

UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 8
Spring 2017

--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 changes are underlined. Deletions are crossed out. The column to the far right indicates the date each change becomes effective. Note: Items marked {S} have been streamlined and do not require Catalog Subcommittee review.

Department	Proposed	Effective Date
Chemical Engineering and Bioengineering Revise graduation requirements for Bachelor of Science in Bioengineering - General Option	Bioengineering, General Option (120 Hours)	8-17
	<p>First Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>CHEM 105 [PSCI] 4</p> <p>Creative & Professional Arts [ARTS] 3</p> <p>ENGLISH 101 [WRTG] 3</p> <p>ENGR 120¹ 2</p> <p>MATH 171 [QUAN] 4</p> <p><i>Second Term</i> <i>Hours</i></p> <p>BIO ENG 140 1</p> <p>BIOLOGY 107 [BSCI] 4</p> <p>CHEM 106 4</p> <p>HISTORY 105 [ROOT] 3</p> <p>MATH 172 4</p> <p>Second Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>BIO ENG 205 1</p> <p>CHE 201 3</p> <p>Humanities [HUM] 3</p> <p>MATH 220 2</p> <p>MATH 273 2</p> <p>PHYSICS 201 4</p> <p><i>Second Term</i> <i>Hours</i></p> <p>BIO ENG 210 2</p> <p>CE 211 3</p> <p>MATH 315 3</p> <p>PHYSICS 202 4</p>	

STAT 370 or 423	3
Complete Writing Portfolio	
Third Year	
<i>First Term</i>	<i>Hours</i>
BIO ENG 321	3
BIO ENG 322 [M]	1
BIO ENG 350	3
CHE 310	3
E E 261	3
<i>Second Term</i>	<i>Hours</i>
BIO ENG 330	3
BIO ENG 340	4
Bioengineering elective ¹²	3
Diversity [DIVR]	3
ECONS 101 [SSCI] or 102 [SSCI]	3
Fourth Year	
<i>First Term</i>	<i>Hours</i>
BIO ENG 410 [M]	3
BIO ENG 440	4
Communication [COMM] or Written Communication [WRTG]	3
Technical electives ²³	6
<i>Second Term</i>	<i>Hours</i>
BIO ENG 411 [CAPS]	3
Bioengineering electives ¹²	3
Technical electives ²³	6
Elective	1
Complete BIO ENG Exit Interview	

Footnotes

¹ 3 credit 300-400-level engineering course may be substituted for ENGR 120 by approval of advisor.

¹² 6 credits of electives must have a BIO ENG subject, selected from the following: BIO ENG 425, 455, 476, or ~~BIO ENG 481~~.

²³ 12 credits of electives may be either BIO ENG courses (not used to fulfill Bioengineering elective requirements) from Footnote ¹², or other relevant engineering or science courses from the following: BIO ENG 488, 495, 499; BIOLOGY 106, 251, 301, 315, 340, 352, 353, 494; CE 315, 463; CHE 301, 334, 475, 476; CHEM 345, 348, 370; CPT S 121; E E 262; MBIOS 301, 303, 304, 305, 306, 401, 404, 413, 414, 426, 465, 478; ME 116, 212, 216, 301, 303, 310, 311, 401, 472, 473; MSE 201, 302, 401, 402, 403, 406, 506, 413; NEUROSCI 301, 302, 305, 403 [M], 404, 425, 426, 430 [M]; PHIL 365; PHYSICS 466.

Design and Construction Revise graduation requirements for Bachelor of Science in Construction Management (Second through Fourth Years)	Construction Management (Second through Fourth years) (92 <u>93</u> Hours) Second Year <i>First Term</i> ARCH 351 3 B-LAW 210 3 CST M 201 3 <u>CST M 222</u> 2 CST M 254 2 PHYSICS 101 or 201 4 <i>Second Term</i> ACCTG 230 3 ARCH 352 3 <u>BLAW 210</u> 3 CST M 202 3 CST M 252 4 Diversity [DIVR] or Humanities [HUM] ¹ 3 Complete Writing Portfolio Third Year <i>First Term</i> C E 302 3 CST M 332 3 CST M 368 3 CST M 370 3 CST M 451 3 <i>Second Term</i> Biological Sciences [BSCI] with lab 4 CST M 333 3 CST M 356 3 CST M 362 [M] 3 CST M 371 3 Fourth Year <i>First Term</i> ARCH 463 3 CST M 301 or MGMT 301 3 CST M 460 3 CST M 462 3 300-400-level CST M Elective 3	8-17
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	<p>Second Term</p> <table border="0"> <tr> <td>CST M 473</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CST M 475 [M]</td> <td style="text-align: right;">3</td> </tr> <tr> <td><u>Diversity [DIVR] or Humanities [HUM]</u>¹</td> <td style="text-align: right;"><u>3</u></td> </tr> <tr> <td>Integrative Capstone [CAPS]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>300-400-level Business Elective²</td> <td style="text-align: right;">3</td> </tr> <tr> <td>300-400-level CST M Elective</td> <td style="text-align: right;">3</td> </tr> </table> <hr/> <p>Footnotes</p> <p>¹ University Requirements include 3 hours of [HUM] and 3 hours of [DIVR].</p> <p>² ECONS 327, WOMEN ST 315, or any 300-400-level ACCTG, B LAW, ENTRP, FIN, HBM, I BUS, MGMT, MGTOP, MIS, or MKTG course not used to fulfill other requirements.</p>	CST M 473	3	CST M 475 [M]	3	<u>Diversity [DIVR] or Humanities [HUM]</u> ¹	<u>3</u>	Integrative Capstone [CAPS]	3	300-400-level Business Elective ²	3	300-400-level CST M Elective	3							
CST M 473	3																			
CST M 475 [M]	3																			
<u>Diversity [DIVR] or Humanities [HUM]</u> ¹	<u>3</u>																			
Integrative Capstone [CAPS]	3																			
300-400-level Business Elective ²	3																			
300-400-level CST M Elective	3																			
<p>Educational Leadership, Sport Studies, and Educational/Counseling Psychology Revise minor in Sport Management</p>	<p>Sport Management</p> <p>The minor in sport management requires 18 semester hours of course work. The minor is designed for students with an interest in sport organizations or sport-related business. Sport management is an appropriate area for students with a variety of career interests, including: business, communication, <u>education, kinesiology, law, and the social sciences</u>. To be eligible to certify as a sport management minor a student must have earned at least 60 credit hours, have a minimum cumulative GPA of at least 2.5 <u>2.75</u> and be certified in a major. Graded courses in the minor may not be taken pass/fail. The program director <u>coordinator</u> must approve any exceptions to these requirements. Required courses include SPMGT 276 and 290; and 12 3 hours from SPMGT 367 or SOC 245, <u>and 9 hours from SPMGT 365, 374, 377, 384, 394 (only Summer enrollment), 464, 468, 496, 497</u>. Credit hours for the minor must include 9 hours of upper-division work taken in residence at WSU or through WSU-approved education abroad or educational exchange courses.</p>	8-17																		
<p>History Revise graduation requirements for Bachelor of Arts in History – Education Option</p>	<p>History - Education Option (120 Hours)</p> <p>First Year</p> <table border="0"> <tr> <td>First Term</td> <td style="text-align: right;">Hours</td> </tr> <tr> <td>Biological Sciences [BSCI] with lab or SCIENCE 101 [SCI]¹</td> <td style="text-align: right;">4</td> </tr> <tr> <td>HISTORY 101 [HUM]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>HISTORY 105 [ROOT]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Quantitative Reasoning [QUAN]</td> <td style="text-align: right;">3 or 4</td> </tr> <tr> <td>Second Term</td> <td style="text-align: right;">Hours</td> </tr> <tr> <td>ECONS 102 [SSCI], POL S 101 [SSCI], or PSYCH 105 [SSCI]²</td> <td style="text-align: right;">3</td> </tr> <tr> <td>ENGLISH 101 [WRTG]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>HISTORY 102</td> <td style="text-align: right;">3</td> </tr> </table>	First Term	Hours	Biological Sciences [BSCI] with lab or SCIENCE 101 [SCI] ¹	4	HISTORY 101 [HUM]	3	HISTORY 105 [ROOT]	3	Quantitative Reasoning [QUAN]	3 or 4	Second Term	Hours	ECONS 102 [SSCI], POL S 101 [SSCI], or PSYCH 105 [SSCI] ²	3	ENGLISH 101 [WRTG]	3	HISTORY 102	3	8-17
First Term	Hours																			
Biological Sciences [BSCI] with lab or SCIENCE 101 [SCI] ¹	4																			
HISTORY 101 [HUM]	3																			
HISTORY 105 [ROOT]	3																			
Quantitative Reasoning [QUAN]	3 or 4																			
Second Term	Hours																			
ECONS 102 [SSCI], POL S 101 [SSCI], or PSYCH 105 [SSCI] ²	3																			
ENGLISH 101 [WRTG]	3																			
HISTORY 102	3																			

Physical Sciences [PSCI] with lab or SCIENCE 102 [SCI] ¹	4
Second Year	
<i>First Term</i>	Hours
200-level HISTORY course³	3
Creative & Professional Arts [ARTS]	3
ECONS 102 [SSCI], POL S 101 [SSCI], or PSYCH 105 [SSCI] ²	3
ENGLISH 201 [WRTG], 301 [WRTG], or 302, 402 [WRTG] ^{4,3}	3
HISTORY 110	3
<u>HISTORY 308</u>	<u>3</u>
<i>Second Term</i>	Hours
200-level HISTORY course ^{3,4}	3
Diversity [DIVR]	3
ECONS 102, POL S 101, or PSYCH 105 ²	3
HISTORY 111	3
Foreign Language, if necessary	0-4
Complete Writing Portfolio	
Third Year	
<i>First Term</i>	Hours
300-400-level HISTORY courses ⁵	6
HISTORY 300 [M]	3
TCH LRN 301	3
<u>Foreign Language, if needed⁶</u>	<u>0 - 4</u>
<i>Second Term</i>	Hours
300-400-level HISTORY course ⁵	3
HISTORY 422	3
Integrative Capstone [CAPS]	3
TCH LRN 317	2
Foreign Language, <u>or elective, if necessary needed⁶</u>	0 - 4
Fourth Year	
<i>First Term</i>	Hours
300-400-level HISTORY course ⁵	3
HISTORY 469 [M]	3
TCH LRN 464	3
TCH LRN 465	3
TCH LRN 466	2
<i>Second Term</i>	Hours
ED PSYCH 468	3
HISTORY 480	3

	<p>TCH LRN 467 [M] 3 TCH LRN 469 2 TCH LRN 470 3</p> <p>Fifth Year</p> <p><i>First Term</i> Hours</p> <p>TCH LRN 415 16</p> <hr/> <p>Footnotes</p> <p>¹ To meet University and College of Arts and Sciences requirements, students must take a [BSCI] course with lab and [PSCI] course with lab or SCIENCE 101 [SCI] and SCIENCE 102 [SCI]. SCIENCE 101 [SCI] is offered Fall semester and is a prerequisite for SCIENCE 102 [SCI]. SCIENCE 102 [SCI] is offered Spring semester.</p> <p>² POL S 101 and ECONS 102 are state requirements for teacher certification in history and are recommended to fulfill UCORE or College of Arts and Sciences requirements</p> <p>³ One from ENGLISH 201, 301, 302, or 402 is required for admission to the Teacher Education Program. Students who take ENGLISH 302 will need to take an additional [WRTG] or [COMM] course.</p> <p>^{3a} 200-level HISTORY course: Choose one from two separate categories: 1) HISTORY 230, or 231, or 2) 270, or 271, or 3) 272, or 273, or 4) 275.</p> <p>⁵ History education majors must choose their 12 hours of 300-400-level electives from the following: One from HISTORY 411, 413, 414, 415, or 416; one from HISTORY 412, 417, 418, or 419; one from HISTORY 340, 341, 342, 350, 381, 382, 386, 435, 440, 441, 444, 445, 447, 448, 450, 453, 454, 455, 459, 463, 466, 467, 468, or 489; and one from HISTORY 306, 315, 331, 335, 337, 370, 373, 374, 387, 388, 425, 430, 432, 433, 434, 435, 436, 439, 464, 466, 472, 473, 474, 475, 476, 477, 483, 491, 492, 494, or 495.</p> <p>⁶ <u>Two years of high school foreign language or at least two semesters of college-level foreign language are required by the College of Arts and Sciences for graduation. Students must take a minimum of 12 credits per semester to maintain full time status.</u></p>	
<p>History Revise graduation requirements for Bachelor of Arts in Social Studies – Education Option</p>	<p>Social Studies - Education Option (120 <u>132</u> Hours)</p> <p>First Year</p> <p><i>First Term</i> Hours</p> <p>Biological Sciences [BSCI] with lab or SCIENCE 101 [SCI]¹ 4 Creative & Professional Arts [ARTS] 3 ENGLISH 101 [WRTG] 3 HISTORY 101 3 Quantitative Reasoning [QUAN] 3 or 4</p> <p><i>Second Term</i> Hours</p> <p>ANTH 101 [DIVR] or 203 [DIVR] 3 HISTORY 102 3 HISTORY 105 [ROOT] 3 Physical Sciences [PSCI] with lab or SCIENCE 102 [SCI]¹ 4 SOC 101 [SSCI] 3</p>	<p>8-17</p>

Second Year		
<i>First Term</i>		<i>Hours</i>
200-level HISTORY course ²		3
ECONS 102		3
HISTORY 110 [HUM]		3
POL S 101 [SSCI] or PSYCH 105 [SSCI]		3
Foreign Language, if necessary <u>needed</u>		0-4
<i>Second Term</i>		<i>Hours</i>
200-level HISTORY course²		3
ENGLISH 201 [WRTG], 301 [WRTG], or 302 [M], <u>or 402 [WRTG]</u> ³		3
HISTORY 111		3
<u>HISTORY 308</u>		<u>3</u>
POL S 101 or PSYCH 105		3
Foreign Language, if necessary <u>needed</u>		0-4
Complete Writing Portfolio		
Third Year		
<i>First Term</i>		<i>Hours</i>
ANTH/PSYCH/SOC Elective ⁴		3
ECONS Elective ⁵		3
European History Elective ⁶		3
HISTORY 469 [M] or SOC 320 ⁷		3
TCH LRN 301		3
<i>Second Term</i>		<i>Hours</i>
ANTH/PSYCH/SOC Elective ⁴		3
Geography Elective ⁸		3
HISTORY 422		3
POL S Elective ⁹		3
TCH LRN 317		2
Fourth Year		
<i>First Term</i>		<i>Hours</i>
Integrative Capstone [CAPS]		3
Non-Western/Global History Elective ¹⁰		3
TCH LRN 464		3
TCH LRN 465		3
TCH LRN 466		2
<i>Second Term</i>		<i>Hours</i>
American History Elective ¹¹		3
ED PSYCH 468		3

	<p>HISTORY 480 3</p> <p>TCH LRN 467 [M] 3</p> <p>TCH LRN 469 2</p> <p>TCH LRN 470 3</p> <p>Fifth Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>TCH LRN 415 16</p> <hr/> <p>Footnotes</p> <p>¹ To meet University and College of Arts and Sciences requirements, students must take a [BSCI] course with lab and [PSCI] course with lab or SCIENCE 101 [SCI] and SCIENCE 102 [SCI]. SCIENCE 101 [SCI] is offered Fall semester and is a prerequisite for SCIENCE 102 [SCI]. SCIENCE 102 [SCI] is offered Spring semester.</p> <p>² Choose one from two separate categories: 1) HISTORY 230, or 231, or 270, or 271, or 272, or 273, or 275.</p> <p>³ One from ENGLISH 201, 301, 302, or 402 is required for admission to the Teacher Education Program. Students who take ENGLISH 302 will need to take an additional [WRTG] or [COMM] course.</p> <p>⁴ ANTH/PSYCH/SOC Electives (6 credits required): Approved courses include ANTH 307, 316, 320, 330, 331, 350, PSYCH 310, 324, 361, 470, SOC 320, 351, 384, and 430. Courses may not be used to fulfill more than one major requirement.</p> <p>⁵ ECONS Elective (3 credits required): Approved courses include ECONS 320, 327, 404, 427, 428, and 430.</p> <p>⁶ European History Elective (3 credits required): Approved courses include HISTORY 340, 341, 342, 350, 381, 382, 386, 440, 441, 444, 445, 447, 449, 450 [M], 453, 454, 455, 459, 462, 463 [M], 467, 468, and 489 [M].</p> <p>⁷ Students who take SOC 320 may need to take an [M] course to fulfill University requirements</p> <p>⁸ Geography Elective (3 credits required): Approved courses include ANTH 309, HISTORY 319, 495, and TCH LRN 487.</p> <p>⁹ POL S Elective (3 credits required): Approved courses include POL S 300, 316, 427, and 455.</p> <p>¹⁰ Non-Western/Global History Elective (3 credits required): Approved courses include HISTORY 306, 331, 335, 337, 370, 373, 374, 387, 388, 425, 430 [M], 432, 433, 434, 435, 436, 439, 466, 472[M], 473, 474, 475, 476 [M], 477 [M], 483, 491, and 492.</p> <p>¹¹ American History Elective (3 credits required): Approved courses include HISTORY 308, 313, 314, 320 [M], 321, 322, 390, 398, 409, 410, 411, 412, 413 [M], 414, 415, 416, 417, 418, 419, 421, 422, 423, 427 [M], 486, and 496.</p>	
<p>Integrated Plant Sciences Revise graduation requirements for Bachelor of Science in Integrated Plant Sciences</p>	<p>Fruit and Vegetable Management (120 Hours)</p> <p>First Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>CHEM 101 [PSCI] or 105 [PSCI] 4</p> <p>ECONS 101 [SSCI] or 102 [SSCI] 3</p> <p><u>H D 205 or COM 102 [COMM]</u> <u>3 or 4</u></p> <p>HISTORY 105 [ROOT] 3</p> <p>HORT / CROP SCI 102 3</p> <p><i>Second Term</i> <i>Hours</i></p> <p>CHEM 102 or 106 4</p>	<p>8-17</p>

ENGLISH 101 [WRTG]	3
HORT / CROP SCI 202	4
Humanities [HUM]	3
STAT 212 [QUAN], MATH 140 [QUAN], 171 [QUAN], or 202 [QUAN]	3 or 4
Second Year	
<i>First Term</i>	<i>Hours</i>
BIOLOGY 106 [BSCI] or 120 [BSCI]	4
[COMM] Course (COM 102 [COMM] or H D 205 [COMM] recommended)	3 or 4
Creative & Professional Arts [ARTS]	3
<u>Diversity [DIVR]</u>	<u>3</u>
SOIL SCI 201	3
<u>MATH 140 [QUAN], 171 [QUAN], 202 [QUAN], or STAT 212 [QUAN]</u>	<u>3 or 4</u>
<i>Second Term</i>	<i>Hours</i>
BIOLOGY 107	4
<u>ECONS 101 [SSCI] OR 102 [SSCI]</u>	<u>3</u>
HORT 251	4
<u>HORT 351</u>	<u>4</u>
Sustainability Elective ¹	<u>2 or 3</u>
Electives	3
Complete Writing Portfolio	
Third Year	
<i>First Term</i>	<i>Hours</i>
BIOLOGY 420	3
Diversity [DIVR]	3
ENTOM 343 [M]	3
HORT 310	3
HORT 313	3
<u>HORT 320</u>	<u>3</u>
<u>Electives</u>	<u>3</u>
<i>Second Term</i>	<i>Hours</i>
ENTOM 351	3
Environmental HORT Elective ²	3
HORT 416³	3
<u>SOIL SCI 441</u>	<u>3</u>
Electives	6
<i>Third Term</i>	<i>Hours</i>
(Summer Session) HORT 399	1

	<p>Fourth Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>HORT 320 313 3</p> <p>HORT 418 [M] 3</p> <p>Pest Management Elective⁴³ <u>2</u> or 3</p> <p>PL P 300 or PL P 429 2 or 3</p> <p>Sustainability Electives¹ <u>3</u> <u>5</u></p> <p><i>Second Term</i> <i>Hours</i></p> <p>Advanced Fruit or Vegetable Elective⁵ 3</p> <p><u>HORT 416</u>⁴ <u>3</u></p> <p>HORT 425 [M] [CAPS] 3</p> <p>HORT/VIT ENOL 409 or CROP SCI/SOIL SCI 412 4</p> <p>IPM 452 <u>2</u></p> <p>SOIL SCI 441 <u>3</u></p> <p>Electives <u>36</u></p> <hr/> <p>Footnotes</p> <p>¹ Sustainability Elective courses (<u>2-3 credits</u>): BIOLOGY 330, 372 [M]; ENVR SCI 101, 285, 469; SOIL SCI 101, <u>302</u>, 480; or as approved by advisor.</p> <p>² Environmental Horticulture Elective courses (<u>3 credits</u>): HORT 231, 232 <u>330</u>, 331, 332, 357; or as approved by advisor.</p> <p>⁴³ Pest Management Elective courses (<u>2-3 credits</u>): CROP SCI 305; <u>IPM 452</u>, PL P 300, 429; or as approved by advisor. Courses cannot be used to fulfill more than one major requirement.</p> <p>³⁴ CROP SCI 411 [M] can be taken in the fall as an alternative to HORT 416.</p> <p>⁵ Advanced Fruit or Vegetable Elective courses (<u>3 credits</u>): HORT 413, or 421 [M], <u>480</u>, or as approved by advisor.</p>	
<p>Molecular Biosciences Revise graduation requirements for Bachelor of Science in Genetics and Cell Biology – Molecular Biology Option</p>	<p>Genetics and Cell Biology – Molecular Biology Option (120 Hours)</p> <p>A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail. <u>Completed core requirements may not be used to satisfy lecture or lab electives.</u></p> <p>Third Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>Communication [COMM] or Written Communication [WRTG] 3</p> <p>MBIOS 304 3</p> <p>MBIOS 305 3</p> <p>STAT 212 or 412 3 or 4</p> <p>Electives 3</p> <p><i>Second Term</i> <i>Hours</i></p>	<p>8-17</p>

	Diversity [DIVR] 3 Lecture Elective ³ 3 MBIOS 401 3 Electives 4 Fourth Year <i>First Term</i> <i>Hours</i> Lab Elective ⁴ 3 or 4 MBIOS 404 3 MBIOS 423 3 MBIOS 478 3 Electives 3 <i>Second Term</i> <i>Hours</i> MBIOS 402 [M] 3 MBIOS 442 or BIOLOGY 476 3 MBIOS 494 [M] [CAPS] 3 Electives 8 Exit Survey <hr/> Footnotes ¹ If required - consult advisor. ² CHEM 345 and 348 recommended for professional or graduate degrees. ³ Lecture elective: select one from BIOLOGY <u>420, 475, 476, 519</u> ; MBIOS 410, 413, 426, 440, 442, 450, 503. ⁴ Lab Elective: minimum of 3 credits selected from MBIOS 411, 430, 454, 498, 499; BIOLOGY 251, 315, 321, 353, 372, 420 .	
Molecular Biosciences Revise graduation requirements for Bachelor of Science in Microbiology – Medical Technology Option	Microbiology – Medical Technology Option (120 Hours) A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail. <u>Completed core requirements may not be used to satisfy lecture or lab electives.</u>	8-17
Molecular Biosciences Revise graduation requirements for Bachelor of Science in Microbiology – Molecular Biology Option	Microbiology – Molecular Biology Option (120 Hours) A grade of C or better is required in all MBIOS courses taken to meet graduation requirements. None of these courses may be taken pass/fail. <u>Completed core requirements may not be used to satisfy lecture or lab electives.</u>	8-17