UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 6

Spring 2022

Faculty Senate approved February 17, 2022

--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
Engineering and Computer Science WSU-V Revise graduation requirements for B.S. in Mechanical Engineering, Vancouver	**Bachelor of Science, Mechanical Engineering (Vancouver Only) (~~121~~120 Credits)** For the major in the Mechanical Engineering degree program on the Vancouver campus, students are admitted to the Mechanical Engineering major upon demonstrating they are ready to take MATH 171 (Calculus I) or higher and making their intentions known to the department. To remain in good standing, students must complete the benchmark courses: MECH 211, 212, 215, MATH 171, 172, 220, 273, 315, CHEM 105, and PHYSICS 201 and 211 (or their transfer equivalents) with a grade of C or better and obtain a WSU cumulative GPA of 2.5 or higher when the final benchmark is completed. No courses listed in this schedule of studies may be taken on a pass/fail basis. All upper-division mechanical engineering courses must be completed with a minimum 2.0 average GPA. **First Year** ***First Term*** ***Credits*** Arts [ARTS] 3 CHEM 105 [PSCI] 4 HISTORY 105 [ROOT] 3 MATH 171 [QUAN] 4 MECH 103 2 ***Second Term*** ***Credits*** ~~CHEM 106~~ ~~4~~ ENGLISH 101 [WRTG] 3 Humanities [HUM] 3 MATH 172 4	**8-22**

MATH 220	2	
MECH 101	2	
Second Year		
First Term	***Credits***	
ECONS 101 [SSCI] or 102 [SSCI]	3	
~~MATH 220~~	~~2~~	
MATH 273	2	
MECH 211	3	
MECH 251	2	
PHYSICS 201	3	
PHYSICS 211	1	
Second Term	***Credits***	
Biological Sciences [BSCI]	3 or 4	
MATH 315	3	
MECH 212	3	
MECH 215	3	
PHYSICS 202	3	
PHYSICS 212	1	
Complete Writing Portfolio		
Third Year		
First Term	***Credits***	
ENGLISH 402 [WRTG]	3	
MECH 301	3	
MECH 303	3	
MECH 304	3	
MECH 309 [M]	3	
Second Term	***Credits***	
MECH 310	4	
MECH 314	3	
MECH 348	3	
MECH 404	3	
400-level MECH Option Courses/Technical Electives[1]	3	
Fourth Year		
First Term	***Credits***	
MECH 402	3	
MECH 414	3	

	MECH 416 [M] 2 400-level MECH Option Courses/Technical Electives[1] 6 ***Second Term*** ***Credits*** ~~Arts [ARTS]~~ ~~3~~ Diversity [DIVR] 3 MECH 417 [CAPS] 3 400-level MECH Option Courses/Technical Electives[1] ~~6~~9 **Footnotes** [1] Technical Electives or 400-level MECH Option Courses: The program emphasizes fundamentals and provides flexibility in selecting a course of study through five technical electives. Students can either take any ~~five~~ six elective courses (~~15~~18 credits), provided they meet the prerequisites, or they can choose to take a set of related electives comprising an option area and additional electives of their choice. ~~Students are required to work with their faculty advisor to develop their schedule of studies as they are admitted to the program at the junior level.~~ The following are the technical elective courses and option areas: (Option 1) Micro and Nanotechnology: MECH 431, 435, 438, 450; (Option 2) Design and Manufacturing: MECH 476, 477, 485, 489; (Option 3) Mechatronics: MECH 405, 467, 468; (Option 4) Renewable Energy: MECH 441, ECE 421, choice of two courses from MECH 405, 431, 439, 442, 450, 468.	
Engineering and Computer Science WSU-V Revise requirements for Computer Science minor (Vancouver)	**Computer Science (Vancouver only)** The minor in computer science consists of ~~21~~ 20 credit hours, ~~10~~ 9 of which must be 300-400-level courses taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. ~~Required courses include CS 121 or 251, 122, 224, 360, and two (6 credits minimum) 300-400 level CS courses, excluding CS 402.~~ Completion of the minor requires CS 121 or 251; CS 122; CS 223, 224 or CS 261; and 9 credits of 300-400 level CS courses excluding CS 402. All courses must be completed with a grade of C or better and all course prerequisites must be met. The minor course of study must be pre-approved by the computer science academic coordinator.	**8-22**
History Move minor in Religious Studies from School of Language, Cultures, and Race to Department of History and revise requirements	**Religious Studies** A minor in Religious Studies requires 18 credits from the course list below, 9 of which must be in 300-400-level courses taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. A grade of C or better is required in all course work for the minor. Courses include: ANTH 303, ENGLISH 305, 306, 308, 341, 483, 484, 485, FINE ART 201, 202, 302, HISTORY 307, 308, 332, 340, 341, 343, 344, 364, 370, 371, 372, 373, 374, 465, 474, HUM 103, 335, PHIL 207, 446.	**8-22**

Physics & Astronomy Under BS in Physics, add new sub-plan: Planetary Sciences	**Planetary Sciences Option (120 Credits)** The concentration in planetary sciences is an interdisciplinary program between the Department of Physics & Astronomy and the School of the Environment. It is appropriate for students who wish to continue their studies in graduate school or pursue careers immediately upon graduation. The curriculum is applicable to a broad range of disciplines from mathematical physics to applied environmental science. The student gains experience with experimental science, data collection and analysis, and analytical reasoning. A one-semester research experience is a requirement for graduation. A free elective course allows students to fine-tune their education in their senior year. Students may be admitted to the physics major upon making their intentions known to the department. **First Year** ***First Term*** ***Credits*** Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI] 3 CHEM 105 [PSCI] 4 ENGLISH 101 [WRTG] 3 MATH 171 [QUAN] 4 SOE 100 or PHYSICS 188 1 ***Second Term*** ***Credits*** CHEM 106 or 116 4 HISTORY 105 [ROOT] 3 MATH 172 or 182 4 SOE 103 or ASTRONOM 138 3 **Second Year** ***First Term*** ***Credits*** CPT S 111 3 MATH 273 or 283 2 PHYSICS 201 [PSCI] 3 PHYSICS 211 [PSCI] 1 SOE 102 4 Foreign Language, if needed 0-4 ***Second Term*** ***Credits*** Biological Sciences [BSCI] 3 Diversity [DIVR] 3 MATH 220 or 230 2 or 3 PHYSICS 202 3 PHYSICS 212 1	**8-22**

SOE 210	4
Foreign Language, if needed	0-4
Complete Writing Portfolio	

Third Year

First Term	***Credits***
MATH 315	3
PHYSICS 303	3
Social Sciences [SSCI]	3
SOE 340 [M]	4
STAT 212	4

Second Term	***Credits***
ASTRONOM 435	3
Humanities [HUM]	3
PHYSICS 304	3
SOE 356	3
SOE 474 [CAPS][M]	4

Fourth Year

First Term	***Credits***
Arts [ARTS]	3
ASTRONOM 345	3
ENGLISH 402 [WRTG] or COM 400 [COMM]	3
SOE 350	4
SOE 499 or PHYSICS 499	1

Second Term	***Credits***
ASTRONOM 450	3
SOE 357	3
SOE 480	3
SOIL SCI 374	3
Elective[1]	3

Footnotes

[1] Free elective (3 credits): Suggested courses are ASTRONOM 436, CHEM 300 or 400 level, DATA 115 or 209, PHYSICS 300 or 400 level, SOE 300 or 400 level, STAT 412.