UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 5
Fall 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.

Dept	Proposed	Effective Date
Business {S}Discontinue Pullman Campus Master of Business Administration (MBA) program.	**MBA Program Curriculum (32 Credits)** A minimum cumulative GPA of 3.0 is required for the MBA degree. Core Curriculum (23 credits) ACCTG 533 BA 514 FIN 526 MKTG 506 MGMT 590 MGMT 593 BA 579 (3 credits) BA 702 (2 credits) **Electives (9 credits):** Students are encouraged to concentrate in one of the following specific areas. Each elective course in the concentration area must be passed with a 3.0 or better GPA. ***Business Analytics:*** MKTG 555; MGMT 556; MIS 557. ***Finance:*** FIN 521; FIN 527; FIN 528; FIN 581. ***Hospitality and Tourism:*** HBM 535; HBM 581; HBM 582. ***International:*** FIN 581; I BUS 580; I BUS 582; I BUS 600. ***Marketing:*** I BUS 582; MKTG 507; MKTG 561; MKTG 565; MKTG 577. ***Stakeholder Leadership:*** ACCTG 541; ACCTG 542; ACCTG 546; B A 520; MGMT 585; MGMT 587; MGMT 589; MKTG 565. ***Technology Management:*** ENTRP 501; MIS 580; MGTOP 540; MGTOP 581; MGMT 589; MKTG 561.	**8-18**
Chemical Engineering and Bioengineering {S}Revise certification and graduation requirements for Bachelor of Science in Bioengineering - Pre-Med Option	**Bioengineering, Pre-Med Option (127 Hours)** Students who plan to pursue pre-med studies should consult their advisor for further information about appropriate courses. Criteria for Certification – Bioengineering Program 1) In March of each year, the faculty of the School of Chemical Engineering and Bioengineering will establish the total number of	**8-18**

students (~~June and~~ January, June, and August) to be certified into the Bioengineering program.

2) Each student will be considered for certification during the semester after she/he has completed all of the following courses: MATH 171, MATH 172, CHEM 105, CHEM 106, BIOLOGY 107, PHYSICS 201, CHE 201.

3) To be certified, each student must meet the following minimum ~~standards~~ requirements:
   a) 2.0 cumulative GPA.
   b) A "C" grade or better in each of the courses listed in 2) above.
   ~~c) Complete at least one term of coursework at WSU as a full-time student.~~
   c) ~~d. Students must b~~Be in good academic standing (semester GPA 2.00 or higher) at the time they are being considered for certification.

4) Certification decisions will be made at the end of Fall, ~~and~~ Spring, and Summer terms ~~semesters,. and t~~Those being certified at the end of Spring term ~~semester~~ will be notified by June 1, ~~while~~ those being certified at the end of Fall term ~~semester~~ will be notified by January 15, and those being certified at the end of the Summer term will be notified by August 15.

5) If the number of students seeking certification exceeds the program capacity, as determined in 1) above, additional criteria will be used to select those who are certified. Those criteria include:
   a) average GPA received in the courses listed in 2) above;
   b) average GPA earned in all the engineering/math/science courses which have already been completed; and
   c) the GPA earned during the previous semester.

6) Students who have completed all the courses listed in 2) above, but who are not certified will be notified of the decision according to the timetable described in 4) above. Such students who are not certified may appeal the decision. ~~This~~ The appeal should describe any special circumstances which should be considered. A faculty committee will consider the appeal, the special circumstances described, and trends in the grades (e.g. trends in grades and/or withdrawals, typical course load attempted and typical course load completed) and make a final decision regarding certification. The appeal must be submitted within 2 weeks of the notification described in 4) above. The appeal will be considered and a decision made by February 15, July 1, and September 15, depending on the term ~~February 15~~.

7) Students who are deficient under the University's Educational Policies and Procedures are subject to decertification. When a student is in good academic standing, they will be reconsidered for certification as stated in 2) above. ~~Recertification will be granted only under rare, extenuating conditions.~~

8) Certification Guarantee: Students who have completed the certification courses noted above with an average GPA of at least 3.2, who have an overall GPA of at least 3.2 in the completed courses required in the

	major, and who have not repeated any required courses, are guaranteed certification. **Fourth Year** ***First Term*** ***Hours*** BIO ENG 350 3 BIO ENG 410 [M] 3 BIO ENG 440 4 Communication [COMM] or Written Communication [WRTG] 3 Diversity [DIVR] 3 ***Second Term*** ***Hours*** BIO ENG 411 [CAPS] 3 Bioengineering Electives[2] 6 ECONS 101 [SSCI] or 102 [SSCI] 3 Humanities [HUM] 3 Complete BIO ENG Exit Interview **Footnotes** [1] 3 credit 300-400 level engineering course may be substituted for ENGR 120 by approval of advisor. [2] 6 credits of electives must have a BIO ENG subject, selected from the following: BIO ENG 425, 435, 455, 476, or 481.	
Civil and Environmental Engineering Revise graduation requirements for Pullman and TriCities for Bachelor of Science in Civil Engineering.	**Civil Engineering (128 Hours)** **Footnotes** [6] CE Elective courses: The 18-credit hours for elective courses must be distributed such that at least three courses, not including the lab, are designated as having design emphasis. Those design courses must be selected such that at least one is chosen from two different areas of study, which include Environmental (CE 401, 402, 403, 415, 418, 419, and 442); Geotechnical (CE 400, 425, and 435); Hydraulics (CE 416,450, 451, 456, 460, and 475); Structural (CE 414, 430, 431, 433, 434, and 436); Sustainability (CE 405, 456, and 472); and Transportation/Pavement (CE 400, 472, 473, and 476); Other approved courses include: 4 credits of CE 488, 498, CST M ~~356,~~ 462, 466, or as approved by advisor.	**8-18**
Electrical Engineering and Computer Science {S}Revise certification requirements for Bachelor of Science in Computer Engineering.	**Computer Engineering (123 Hours)** Students may apply for certification into the Bachelor of Science in Computer Engineering degree program after completion of the following courses with a grade of C or better and a cumulative GPA of 2.5 or higher: CPT S 121 or 131; E E 214; MATH 171, 172, 216, 220, 273; PHYSICS 201. No courses listed in this schedule of study may be taken on a pass/fail basis.	**8-18**

	All listed E E and CPT S courses, required electives, and prerequisites to these courses must be completed with a grade of C or better. Certification Guarantee: Students who have completed the certification courses noted above with an average GPA of at least 3.2, who have an overall GPA of at least 3.2 in the completed courses required in the major, and who have not repeated any required courses, are guaranteed certification.	
Electrical Engineering and Computer Science {S}Revise graduation requirements for minor in Computer Science.	**Computer Science** The minor in computer science consists of 20 credits which must include CPT S 121, 122, and 223, or CPT S 131, 132, and 233, and three 300-400-level CPT S courses taken in residence at WSU or through WSU-approved education abroad or educational exchange courses, excluding CPT S 302 and 401. All prerequisites for courses in the minor must be met. The minor program must be approved by the computer science undergraduate coordinator. For all courses and their prerequisites, a grade of C or better is required to complete the minor.	**8-18**
Electrical Engineering and Computer Science {S}Revise graduation requirements for minor in Electrical Engineering.	**Electrical Engineering** The minor in electrical engineering consists of 18 credit hours, 9 of which must be 300-400-level and taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. The 18 credits must include the following courses: E E 214, 261, and 262. The remaining credits must be selected from any 300-400-level E E courses excluding E E 302 and E E 304. All prerequisites for minor courses must be met. The minor program must be approved by the electrical engineering undergraduate coordinator. For all courses and their prerequisites, a grade of C or better is required to complete the minor.	**8-18**
Electrical Engineering and Computer Science {S}Revise graduation requirements for minor in Software Engineering.	**Software Engineering** The minor in Software Engineering consists of 20 credits from CPT S 121, 122, 223 (or CPT S 131, 132, 233) and three 300-400-level courses chosen from CPT S 321, 322, 422, 476, 478, 484, or 487. A maximum of 8 course credits from the requirements of the student's major can be used to satisfy the requirements of the minor. 9 hours must be 300-400-level courses taken in residence at WSU or through WSU-approved education abroad or	**8-18**

	educational exchange courses. For all courses and their prerequisites, a grade of C or better is required to complete the minor.	
Engineering and Computer Science WSU-Vancouver Add new minor: Electrical Engineering (Vancouver only)	**Minor in Electrical Engineering (Vancouver only)** Students majoring in other disciplines may elect to obtain a minor in electrical engineering. The minor in electrical engineering consists of 20 credit hours that must include ECE 214, 260, 321, 325, and any two of ECE 324, 341, 349, 366, 370, 411, 414, 424, 461, or 462. Though it is not required, students may choose their two optional courses in the following concentrations: • VLSI design: ECE 349 and 366 • Digital signal processing: ECE 341 and 414 • Computer engineering: ECE 324 and 424 • Power systems: ECE 461 and 462 All minor courses, except ECE 214, 260, 321 and 341, must be taken in residence at WSU Vancouver. The University requires at least 9 credit hours for any minor be 300-400-level and taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. All prerequisites for minor courses must be met. All minor courses must be completed with a minimum 2.0 GPA.	**8-18**
Honors College Correction of typo: Revise course in Footnote 5 of Honors College requirements	**Honors College Requirements** **Third or Fourth Year** • HONORS 450 Honors Thesis[5] [5] Three credits required. HONORS 398 strongly recommended as preparation. Approved substitutes for this course include~~:~~ BIO ENG 411, CE 465, CHE 451, CPT S ~~422~~ 423, ENGR 421, E E 416, and ME 416.	**8-17**
Molecular Biosciences Add new undergraduate sub-plan in Bachelor of Science in Microbiology: Accelerated Pre-Veterinary Option	**Microbiology – Honors Accelerated Pre-Veterinary Option (120 Hours)** This option has been established for admission of highly academically qualified students to the Doctor of Veterinary Medicine (D.V.M.) program at the Washington State University College of Veterinary Medicine (CVM). The program of study consists of three years of undergraduate coursework that fulfills the pre-veterinary microbiology requirements followed by the	**8-18**

four-year D.V.M. Program. Satisfactory completion of this 7-year curriculum leads to the Bachelor of Science (B.S.) in Microbiology and Doctor of Veterinary Medicine (D.V.M.) degrees.

All students who qualify for admission to the WSU Honors College are eligible to apply for pre-admission to the College of Veterinary Medicine after one year of Honors pre-veterinary microbiology curriculum. Interested applicants should identify themselves to the Honors College as soon as they decide to enroll at the University because the number of available seats in the B.S./D.V.M. Program is limited. Early admission to the D.V.M. Program requires approval of the CVM Admissions Committee. Accepted students are pre-admitted directly to the D.V.M. program. To maintain pre-admission into the D.V.M. Program, accepted students must achieve an overall grade point average of 3.50 or better in all undergraduate coursework.

Students may certify in microbiology – accelerated pre-veterinary option after completing a minimum of 30 semester credits in residence at WSU with a 2.5 cumulative GPA, and a grade of C or better in each of the following courses: BIOLOGY 106; BIOLOGY 107; CHEM 105; CHEM 106 or 116. Completion of the degree requires a minimum of 90 undergraduate credits, including 30 upper-division credits, and one year of DVM coursework.

First Year

First Term	***Hours***
BIOLOGY 106	4
CHEM 105	4
ENGLISH 298	4
Foreign Language (if needed)[1]	0-4
Second Term	***Hours***
BIOLOGY 107	4
CHEM 106 or 116[2]	4
HONORS 270	3
Foreign Language (if needed) or elective[1]	2-4
Summer	***Hours***
MATH 140 or 171	4

Second Year

First Term	***Hours***
CHEM 345	4
HONORS 280	3
MBIOS 301	4
STAT 212	4
Second Term	***Hours***
HONORS 290	3
MBIOS 303	4
MBIOS 304	3
PHYSICS 101 or 201	4
Complete Writing Portfolio	
Summer	***Hours***
MBIOS 305	3

Third Year

First Term	***Hours***
HONORS 370	3
HONORS 380	3
HONORS 398[2]	0 or 1
MBIOS 404	3
MBIOS 494 [M] [CAPS]	3
PHYSICS 102 or 202	4
Second Term	***Hours***
HONORS 390[3]	3
HONORS 450	1
MBIOS 410	3
MBIOS 411 [M]	3
MBIOS 450	3

Fourth Year

First Term	***Hours***
VET MED 511[4]	5
VET MED 535[5]	3
Additional DVM coursework[6]	7
Second Term	***Hours***
VET MED 534[7]	5
Additional DVM coursework[6]	10

Footnotes

[1] The foreign language requirement may be satisfied in one of the following ways:

- Satisfactory completion of the STAMP test
- Satisfactory completion of a foreign language 204-level course

	• Completion of a minor in a foreign language • Earning the Honors College Certificate of Global Competencies • Students with a native language that is not English and who come to the United States after 8th grade can be exempted from the foreign language requirement with approval of an Honors advisor [2] HONORS 398 is an optional thesis-preparation course. [3] Students who complete CHEM 116 fulfill the honors HONORS 390 requirement and another 3-credit course can be substituted. [4] Satisfies the Laboratory Elective for the B.S. in Microbiology. [5] Satisfies the Virology requirement (MBIOS 442) for the B.S. in Microbiology [6] Additional (required) D.V.M. courses in the first year satisfy the Microbiology elective requirement for the B.S. in Microbiology. Students must complete a minimum of 21 credits in 500-level (professional or graduate) courses, while pursuing the subsequent D.V.M. degree in order to complete the requirements for the accelerated bachelor's degree. [7] Satisfies the Immunology requirement (MBIOS 440) for the B.S. in Microbiology	
Physics & Astronomy Revise graduation requirements for Bachelor of Science in Physics - Standard Option	**Physics – Standard Option (121 Hours)** **Third Year** ***First Term*** ***Hours*** CPT S 111, CPT S 121, E E 221, or MATH 300 2-4 Diversity [DIVR] 3 Humanities [HUM] 3 MATH Elective[1] 3 PHYSICS 320 3 PHYSICS 341 3 ***Second Term*** ***Hours*** ENGLISH 402 [WRTG] [M] 3 MATH Elective[1] 3 PHYSICS 342 3 PHYSICS 415 [M] 3 PHYSICS 499 1 Standard Option Elective [2] 3	**8-18**
Physics & Astronomy Revise graduation requirements for Bachelor of Science in Physics - Astrophysics Option	**Physics – Astrophysics Option (121 Hours)** **Third Year** ***First Term*** ***Hours*** ASTRONOM 345 3 CPT S 111, CPT S 121, E E 221, or MATH 300 ~~[M]~~ 2-4 Humanities [HUM] 3 MATH Elective[1] 3 PHYSICS 320 3 PHYSICS 341 3 ***Second Term*** ***Hours*** ASTRONOM 435 or 436 3	**8-18**

	ENGLISH 402 [WRTG]	3	
	MATH Elective[1]	3	
	PHYSICS 342	3	
	PHYSICS 415 [M]	3	
	PHYSICS 499	1	