UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 2
Fall 2023

--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
{S} Art Revise requirements for BA in Art - Studio Option	**Bachelor of Arts in Art - Studio Option (120 Credits)** A student may be admitted to the Bachelor of Arts in Art – Studio Option upon completing ART 102 or 103 and 9 credits of 200-300-level art history courses, while maintaining a minimum cumulative GPA of 2.0 in ART courses. For the Bachelor of Arts in Art a total of at least 39 credits of ART with a minimum cumulative GPA of 2.0 is required; 18 of these credits must be in 300-400-level courses.	**8-24**

First Year

First Term	*Credits*
ART 102, 103, or 110	6
ART 201 [ARTS]	3
Biological Sciences [BSCI] with lab[1]	4
ENGLISH 101 [WRTG]	3

Second Term	*Credits*
ART 102, 103, or 110	3
ART 111, 312, 320, or 370	3
HISTORY 105 [ROOT]	3
Quantitative Reasoning [QUAN]	3 or 4
Elective	3

Second Year

First Term	*Credits*
Diversity [DIVR]	3
Humanities [HUM]	3
Physical Sciences [PSCI] with lab[1]	4
300-400-level ART Elective	3
Foreign Language, if necessary, or Elective	3 or 4

	Second Term ***Credits***	
	ART 202 3	
	Communication [COMM] or Written Communication [WRTG] 3	
	Equity and Justice [EQJS] 3	
	300-400-level ART Elective 3	
	Foreign Language, if necessary, or Electives 3	
	Complete Writing Portfolio	

Third Year

First Term   ***Credits***
ART 303   3
Social Sciences [SSCI]   3
300-400-level ART Elective   3
Electives   6

Second Term   ***Credits***
300-400-level ART Elective   3
Electives   12

Fourth Year

First Term   ***Credits***
ART [M] Courses[2]   6
300-400-level Electives   9

Second Term   ***Credits***
~~Integrated Capstone [CAPS]~~   ~~3~~
<u>ART 498 [CAPS]</u>   <u>3</u>
300-400-level Electives   10

Footnotes
[1] To meet University and College of Arts and Sciences requirements, students must take a [BSCI] course with lab and [PSCI] course with lab.
[2] ART [M]: Repeatable [M] course cannot be used to fulfill both of the two required [M] courses.

{S} Art Revise requirements for BFA in Art	**Bachelor of Fine Arts (BFA) in Art (120 Credits)** For the degree Bachelor of Fine Arts in Art a total of at least 70 credits in ART are required; 46 of these must be in 300-400-level courses. Admission requirements (students should prepare for BFA review during fall semester of the junior year): 1) ART 102, 103 and 110; 2) ART 201 and 202; 3) One course from 2D area (ART 111, 312, 320 or 370);	**8-24**

4) One course from 3D area (ART 340 or 350;
5) One course from media arts areas (ART 332, 333 or 381);
6) 6 additional credits in major emphasis;
7) 2.0 cumulative GPA in ART courses;
8) Slide portfolio and exhibit presentation of original art work.

First Year

First Term	*Credits*
ART 102	3
ART 110	3
Biological Sciences [BSCI] with lab[1]	4
ENGLISH 101 [WRTG]	3
Quantitative Reasoning [QUAN]	3 or 4

Second Term	*Credits*
ART 103	3
ART 111, 312, 320, or 370	3
ART 201 [ARTS]	3
HISTORY 105 [ROOT]	3
Physical Sciences [PSCI] with lab[1]	4

Second Year

First Term	*Credits*
ART 340 or 350	3
Communication [COMM] or Written Communication [WRTG]	3
Diversity [DIVR]	3
300-400-level ART Elective	3
Foreign Language or Electives	3 or 4

Second Term	*Credits*
ART 202	3
ART 332, 333, or 381	3
Equity and Justice [EQJS]	3
300-400-level ART Elective	3
Foreign Language or Electives	3
Complete Writing Portfolio	

Third Year

First Term	*Credits*
ART 303	3
ART 312	3
Social Sciences [SSCI]	3

	300-400-level ART Elective 3	
	Electives 3	
	Second Term *Credits*	
	ART 304 3	
	Humanities [HUM] 3	
	300-400-level ART Electives 6	
	Electives 3	
	Fourth Year	
	First Term *Credits*	
	ART 498 [M] [CAPS] 3	
	~~Integrated Capstone [CAPS]~~ ~~3~~	
	300-400-level ART Electives ~~9~~12	
	Second Term *Credits*	
	ART [M][2] 3	
	ART 493 4	
	300-400-level ART Electives 3	
	Electives 3	

Footnotes

[1] To meet University and College of Arts and Sciences requirements, students must take a [BSCI] course with lab and [PSCI] course with lab.

[2] ART [M]: Repeatable [M] course cannot be used to fulfill both of the two required [M] courses.

| Civil and Environmental Engineering Revise graduation requirements for BS in Civil Engineering | **Civil Engineering (~~128~~125 Credits)**

Admission to the Major Criteria

Students may be admitted to the Civil Engineering degree program either in the Department of Civil and Environmental Engineering, on the Pullman campus, or in the School of Engineering and Applied Sciences, on the Tri-Cities campus.

To be admitted to the Civil Engineering major, students must have one of the following:
• An 83% or higher ALEKS math placement score
• WSU enrollment in MATH 171 or equivalent credit earned with a 'C' or higher grade
• An AP Calculus score of '2' or higher (AB or BC exam)

To remain in the Civil Engineering major, students must complete the following benchmarks:
• A grade of 'C' or better in the following courses:
-- MATH 171, MATH 172
-- CE 211 | 8-24 |

-- PHYSICS 201 and 211
• A cumulative GPA of 2.5 or higher (or transfer GPA if no WSU GPA exists upon completion of the above courses)

The admission to major benchmarks are the same on all campuses, but the application process may vary. Students should consult with their advisor about their readiness for admission to the major and apply during the semester in which admission requirements will be met.

The admission to the major is only valid for the current campus of residence. Should a student decide to change campus after admission to the major, they will need to reapply for admission to the major for the campus to which they transfer.

Students who are deficient under the University's Academic Regulations or whose GPA in CE courses falls below 2.0 are subject to loss of eligibility of major. The undergraduate studies committee on each campus will determine the probation conditions for academically deficient students. Students must meet the conditions of their probation during the following semester to remain admitted to the major. Students failing to meet their probationary conditions during the following semester are released from the major.

Experiential Requirement

To earn a B.S. degree in Civil Engineering, students must complete one of the following experiential requirements:

1. An internship of at least eight weeks duration, with at least one credit of CE 495.
2. A research position of at least eight weeks duration under the supervision of a departmental faculty member or approved mentor, with at least one credit of CE 499.
3. Study abroad for six or more credit hours. International students in the School of Engineering and Applied Sciences will meet this requirement through their study in the United States.
4. Participation in a recognized ROTC program. Veterans in the Department of Civil Environmental Engineering or in the School of Engineering and Applied Sciences will have met this requirement through their prior service in the armed forces.
5. A leadership or service experience of at least one semester, subject to departmental approval, with at least one credit of CE 499.

At least 50 of the total hours required for this degree must be in 300-400-level courses. None of the courses listed below may be taken on a pass/fail basis. A grade of C or higher in all CE courses used to fulfill major requirements is required for graduation.

Students should consult with their advisor at their campus of residence for

approved alternative course sequences and choices as well as allowed substitutions to the schedule of studies listed below. At the time of admission to the CE program, all pre-existing upper-division CE coursework from previous institutions can be evaluated by the department for compliance with degree requirements on a case-by-case basis. Following admission to the CE program, all subsequent upper-division CE courses must be taken at WSU. However, an exception may be made if a student receives less than a C grade in one CE course during their last semester at WSU. With approval of the department chair, a student can make up that one course only at a different institution.

First Year

First Term	Credits
CHEM 105 [PSCI]	4
ENGLISH 101 [WRTG]	3
ENGR 120	2
MATH 171 [QUAN]	4
UCORE Inquiry[1]	3

Second Term	Credits
~~Biological Sciences [BSCI]~~	~~3~~
ECONS 101 [SSCI] or 102 [SSCI]	3
HISTORY 105 [ROOT]	3
MATH 172	4
MATH 220	2
UCORE Inquiry[1]	3

Second Year

First Term	Credits
CE 211	3
~~CST M 254~~	~~2~~
MATH 273	2
PHYSICS 201	3
PHYSICS 211	1
UCORE Inquiry[1]	6

Second Term	Credits
CE 203	2
CE 215	3
CHEM 106, PHYSICS 202/212, SOE 101, or 102[2]	4
ME 212	3
ME 220	1
STAT 360 or 370	3

Complete Writing Portfolio

Third Year

First Term	*Credits*
CE 302	2
CE 315	3
CE 317 [M]	4
CE 330	3
CE 341	3
CST M 254	2

Second Term	*Credits*
CE 320, MSE 201, or ME 301	3
CE 321	2
CE 322	3
CE 351	3
ENGLISH 402 [WRTG] or COM 400 [COMM][3]	3
MATH 315	3

Fourth Year

First Term	*Credits*
CE 463	3
CE 480 [M]	1
CE Electives[~~4~~3]	9
CE Laboratory Elective[~~5~~4]	3

Second Term	*Credits*
CE 465 [CAPS] [M][~~6~~5]	4
CE Electives[~~4~~3]	9
~~COM 102 [COMM] or H D 205 [COMM] or upper-division CE Elective[3,7]~~	~~3~~
Complete Experiential Requirement[~~8~~6]	0 - 1
Exit Interview	

Footnotes

[1] Must complete ~~3~~4 of these ~~4~~5 UCORE designations: ARTS, BSCI, DIVR, EQJS, HUM.

[2] CHEM 106 strongly recommended for students emphasizing environmental engineering; SOE 101 or 102 strongly recommended for students emphasizing structural, geotechnical, or infrastructure engineering.

[3] ~~To fulfill their upper-division CE elective and technical writing requirements, students can choose one of the following course combinations: COM 400 and a 300-400-level CE elective; COM 400 and COM 102; COM 400 and H D 205; ENGLISH 402 and COM 102; ENGLISH 402 and H D 205.~~

[~~4~~3] CE Elective courses: The 18 credits for elective courses must be distributed such that at least one course, not including the lab, 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, 3 credits of 498, CST M 462, 466, or as approved by advisor. Of the 18 credits for elective courses, at least three courses designated as having a design emphasis, not including the lab, must be chosen. Eligible design courses include: CE 400, 403, 419, 425, 431, 433, 434, 435, 436, 442, 450, 451, 456, 460, 473, ~~474~~, or 476. [5]4 CE Laboratory Elective: Choose one from CE 400, 415, or 416. [6]5 Course to be taken in final semester. With permission of advisor, student may substitute ENGR 421 or 431 for CE 465. ~~[7] Upper-division CE Elective — any CE Elective not used to fulfill major requirements, or as approved by advisor. In addition, CE 495 and 499 cannot be used to fulfill this requirement.~~ [8]6 Experiential Requirement: Requires completion of one of the following: 1) one credit of CE 495 or 499; 2) six or more credits of study abroad; 3) military service or participation in recognized ROTC program.	
Electrical Engineering and Computer Science Revise requirements for BS in Computer Science	**Bachelor of Science, Computer Science (120 Credits)** 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 78% 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. 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, one of CHEM 105, 106, PHYSICS 201 and 211, 202 and 212, and BIOLOGY 106, or 107, 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, 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*
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CPT S 101	1
CPT S 121 or 131[1]	4
ENGLISH 101 [WRTG]	3
MATH 171 [QUAN]	4
PHIL 201	3		**8-24**

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 or 225	2 or 3
MATH 273 or 301	2 or 3
Lab Science Requirement [BSCI] or [PSCI][2]	4

Second Term	*Credits*
CPT S 317	3
CPT S 322 [M]	3
CPT S 355	3
CPT S Technical Elective[3]	3
Lab Science Requirement [BSCI] or [PSCI][2]	4
Complete Writing Portfolio	

Third Year

First Term	*Credits*
CPT S 302	3
CPT S 327	3
CPT S 350	3
CPT S 360 or 370[1]	4
ENGLISH 402 [WRTG] ~~[M]~~	3

Second Term	*Credits*
STAT 360	3
UCORE Inquiry[4]	3
Computer Science Electives[5]	6
CPT S Technical Elective [3]	3

Fourth Year

First Term	*Credits*
CPT S 421	3
UCORE Inquiry[4]	6
CPT S Technical Electives [3]	6

	Second Term	*Credits*	
	CPT S 423 [CAPS] [M]	3	
	UCORE Inquiry[4]	3	
	Computer Science Electives[5]	9	
	Complete CPT S Exit Interview and Survey		

Footnotes

[1] Students may choose between a C/C++ (CPT S 121, 122, 223, 360) path or a Java programming (CPT S 131, 132, 233, 370) path. Students should adhere to one path option.

[2] Lab Science Requirement: Choose from CHEM 105 [PSCI], 106, PHYSICS 201 [PSCI] and 211, 202 [PSCI] and 212, BIOLOGY 106 [BSCI], 107 [BSCI]. Graduation requirements stipulate one each of [BSCI], and [PSCI]. Transfer students may fulfill the credit requirement with course equivalencies of 6 semester credits. Courses should include sufficient credits to meet the University requirement of 120 credits.

[3] CPT S Technical Electives consist of 4 courses (12 credits) taken from the courses listed below, with at least one course from the Software area and one course from the Data and Information 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, 480, ~~481,~~ 484, 487, 489; Artificial Intelligence and Machine Learning: CPT S 434, 437, 440; Scientific and Visual Computing: CPT S 430, 442, 453~~.~~; Cybersecurity: CPT S 424, 425, 426, 427, 428, 429, 431, 439.

[4] Must complete 4 of these 5 UCORE designations: ARTS, DIVR, EQJS, HUM, SSCI.

[5] Computer Science Electives: Five additional courses (15 credits) at the 300-400-level that are not used as Technical Electives. At least 9 credits must be CPT S courses. Approved non-CPT 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 a combined 3 credits of CPT S 488 and ENGR 489.

Electrical Engineering and Computer Science Revise requirements for BS in Cybersecurity	**Cybersecurity (120 Credits)** Students are admitted to the Cybersecurity 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 78% 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. To remain in good standing students must complete CPTS 121 or 131 and CPTS 122 or 132 and CPTS 223 or 233. In addition, students must also complete MATH 171, 216, and MATH 220 or 225, 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, excluding MATH 216, CPTS 223/233. In addition, complete the following courses: a [SSCI] course such as ECONS 101 or 102, ENGLISH 101, PHIL 201 or MATH 301, and the [PSCI] requirement of Lab Science Requirement[3], all with a grade of C or better, and a 2.5 cumulative WSU GPA (or transfer GPA if no WSU GPA	**8-24**

exists).

No courses listed in this schedule of study may be taken on a pass/fail basis. With the exception of CPT S 488, 499, and ENGR 489, all All listed courses must be completed with a grade of C or better.

First Year

First Term	Credits
CPT S 101	1
CPT S 121 or 131[1]	4
ENGLISH 101 [WRTG]	3
MATH 171 [QUAN]	4
UCORE Inquiry[2]	3

Second Term	Credits
CPT S 122 or 132[1]	4
HISTORY 105 [ROOT]	3
MATH 216	3
UCORE Inquiry[2]	3

Second Year

First Term	Credits
CPT S 223 or 233[1]	3
CPT S 260 or E E 234	3 or 4
Lab Science Requirement [BSCI][3]	4
MATH 220 or 225	2 or 3
UCORE Inquiry[2]	3

Second Term	Credits
CPT S 317	3
CPT S 321, 323, or 355[4]	3
CPT S 322 [M]	3
MATH 301 or PHIL 201	3
UCORE Inquiry[2]	3
Complete Writing Portfolio	

Third Year

First Term	Credits
CPT S 302	3
CPT S 327	3
CPT S 350	3
CPT S 360 or 370[1]	4

	ENGLISH 402 [WRTG] [M]	3
	Second Term	**Credits**
	CPT S 427	3
	CPT S 451 or 415	3
	STAT 360	3
	Computer Science Electives[5]	6
	Fourth Year	
	First Term	**Credits**
	CPT S 428	3
	CPT S 455	3
	Lab Science Requirement [PSCI][3]	4
	Computer Science Electives[5]	6
	Second Term	**Credits**
	CPT S 426	3
	CPT S 432 [CAPS] [M]	3
	CPT S 439	3
	Computer Science Electives[5]	6
	Complete CPT S Exit Interview and Survey	

Footnotes

[1] Students may choose between a C/C++ (CPTS 121, 122, 223, 360) path or a Java programming (CPTS 131, 132, 233, 370) path. Transitivity allowed between tracks before taking CPTS 223/233. The C/C++ track is not available in Everett.

[2] Must complete 4 of these 5 UCORE designations: ARTS, DIVR, EQJS, HUM, SSCI.

[3] Lab Science Requirement: Choose from CHEM 105 [PSCI], 106, PHYSICS 201 [PSCI] and 211, 202 [PSCI] and 212, BIOLOGY 106 [BSCI], 107 [BSCI]. Graduation requirements stipulate one each of [BSCI], and [PSCI]. Transfer students may fulfill the credit requirement with course equivalencies of 6 semester credits. Courses should include sufficient credits to meet the University requirement of 120 credits.

[4] CPT S 323 is only available in Tri-Cities.

[5] Computer Science Electives: 18 credits (minimum 12 credits 300-400 level CPTS courses) and must include one of CPTS 434, 437, 440, or 475. May include a maximum of 3 credits each of CPTS 490 and 499, or 3 credits each of CPT S 488, 499, and a combined 3 credits of CPT S 488 and ENGR 489. Approved non-CPTS courses are: 300-400-level EE courses, CE 463, DTC 335, EM 464, MATH 172, MBIOS 478, MSE 302, PHYSICS 303, 443, and STAT 436.

Electrical Engineering and Computer Science Revise requirements for BS in Software Engineering	**Software Engineering (122 Credits)** 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 78% 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.	**8-24**

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.

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 or 225, 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.

No courses listed in this schedule of study may be taken on a pass/fail basis. With the exception of CPT S 488, 499, and ENGR 489, all ~~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 101	1
CPT S 121 or CPT S 131[1]	4
ENGLISH 101 [WRTG] or ENGLISH 105 [WRTG]	3
MATH 171 [QUAN]	4
Math Requirement[2]	3

Second Term	*Credits*
CPT S 122 or CPT S 132[1]	4
HISTORY 105 [ROOT]	3
MATH 172	4
MATH 216	3
UCORE Inquiry[3]	3

Second Year

First Term	*Credits*
CPT S 223 or CPT S 233[1]	3
CPT S 260	3
MATH 220 or 225	2 or 3
Math Requirement[2]	2 or 3
PHYSICS 201/211 [PSCI] or CHEM 105 [PSCI]	4

Second Term	*Credits*
CPT S 321	3
CPT S 355	3

ECONS 101 [SSCI] or ECONS 102 [SSCI]		3
UCORE Inquiry[3]		6
Complete Writing Portfolio		

Third Year

First Term		*Credits*
CPT S 302		3
CPT S 317		3
CPT S 322 [M]		3
CPT S 360 or CPT S 370[1]		4
ENGLISH 402 [WRTG] or ENGLISH 403 [WRTG]		3

Second Term		*Credits*
CPTS 327		3
CPT S 350		3
CPT S 487		3
MATH/CPT S 453 or STAT 419		3
STAT 360		3
~~UCORE Inquiry[3]~~		~~6~~

Fourth Year

First Term		*Credits*
~~CPT S 327~~		~~3~~
CPT S 421		3
CPT S 422 [M]		3
CPT S 428 or 476		3
CPT S 484		3
Software Engineering Option Course[4]		3

Second Term		*Credits*
CPT S 423 [CAPS]		3
~~CPT S 476~~		~~3~~
Data and Information Management Elective[5]		3
Software Engineering Option Courses[4]		6
UCORE Inquiry[3]		3
Complete S E Exit Interview and Survey		

Footnotes

[1] Students may choose between a C/C++ (CPT S 121, 122, 223, 360) path or a Java programming (CPT S 131, 132, 233, 370) path. Students should adhere to one path option.

[2] Math Requirement: minimum 5 credits from the following: MATH 273, MATH 301, PHIL 201, STAT 212.

[3] Must complete 4 of these 5 UCORE designations: ARTS, BSCI, DIVR, EQJS, HUM.

Electrical Engineering and Computer Science Revise 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, 488, 490, and 499. 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.	**8-24**
Electrical Engineering and Computer Science Revise 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, 323, 422, 428, 476, 478, 484, or 487. Credit not granted for both CPTS 323 and 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 educational exchange courses. For all courses and their prerequisites, a grade of C or better is required to complete the minor.	**8-24**
Electrical Engineering and Computer Science Revise requirements for undergraduate certificate: CySER CAE-CO Fundamentals	**CySER CAE-CO Fundamentals** Students participating in the CySER CAE-CO Fundamentals Certificate will receive in-depth and wide-ranging training that integrates cybersecurity research and education with professional skills in teamwork, communication, leadership, and lifelong learning. A core principle in this certificate is training that organically merges theoretical knowledge with experiential learning in cyber operations and cyber defense. The certificate requires CPT S 327, 427, 428 and four elective courses from: CPT S 415, 425, 426, 429, 439, ~~443,~~ 455, 460, 464, ~~466,~~ 475, 478, 489; E E 334, 434, 489; or MIS 374. Additionally, students will: • Complete the Senior Design course sequence (CPT S 421 and 423) with a project focused on cybersecurity. • Complete an internship with a cybersecurity-related experience. • Demonstrate involvement in CySER research (realized via class projects, senior design projects, independent study). • Attend the CySER summer workshop. • Attend CySER seminars (at least 60% of the bi-weekly seminars in a semester).	**8-24**

	• Recommend at least four credits of foreign language or demonstrate equivalent proficiency in Russian, Chinese, Korean, Arabic, or Persian.	
Engineering and Computer Science WSU-V Revise requirements for BS in Computer Science (Vancouver Only)	**Bachelor of Science, Computer Science (Vancouver Only) (120 Credits)** For the major in the Computer Science degree program on the Vancouver campus, students are admitted to the 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,~~ <u>To keep their status as Computer Science majors and to remain in good academic standing,</u> students must pass CS 121, 122, 166, MATH 171, 172, and PHYSICS 201/211 (or their transfer equivalents) with a grade of C or better and <u>maintain a cumulative GPA of 2.0 or higher.</u> ~~have a WSU cumulative GPA of 2.5 when the final benchmark is completed.~~ No courses listed in this schedule of studies may be taken on a pass/fail basis. All listed computer science courses, and their prerequisites, must be completed with a grade of C or better. **First Year** | *First Term*	*Credits*
---	---
CS 121	4
HISTORY 105 [ROOT]	3
MATH 171 [QUAN]	4
UCORE Inquiry[1]	3 | | *Second Term*	*Credits*
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CS 122	4
CS 166	3
ENGLISH 101 [WRTG]	3
MATH 172	4 | **Second Year** | *First Term*	*Credits*
---	---
CS 223	3
CS 260	3
MATH 220	2
PHYSICS 201 [PSCI]	3
PHYSICS 211 [PSCI]	1
UCORE Inquiry[1]	3 | | *Second Term*	*Credits*		**8-24**

Biological Sciences [BSCI] or Elective[2]	4
CS 220 or CS 224	3
CS 261	3
MATH 273 or 301	2-3
Science Elective with Lab[3]	4
Complete Writing Portfolio	

Third Year

First Term	*Credits*
CS 317	3
CS 360	4
CS Option Course[4]	3
ENGLISH 402 [WRTG]	3
STAT 360	3

Second Term	*Credits*
CS 320 [M]	3
CS 351	3
CS 355	3
CS Option Course[4]	3
UCORE Inquiry[1]	3

Fourth Year

First Term	*Credits*
CS 420 [CAPS] [M]	3
CS 450	3
CS Option Courses[4]	6
UCORE Inquiry[1]	3

Second Term	*Credits*
CS 402 [M]	3
CS 421	3
CS 460	3
CS Option Course[4]	3
CS Security Option Course[5]	3
Complete CS Exit Survey	

Footnotes

[1] Must complete 4 of these 5 UCORE designations: ARTS, DIVR, EQJS, HUM, SSCI.

[2] If the [BSCI] requirement ~~has previously been~~ will be satisfied via the Science Elective requirement, 4 elective credits from any discipline may be selected. See also footnote 3.

[3] Science Elective with Lab: science course selected from the following: PHYSICS 202/212, CHEM 105, 106, BIOLOGY 106, or 107.

	[4] CS Option Courses: 15 credits of option area courses are required for completion of the degree program. The option courses must be chosen from 300-400-level CS courses and may also include up to 6 ~~hours~~ <u>credits</u> from the following list: MATH 315, 320, 325, 364, 420, 448, 453, 466, ECE 324, 366, and 424. Other computer science-related courses may be substituted, as approved by the department. [5] CS Security Option Courses: 3 credits of security option area courses are required for completion of the degree program. These credits are in addition to the 15 credits of CS Option Courses required above. CS Security Option Courses must be chosen from the following courses: CS 425, 426, and 427.	
Engineering and Computer Science WSU-V Revise requirements for BS in Electrical Engineering (Vancouver Only)	**Bachelor of Science, Electrical Engineering (Vancouver only) (121 Credits)** For the major in the Electrical Engineering degree program on the Vancouver campus, students are admitted to the Electrical Engineering major upon demonstrating they are ready to take MATH 171 (Calculus I) or higher and making their intention known to the department. To remain in good standing, students must complete the benchmark courses: CS 251, ECE 214, 234, 260, MATH 171, 172, 220, 273, 315, CHEM 105, PHYSICS 201 and 211, and PHYSICS 202 and 212 (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 course is completed. No courses listed in this schedule of studies may be taken on a pass/fail basis. All upper-division electrical engineering courses must be completed with a minimum 2.0 average GPA.	**8-24**

First Year

First Term	*Credits*
CHEM 105 [PSCI]	4
ECE 101	2
HISTORY 105 [ROOT]	3
MATH 171 [QUAN]	4
UCORE Inquiry[1]	3

Second Term	*Credits*
~~CS 251~~	~~4~~
<u>ECE 214</u>	<u>3</u>
ENGLISH 101 [WRTG]	3
MATH 172	4
PHYSICS 201 [PSCI]	3
PHYSICS 211 [PSCI]	1

Second Year

First Term	*Credits*
Biological Sciences [BSCI]	3 or 4

<u>CS 251</u>	<u>4</u>
~~ECE 214~~	~~3~~
MATH 220	2
MATH 273	2
PHYSICS 202	3
PHYSICS 212	1
Second Term	***Credits***
ECE 234	3
ECE 260	4
ECONS 101 [SSCI] or 102 [SSCI]	3
MATH 315	3
UCORE Inquiry[1]	3
Complete Writing Portfolio	

Third Year

First Term	***Credits***
ECE 321	3
ECE 325	4
ECE Elective[2]	3
ENGLISH 402 [WRTG]	3
STAT 360	3
Second Term	***Credits***
ECE 311	3
ECE 341	3
ECE 370	3
ECE Electives[2]	6

Fourth Year

First Term	***Credits***
ECE 451	2
ECE Electives[2]	12
Second Term	***Credits***
ECE 405 [M]	3
ECE 452 [M] [CAPS]	3
ECE Electives[2]	6
UCORE Inquiry[1]	3

Footnotes

[1] Must complete 3 of these 4 UCORE categories: ARTS, DIVR, EQJS, HUM.

	[2] ECE Electives must be chosen from CS 330, 466, ECE 302, 316, 324, 327, 345, 349, 366, 411, 414, 421, 424, 425, 461, 466, 471, 476, 483, 495, 496, MECH 441, 467, 468, or be pre-approved by a faculty advisor.	
Engineering and Computer Science WSU-V Revise requirements for minor in Mechanical Engineering (Vancouver only)	**Mechanical Engineering (Vancouver only)** A mechanical engineering minor requires a minimum of 16 semester hours, 9 of which must be in upper-division course work and taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. This minor requires (1) MECH 211 and 212, (2) ~~Four out of the following MECH 215, 303, 309, 314, 348, 431, 438, 441, 450, 467, or 468~~ <u>one from the following three courses: MECH 303, 309, or 348, and (3) remaining credits from MECH 300-400-level courses.</u> ~~At least one of these four courses must be MECH 215, 303, or 348.~~ All prerequisites for minor courses must be met. All courses must be completed with a minimum 2.0 average GPA.	**8-24**
Integrative Physiology and Neuroscience [IPN] Drop options under BS in Neuroscience	~~**Computational Breadth of Field Option**~~ ~~**Computational Hardware Option**~~ ~~**Computational Software Option**~~ ~~**Pre-Medical and Pre-Dental Option**~~	**8-24**
Integrative Physiology and Neuroscience [IPN] Under BS in Neuroscience, revise requirements for Pre-Veterinary Option and change name of option to Pre-Professional Option	**Pre-~~Veterinary~~ <u>Professional</u> Option (120 Credits)** Students may be admitted to the Neuroscience - Pre-~~Veterinary~~ <u>Professional</u> Option upon making their intention known to the department and enrollment in or credit for MATH 106 (or higher). To maintain admission to the major, students who have completed a minimum of 30 credits at WSU must maintain 3.0 minimum GPA overall, and a 3.0 minimum cumulative GPA in BIOLOGY 107, CHEM 105, CHEM 106 or 116, MATH 140 or 171, NEUROSCI 301, ~~NEUROSCI 302,~~ PHYSICS 101/111 or 201/211 or 205, and PHYSICS 102/112 or 202/212 or 206 or CHEM 345. Students must receive a grade of C or better in these courses and may repeat a maximum of three of these courses to maintain admission to the major. Students are encouraged to take the ~~GRE~~ <u>appropriate entrance exam for their professional program</u> after completion of the third year and apply to Veterinary School by the end of the first term of the fourth year. **First Year** *First Term* *Credits* CHEM 105 [PSCI] 4 ENGLISH 101 [WRTG] 3 MATH 140 [QUAN] or 171 [QUAN] 4 PSYCH 105 [SSCI] 3 *Second Term* *Credits* BIOLOGY 107 [BSCI] 4	**8-24**

	Credits
CHEM 106	4
Communication [COMM] or Written Communication [WRTG][1]	3
HISTORY 105 [ROOT]	3

Second Year

First Term	*Credits*
BIOLOGY 106	4
CHEM 345	4
NEUROSCI 301[2]	3
PHYSICS 101 or 201	3
PHYSICS 111 or 211	1

Second Term	*Credits*
BIOLOGY/MBIOS 301	4
Diversity [DIVR]	3
NEUROSCI 302	3
PHYSICS 102 or 202	3
PHYSICS 112 or 212	1
Complete Writing Portfolio	

Third Year

First Term	*Credits*
~~Behavior Course[3]~~	~~3 or 4~~
NEUROSCI 430 [M]	3
NEUROSCI 431	1
MBIOS 303	4
Statistics Course[~~4~~3]	3 or 4
Neuroscience Electives[~~5~~4]	5

Second Term	*Credits*
Arts [ARTS]	3
Equity and Justice [EQJS]	3
Humanities [HUM]	3
NEUROSCI 325	3
NEUROSCI 404	~~4~~3
NEUROSCI 405	1
~~Electives[6]~~	~~7~~

Fourth Year

First Term	*Credits*
~~Equity and Justice [EQJS]~~	~~3~~

	~~NEUROSCI 430 [M]~~ ~~4~~ <u>Behavior Course[5]</u> <u>3</u> Electives[6] ~~9~~<u>12</u> ***Second Term*** ***Credits*** NEUROSCI 403 [M] 3 NEUROSCI 490 [CAPS] 3 Electives[6] ~~9~~<u>10</u>	

Footnotes

[1] NEUROSCI/MBIOS 201 is recommended.

[2] PSYCH 372 may be taken in place of NEUROSCI 301 with department permission.

[3] ~~Behavior Course: Choose one course from NEUROSCI 305, 333, or 409. Other courses may be allowed by department consent.~~
<u>Statistics Course: Choose one course from PSYCH 311, STAT 212, 360, 370, or 412.</u>

[4] ~~Statistics Course: Choose one course from PSYCH 311, STAT 212, 360, 370, or 412.~~

<u>Neuroscience Electives (5 credits): Approved courses include BIOLOGY 307, 315, 321, 324 333, 340, 352, 353, 354, 438, 456; MATH 340; MBIOS 304, 305, 401, 404, 405, 478; NEUROSCI 305, 326, 333, 395, 409, 480; PHYSICS 466; PSYCH 265, 312, 328, 333, 350, 361, 363, 384, 390, 464, 468, 470, 473, 490, 491; VET PH 308. Other courses may be allowed by department consent. Courses may not be used to fulfill more than one requirement. Please consult your advisor.</u>

[5] ~~Neuroscience Electives (5 credits): Approved courses include BIOLOGY 307, 315, 321, 333, 340, 352, 353, 354, 438, 456; MATH 340; MBIOS 301, 304, 305, 401, 404, 413; NEUROSCI 305, 333, 409, 425, 426; PHYSICS 466; PSYCH 265, 312, 333, 350, 361, 372, 384, 464, 470, 490, 491; VET PH 308. Other courses may be allowed by department consent. Courses may not be used to fulfill more than one requirement. Please consult your advisor.~~

<u>Behavior Course: Choose one course from NEUROSCI 305, 333, or 409. Other courses may be allowed by department consent.</u>

[6] Elective choices should include 300-400 level coursework to meet the University minimum requirement of 40 upper division credits. Consult your advisor regarding elective courses that may be required or recommended for admission to a ~~DVM~~ <u>professional</u> program.

Languages, Cultures, and Race Under BA in Foreign Language & Cultures, add new subplan: Spanish - Latin American and Latinx Studies	**Spanish – Latin American and Latinx Studies (120 Credits)** The Bachelor of Arts in Foreign Languages & Cultures / Spanish - Latin American and Latinx Studies is a cross-disciplinary program designed for students who have interests in both the acquisition of Spanish language and the study of Latin American and Latinx cultures, literatures, and film. The Bachelor of Arts in Foreign Languages & Cultures / Spanish - Latin American and Latinx Studies promotes the study of Latin American societies and Latinx communities in the United States from systematic, interdisciplinary, comparative, and transnational approaches, through a learning process based on the intersectionality of notions such as social class, ethnicity, race, gender, migration, "local" realities, late capitalism, colonialism, postcolonial condition, among others. Students will learn how nowadays Latin American national identities were built and how those identities are simultaneously preserved and negotiated in Latino communities in the U.S. The Bachelor of Arts in Foreign Languages & Cultures / Spanish - Latin American and Latinx Studies is preparatory for careers and future study in teaching, social work, law school, community development and nonprofit	**8-24**

work along with graduate programs in Spanish, Hispanic Studies, Latin American Studies, Latinx Studies, American Studies, History, Ethnic Studies, Immigration Studies, Law, among other fields.

To earn a Bachelor of Arts in Foreign Languages & Cultures / Spanish - Latin American and Latinx Studies students will complete:

• A minimum of 34 credits beyond the 203 level (or the equivalent level in competence) in Spanish language courses (including 15 credits in Latin American Literature, Film, and Culture.) SPANISH 101, 102, and 203 do not count toward the major. Students who place into 102 and receive a B or better qualify for an additional 4 departmental advanced placement credits; students placing into 203 or above and receiving a B or better qualify for 8 departmental advanced placement credits. A maximum of 8 departmental AP credits is possible. See school for details.

• A minimum of 27 credits in Comparative Ethnic Studies (CES) courses focused on Latino Culture and Literature including 12 credits of 300-400 level course work. (NOTE: CES 151 and CES 201 are pre-requisite and are mandatory.)

• 6 credits in Internship/Service Learning/Study Abroad

The program of study must fulfill an academic or career goal, include prerequisites consistent with the 300-400-level major coursework, satisfy the UCORE requirements and any additional requirements for the College of Arts and Sciences, and include language proficiency appropriate to the cultural area. The area studies major will consist of a minimum of 61 credits. Students are admitted to the Bachelor of Arts in Foreign Languages & Cultures / Spanish - Latin American and Latinx Studies upon making their intentions known to the School of Languages, Cultures and Race. However, no course in which C- or lower is earned will be counted toward the major. 300-400-level courses taken pass/ fail may not be included for credit toward the major. No course may be repeated for credit toward the major unless thus designated in the catalog. More details are available on the websites of WSU, the General Studies program, and the School of Languages, Cultures, and Race, at https://slcr.wsu.edu/.

First Year

First Term	Credits
CES 151 [HUM][1]	3
SPANISH 101, 102, or 203[2]	4
SPANISH 105, 205, or Elective	1
Written Communication [WRTG]	3
100-level SPANISH course taught in English	3

Second Term	Credits
Equity and Justice [EQJS]	3

	Credits
HISTORY 105 [ROOT]	3
Quantitative Reasoning [QUAN]	3
SPANISH 102, 203, or 204	4
SPANISH 105, 205, FOR LANG 210, or Elective	1

Second Year

First Term	*Credits*
Biological Sciences [BSCI] with lab[3]	4
CES 201[1]	3
Communication [COMM] or Written Communication [WRTG]	3
SPANISH 203	4
SPANISH 205 or Elective	1

Second Term	*Credits*
CES courses[4]	3
FOR LANG 370	3
Physical Sciences [PSCI] with lab[3]	4
SPANISH 204	4
SPANISH 205, FOR LANG 210, or Elective	1
Complete Writing Portfolio	

Third Year

First Term	*Credits*
CES courses[4]	6
Social Sciences [SSCI]	3
SPANISH 305 or Elective	1
SPANISH 306, 307, or 308 (choose 2)[5]	6

Second Term	*Credits*
CES courses[4]	3
SPANISH 305, FOR LANG 210, or Elective	1
SPANISH 306, 307, or 308 (choose 1)[5]	3
SPANISH 320 [DIVR], 321 [DIVR], 350 [ARTS], 351 [ARTS][6]	3
SPANISH 407 or 408 [M]	3
SPANISH 450 [M] [CAPS], 451 [M] [CAPS], 452 [M] [CAPS], or 453 [M][7]	3

Fourth Year

First Term	*Credits*
CES courses[4]	6
SPANISH 310 [ARTS] or 311 [ARTS][7]	3
SPANISH 407 or 408 [M]	3

	SPANISH 450 [M], 451 [M], 452 [M], or 453 [M][7]	3	
	Second Term *Credits*		
	CES courses[4]	3	
	FOR LANG 495 (Internship, Service Learning, or Study Abroad)	6	
	SPANISH 320 [DIVR], 321 [DIVR], 350 [ARTS], 351 [ARTS][6]	3	
	SPANISH 450, 451, 452, or 453[6]	3	

Footnotes

[1] CES 151 satisfies the [HUM] UCORE requirement and one of the two CES pre-requisites of the program. The second CES pre-requisite of the program is CES 201.

[2] Student must meet proficiency requirement to enroll in SPANISH 203.

[3] To meet University and College of Arts and Sciences requirements, students must take a [BSCI] course with lab and [PSCI] course with lab.

[4] All Spanish – Latin American and Latinx Studies majors must complete 21 credits of CES courses, including 12 credits of upper-division CES courses from CES 254, 255, 353, 357, 358, 359, 454.

[5] SPANISH 306, 307, or 308 cannot be repeated for credit. The student must take 2 of these courses in the 3rd year/1st term, and the remaining course in the 3rd year/2nd term.

[6] SPANISH 310 [ARTS], 311 [ARTS], 320 [DIVR], 321 [DIVR], 350 [ARTS], or 351 [ARTS] cannot be repeated for credit. The student must take at least one [ARTS] and one [DIVR] course. Both [ARTS] and [DIVR] are needed to satisfy CAS UCORE requirements.

[7] Either SPANISH 450, 451, or 452 satisfies the [CAPS] UCORE requirement. As the student must take two [M] courses, the second SPANISH course at 450-level may be either another [CAPS] or SPANISH 453 if the student is interested in linguistics.

| **Teaching and Learning** Revise requirements for Add-On Endorsement in Middle-Level Math | **ADD-ON ENDORSEMENTS**

Anyone wishing to add an endorsement to a valid Washington State teacher certificate must make application to the WSU add-on endorsement program. The application and more information can be found on the College of Education's website (http://education.wsu.edu/studentservices/endorsements). The following endorsements are available as add-on endorsements only. Individuals may be recommended for endorsement in bilingual education, English Language Learners, reading, middle level science, middle level mathematics, science, or special education concurrently with completion of endorsement requirements in elementary education or one of the specific subject endorsements listed above, or as an endorsement added to a currently valid teacher certificate.

Bilingual Education: TCH LRN 333, 410, or 510; 339 or 549; 401 or 501; 409 or 509; 411; 413, 414, or 514; one from ENGLISH 256, TCH LRN 330, 404, 504 (highly recommended), 512, 516, 537, 574, 580. Demonstrated proficiency in a language other than English by passing the oral and written | **8-24** |

proficiency tests of the American Council on the Teaching of Foreign Language (ACTFL) at the advance mid-level.

English Language Learners [undergraduate courses]: TCH LRN 333, 339, 401, 413 or 414, and 409. One from ENGLISH 256, TCH LRN 330, 404, 504 (highly recommended), 512, 516, 537, 574, 580.

English Language Learners [graduate courses]: TCH LRN 501, 509, 510, 514, 549; one from TCH LRN 512, 516, 504, (highly recommended), 537, 574 or 580.

Middle Level Math: MATH ~~106,~~ 252, 303, 351; TCH LRN 433 or 533, 434 or 534, approved probability and statistics course.

Middle Level Science: BIOLOGY 106, 107, BIOLOGY/TCH LRN 430, CHEM 101, PHYSICS 150, SCIENCE 101, 102, SOE 101.

Reading [graduate courses]: TCH LRN 528, 537, 544, 546, 551, 553, 558.

Special Education [undergraduate courses]: SPEC ED 301, 401, 402, 403, 404, 409, 421, 471, 490 or 499 (4 credits).

Special Education [graduate courses]: SPEC ED 301, 501, 502, 503, 504, 509, 521, 571, 590 or 499 (4 credits).