## UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 4 Fall 2021

## --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 <br> Date |
| :---: | :---: | :---: |
| \{S\} College of Communication Update the Department of Journalism and Media Production and the Department of Strategic Communication requirements to reflect the reassignment of course subjects | Murrow College eliminated the Department of Communication and Society in Fall 2020. All curriculum was moved except for the following courses. These 10 COMSOC courses have now been reassigned to the subjects COM or STRATCOM as indicated below, or dropped, and the requirements will be updated to reflect the updated subjects. <br> - COMSOC 230 - Subject updated to COM 230 <br> - COMSOC 301 - Subject updated to COMSTRAT 301 <br> - COMSOC 321 - Subject updated to COM 321 <br> - COMSOC 324 - Subject updated to COMSTRAT 324 <br> - COMSOC 325 - Subject updated to COM 325 <br> - COMSOC 326 - Subject updated to COMSTRAT 326 <br> - COMSOC 421 - Subject updated to COM 421 <br> - COMSOC 480 - Subject updated to COM 480 <br> - COMSOC 495 - Dropped and replaced with COM / COMSTRAT <br> - COMSOC 499 - Dropped and replaced with COM / COMSTRAT | 8-22 |
| Economic Sciences <br> Revise graduation requirements for Bachelor of Science in Economic Sciences - Quantitative Economics option | Quantitative Economics (120 Credits) <br> Students are admitted to the Quantitative Economics option upon making their intention known to the department. Admitted students must meet the following two benchmarks to remain in good standing: <br> 1. Minimum WSU cumulative GPA of 2.0 . <br> 2. Cumulative GPA of 2.0 or higher in ECONS 301, 302, and 311. <br> First Year <br> First Term <br> Credits <br> Biological Sciences [BSCI] or Physical Sciences [PSCI] (with lab) ${ }^{1}$ <br> ECONS 101 [SSCI] or 102 [SSCI] | 8-22 |



|  | ECONS 483, 495, 497, 499, or HONORS 450 <br> MATH 364, 401, or ECONS 526 <br> MATH 420 or ECONS 527 | 3 |
| :--- | :--- | :--- | :--- |
|  | Electives | 3 |
| Second Term |  |  |
| ECONS 400-500-level Elective |  |  |



|  | Science Elective (with lab) ${ }^{3}$ <br> Second Term <br> Credits <br> 300-400-level Minor Elective ${ }^{2}$ <br> 3 <br> CPT S 302 <br> CPT S 317 <br> CPT S 360 or $370^{1}$ <br> Science Elective ${ }^{3}$ <br> Fourth Year <br> First Term <br> Credits <br> 300-400-level Minor Elective ${ }^{2}$ <br> CPT S 327 <br> CPT S 350 <br> CPT S $421{ }^{4}$ <br> EPT S-427 <br> Humanities [HUM] <br> Second Term <br> 300-400-level Minor Elective ${ }^{2}$ <br> Advanced CPT S Electives (choose two) ${ }^{5}$ <br> CPT S 423 [CAPS] ${ }^{4}$ <br> Complete CPT S Exit Interview and Survey <br> Footnotes <br> ${ }^{1}$ Students may choose between a C/C++ (CPTS 121, 122, 223, 360) path or a Java programming (CPTS 131, 132, 233, 370) path. Students should stick to one path option. The Java track is not available in Tri Cities. <br> ${ }^{2}$ Elective credits may include a minor program. Completion of a minor is strongly encouraged. <br> ${ }^{3}$ Science electives: A minimum of 15 credits required. Must include a year-long sequence (two semesters including a laboratory in each semester) of [BSCI] or [PSCI], and two additional science courses, one of which must have a laboratory component. Electives include BIOLOGY 106, 107; CHEM 101, 102 or 105, 106; PHYSICS 101/111, 102/112 or 201/211, 202/212. <br> ${ }^{4}$ Consult with an advisor at campus of residence for allowed substitutions. <br> ${ }^{5}$ Advanced CPT S Electives: 6 credits required. These credits must be in 300 - or 400- or 500level CPT S courses and they must include at least one of the following courses: CPT S 315, $415,451,471$, or 475 . A maximum of 3 credits from CPT S 490 and 499, or 3 credits from CPT S 488 or 499 may be selected as CPT S electives. Consult with advisor at campus of residence for course choices. |  |
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| Electrical Engineering and Computer Science Revise requirements for Bachelor of Science in Computer Science | Bachelor of Science, Computer Science (120 Credits) <br> Students are admitted to the Computer Science major upon demonstrating they are calculus-ready and making their intention known to the department. Calculus-ready is defined as having an ALEKS math placement score of $83 \%$ or higher; or completion of MATH 108, and 171 or a higher calculus course with a grade of C or better; or | 8-22 |

completing the Math AP with a score of 2 (places the student in MATH 171), or 3 (credit is given for MATH 171); or achieving an IB score of HL 5; or achieving a CLEP score of 50 .

To remain in good standing students must complete CPT S 121, 122, and 223 , or CPT S 131,132 , and 233 , MATH $171,172,216$, and PHYSICS 201/211, each with a grade of C or better, and earn a cumulative WSU GPA of 2.5 or higher upon completion of the above courses.

Alternate Pathway:
Completion of ALL standard pathway benchmarks and additionally: ENGLISH 101, CHEM 105, CPT S 260, and MATH 273 or 301, all with a grade of C or better, and a 2.5 cumulative WSU GPA (or transfer GPA if no WSU GPA exists).

No courses listed in this schedule of study may be taken on a pass/fail basis. With the exception of CPT S 488, 490, 499, and ENGR 489, 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.

## First Year

## First Term

Credits
CPT S 121 or $131^{1}$
ENGLISH 101 [WRTG] ..... 3
MATH 171 [QUAN] ..... 4
PHIL 201 ..... 3
Second Term
Credits
CPT S 122 or $132^{1}$ ..... 4
HISTORY 105 [ROOT] ..... 3
MATH 172 ..... 4
MATH 216 ..... 3
Second Year
First Term
Credits
CPT S 223 or $233^{1}$ ..... 3
CPT S 260 ..... 3
MATH 220 ..... 2
MATH 273 or 301 ..... 2 or 3
PHYSICS 201 [PSCI] ..... 3
PHYSICS 211 [PSCI] ..... 1
Second Term
Credits
CPT S 3173


|  | Information Mangement-Management area. CPT S 483 special topics course may also be considered as a CPT S Technical Elective with departmental approval. Consult your academic advisor. Systems: CPT S 411, 427, 428, 442, 455, 460, 464, 466; Data and Information Management: CPT S 315, 415, 451, 471, 475; Software: CPT S 321, 323, 422, 443, 479, 481, 484, 487, 489; Artificial Intelligence and Machine Learning: CPT S 434, 437, 440; Scientific and Visual Computing: CPT S 430, 442, 453. <br> Computer Science Electives: Four additional courses (12 credits) at the 300-400-level that are not used as Technical Electives. At least 6 credits must be CPT S courses. Approved nonCPT S courses are: 300-400-level E E courses, CE 463, DTC 335, E M 464, MATH 315, $401,420,421$, MBIOS 478, MSE 302, PHYSICS 303, 443, and STAT 436. Additional Free Electives may include a maximum of 3 credits each of CPT S 490 and 499, or 3 credits each of CPT S 488, 499, and ENGR 489. <br> ${ }^{4}$ ECONS 101 or 102 recommended. |  |
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| Electrical Engineering and Computer Science Revise requirements for Bachelor of Science Software Engineering | Software Engineering (121 Credits) <br> Students are admitted to the Software Engineering major upon demonstrating they are calculus-ready and making their intention known to the department. Calculus-ready is defined as having an ALEKS math placement score of $83 \%$ or higher; or completion of MATH 108, and 171 or a higher calculus course with a grade of C or better; or completing the Math AP with a score of 2 (places the student in MATH 171), or 3 (credit is given for MATH 171); or achieving an IB score of HL 5; or achieving a CLEP score of 50. <br> To remain in good standing students must complete CPT S 121, 122, and 223 , or CPT S 131, 132, and 233, MATH 171, 172, 216, and PHYSICS 201/211 or CHEM 105, each with a grade of C or better, and earn a cumulative WSU GPA of 2.5 or higher upon completion of the above courses. <br> Alternate Pathway (Everett students follow this pathway): Completion of ALL standard pathway benchmarks, except CPT S 223/233, and additionally: ECONS 101 or 102, ENGLISH 101 or 105, MATH 220, and two of MATH 273 301, PHIL 201 or STAT 212, all with a grade of C or better, and a 2.5 cumulative WSU GPA (or transfer GPA if no WSU GPA exists). Everett applicants follow the alternate pathway. <br> No courses listed in this schedule of study may be taken on a pass/fail basis. 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. <br> First Year <br> First Term <br> Credits <br> CPT S 121 or CPT S $131^{1}$ <br> ENGLISH 101 [WRTG] or ENGLISH 105 [WRTG] <br> MATH 171 [QUAN] <br> Math Requirement ${ }^{2}$ | 8-22 |



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| Environment <br> Revise requirements for Bachelor of Science in Earth and Environmental Sciences - Earth Sciences | Earth Sciences (123 Credits) <br> A student may be admitted to the Earth Sciences major upon making their intention known to the School of the Environment. <br> A student maintains eligibility for the major by completing each of the following courses with a C or better by the start of the third semester in the major: SOE 101 or 102, SOE 110 or BIOLOGY 106, and CHEM 101 or 105 . The following courses must be completed with a C or better by the end of the fourth semester in the major: MATH 140 or MATH 171 or STAT 212, PHYSICS 101/111 or 201/211, and SOE 350. In addition, admitted students must maintain a minimum cumulative GPA of 2.0. <br> A student who does not meet these minimum requirements for maintaining eligibility in the major may be released by the School of the Environment after two semesters of failing to meet minimums. A student may be eligible to re-enter into the same major when minimum requirements are met. <br> First Year <br> First Term | 8-22 |


Third Term
Credits
Summer Session: SOE 408 [CAPS] [M], if needed ${ }^{3,6}$ ..... 0 or 3
Fourth Year
First TermCredits
Arts [ARTS] ..... 3
SOE 300 or BIOLOGY 372 ..... 3 or 4
Earth Sciences or Professional Electives ${ }^{2,3}$ ..... $10 \underline{9}$
Second Term ..... Credits
Arts [ARTS], Humanities [HUM], or Social Sciences [SSCI] ..... 3
SOE 312 [DIVR] ..... 3
SOE 404 [CAPS] [M], if needed, or Professional Electives ${ }^{2,3,6}$ ..... 3
SOE 474 [CAPS][M] or 480 [CAPS] ${ }^{3}$ ..... 3
Earth Sciences or Electives/Professional Electives ${ }^{2,3}$ ..... 6
Exit Survey ${ }^{76}$

## Footnotes

${ }^{1}$ MATH 106 and 108 are required courses. However, if students have tested into or taken MATH 140, 171, 172 or ALEKS with an $80 \%$ or better, MATH 106 and 108 will be waived. If waived, students may need to take additional credits to meet the University minimum requirement of 120 credits
2 Earth Sciences or Professional Electives: Students will complete atotal of 31 credits-six (6) courses of Earth Sciences electives, selected from the following list: SOE 303, 320, 356, $357,405,474,475,480$, and Geology 490 (Co-op course with the University of Idaho). In addition, students will complete 22 credits of professional electives, $21 \underline{13}$ of which must be upper division. Professional Electives are courses selected by students in concert with their advisor and pertain to their major and/or to a specific sub-discipline of interest. Professional electives may also include courses from outside of their major as needed to complete a minor in another field of study. selected from one of three emphasis areas: 1) Solid Earth approved courses include SOE $303,320,340[\mathrm{M}], 404[\mathrm{M}], 405,498$; SOLL SCI $374 ; 2$ ) Earth Surface Processes, Seils, and Geography approved courses include; BIOLOGY 469 [M]; SOE 303, 311, 320, $335[\mathrm{M}], 340[\mathrm{M}], 404[\mathrm{M}], 405,408[\mathrm{M}], 412[\mathrm{M}], 416,444 ;$ SOLL SCI 302, 374, 441/442; TCH LRN 487, or 3) Water and Climate approved courses include BIOLOGY 469 [M]; CE 401, 402, 403; SOE 303, 311, 320-390, 408 [M], 412, 463, 465,475 ; SOLE SCI $374,414 / 415$. The remaining 10 credits of professional electives can be 300-400 level courses chosen from any of the emphasis areas and may need to include an [M] course, or selected from a related field or sub-discipline and approved by the academic advisor. Course used to fulfill the [CAPS] requirement cannot be used to fulfill Earth Sciences or Professional Electives.
3 The School of the Environment requires students to take three [M] courses. At least one writing in the major [M] course should come from the professional electives. The [CAPS] course required for each emphasis fulfills one of the [M] courses. The remaining two [M] courses will be selected from the professional electives.
4 SOE 207 is the approved Experiential Elective for Earth Science majors.
5 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.
${ }^{6}$ University [CAPS] course required for each emphasis is as follows: 1) Solid Earth SOE 408 [CAPS] [M]; 2) Earth Surface Processes, Soils, and Geography - SOE 404[CAPS] [M] or 408 [CAPS] [M]; and 3) Water and Climate - SOE 404 [CAPS] [M].
${ }^{76}$ Students must complete a School of the Environment exit survey, administered during the final semester.

| Food Science <br> Revise graduation requirements for Bachelor of Science in Food Science - General Option | Food Science - General Option (120 Credits) |  | 8-22 |
| :---: | :---: | :---: | :---: |
|  | First Year |  |  |
|  | First Term | Credits |  |
|  | CHEM 105 [PSCI] | 4 |  |
|  | FS 110 | 3 |  |
|  | HISTORY 105 [ROOT] | 3 |  |
|  | MATH 140 [QUAN] or 171 [QUAN] | 4 |  |
|  | Second Term | Credits |  |
|  | Arts [ARTS] | 3 |  |
|  | BIOLOGY 107 [BSCI] | 4 |  |
|  | CHEM 106 | 4 |  |
|  | ENGLISH 101 [WRTG] or 105 [WRTG] | 3 |  |
|  | Second Year |  |  |
|  | First Term | Credits |  |
|  | CHEM 345 | 4 |  |
|  | COM 102 [COMM] or H D 205 [COMM] | 3 or 4 |  |
|  | PHYSICS 101 | 3 |  |
|  | PHYSICS 111 | 1 |  |
|  | Social Sciences [SSCI] | 3 |  |
|  | Emphasis Electives ${ }^{1}$ | 3 |  |
|  | Second Term | Credits |  |
|  | BIOLOGY 140 or 333 | 3 |  |
|  | CHEM 370 OR MBIOS 303 | 3 or 4 |  |
|  | FS 220 | 3 |  |
|  | MBIOS 101, or MBIOS 304 and 305 | 4 or 6 |  |
|  | Complete Writing Portfolio |  |  |
|  | Third Year |  |  |
|  | First Term | Credits |  |
|  | FS 302 [M] | 1 |  |
|  | FS 303 | 3 |  |
|  | FS 416 | 3 |  |
|  | FS 417 | 2 |  |
|  | Humanities [HUM] | 3 |  |
|  | STAT 212 | 4 |  |
|  | Second Term | Credits |  |



