490	10