

**UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 11
Spring 2018**

--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
<p>Civil and Environmental Engineering Revise certification requirements and correct an error in the schedule of studies listing of a course's credits for the Bachelor of Science in Civil Engineering (Pullman and Tri-Cities)</p>	<p>Civil Engineering (1289 Hours)</p> <p>Students may certify in the Civil Engineering degree program either in the Department of Civil and Environmental Engineering on the Pullman campus, or the School of Engineering and Applied Sciences on the Tri-Cities campus. <u>To be eligible for certification, students must have completed 45 semester hours of course work including CE 211, MATH 171 172, and PHYSICS 201 or course equivalents.</u></p> <p>The certification criteria are <u>the same on all campuses, but the application process may vary.</u> identical and independently applied by the two academic units. Students should consult with their advisor <u>about their readiness for certification and apply for certification during the semester in which certification requirements will be met.</u> at their campus of residence for approved alternative course sequences and choices as well as allowed substitutions vis à vis the schedule of studies listed below. Please see the following specific policies for each academic unit.</p> <p><u>The number of students certified into the Department of Civil and Environmental Engineering and the School of Engineering and Applied Sciences depends upon the available resources and facilities on their respective campuses. The best-qualified students, based on cumulative GPA and grades in the prerequisite courses above, as well as all engineering, math, and science courses taken to date will be</u></p>	<p>8-18</p>

certified into the department and the school until the carrying capacity is reached.

The Certification Committee reviews applicants' academic credentials and a decision is made on the basis of the following guidelines:

1. The Department of Civil and Environmental Engineering and the School of Engineering and Applied Sciences will establish the total number of students to be certified into the Civil Engineering program on each campus.
2. Applicants are ranked on the basis of an index number that includes weighted contribution from the student's overall GPA and the GPA from all engineering, math, and science courses taken as part of the curriculum. For transfer students, a composite overall GPA will normally be constructed on the basis of the percentage of total credits from each institution. A weight of .25 is used for the overall GPA and .75 is used for the engineering, math, and science GPA. Students must have a minimum index value of 2.5 to be considered for certification. However, the cutoff certification index number may fluctuate each semester depending upon the number of applicants.
3. Certification Guarantee: Students who complete the required certification courses with an average GPA of at least 3.2, and overall GPA of at least 3.2 in all the completed engineering, math, and science courses and who have not repeated any required course are guaranteed certification.
4. Students who are not guaranteed certification will be ranked on the basis of their index value. If the number of students who meet minimum certification requirements exceeds the number of available spaces, the following factors may also be considered:
 - a. Performance in engineering-related courses.
 - b. Summer and other work experience.
 - c. Expressed interest in Civil Engineering.

- d. Progress toward completion of the degree.
- e. Professional and ethical character.
- 5. The certification procedure is as follows:
 - a. Certification applications will normally be reviewed in August, December and May of each academic year.
 - b. Only students with index numbers of 3.0 or higher, or up to a departmental predefined limit, will normally be certified in August or December. All other eligible applications (i.e. with index values above 2.5) will receive a letter informing them that they must wait until the following semester for a decision.
 - c. Applications for students who are not certified will be held for consideration in subsequent terms in the same academic year. Students who are not certified within one academic year should contact their advisor to determine if reapplication is recommended.
 - d. Uncertified students may take the following courses based on index number and space availability: CE 302, 303, 315, 317, 322, 330, 341, 351, 414, and 463. Permission to enroll in these classes does not imply acceptance for certification. A student with an index number below 2.5 is not permitted to take any upper-division CE courses. If already enrolled, the student will be removed from the course.
- 6. The certification is only valid for the current campus of residence. Should student decide to change campus after certification, they will need to reapply for certification for the campus to which they transfer.
- 7. Students who are deficient under the University's Academic Regulations or whose GPA in CE courses falls below 2.0 are subject to decertification. The undergraduate studies committee on each campus will determine the eligibility and

probation conditions for decertified students who will be permitted to apply for recertification

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.

Department of Civil and Environmental Engineering, Pullman

~~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 and a grade of C or better in all CE courses used to~~

fulfill major requirements is required for graduation.

Certification Requirements:

Students who will be completing at least 45 semester hours of course work at the end of the semester including CE 211, MATH 171, 172, and PHYSICS 201 or equivalents are eligible to apply for certification into the Department of Civil and Environmental Engineering. The number of students certified into the department depends upon the available resources and facilities. The best qualified students, based on cumulative GPA and grades in the prerequisite courses listed above, as well as all math, science and engineering courses taken to date, will be certified into the department until the carrying capacity is reached.

Experiential Requirement

Students within the Department of Civil and Environmental Engineering 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 Department of Civil and Environmental Engineering will meet this requirement through their study in the United States.
4. Participation in a recognized ROTC program. Veterans in the Department of Civil and Environmental Engineering 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.

School of Engineering and Applied Sciences, Tri-Cities

1. The School Engineering and Applied Sciences will establish the total number of students to be certified into the Civil Engineering degree program on the Tri-Cities campus. At least 50 of the total hours required for this degree program must be in 300-400 level courses. None of the courses listed below may be taken on a pass, fail basis and a grade of C or better in all CE courses used to fulfill major requirements is required for graduation.
2. Students who will be completing at least 45 semester hours of course work at the end of the semester including CE 211, MATH 171, 172, and PHYSICS 201 or equivalents are eligible to apply for certification into School of Engineering and Applied Sciences.
3. Students should consult with their advisor about their readiness for certification and then apply for certification as early as possible in their studies after completion of the needed certification courses.
4. Certification applications are accepted on a rolling basis online, under the Certification tab at https://tricities.wsu.edu/engineering/seas-advising_gateway/ for the Civil Engineering program, and normally processed within two weeks of the date of submittal.

~~5. Any further questions should be addressed through scheduling an individual meeting with your advisor at <https://tricities.wsu.edu/engineering/undergraduate/advising-form>.~~

Experiential Requirement

~~Students within the School of Engineering and Applied Sciences 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 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.~~

Third Year

<i>First Term</i>	<i>Hours</i>
CE 302	2
CE 315	3
CE 317 [M]	3 4
CE Breadth Electives ^{4,5}	6
CST M 254	2

Design and Construction

Revise certification and graduation requirements for Bachelor of Science in Architectural Studies

Bachelor of Science in Architectural Studies (120 Hours)

Students may apply for certification in the Bachelor of Science in Architectural Studies during the at the end of spring semester of the first year. Certification requirements include completion of a minimum of 24 semester ~~hours~~ credits and earning a C or better grade in the following courses: SDC 100, 120, and 140. Additional required courses are COM 102, ENGLISH 101, HISTORY 105, PSYCH 105 or SOC 101, MATH 106 and 108, and one fine arts class (FINE ART 101, 201, or 202). Transfer equivalents may be approved by the program. A minimum 2.5 WSU cumulative GPA is required to apply for certification. Students' overall WSU GPA and major specific GPA from the courses listed above are considered in the application process.

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~~While students must have a minimum cumulative WSU GPA of 2.5 to apply for certification, the process is competitive due to limited space in upper division courses. Students' overall WSU GPA and major specific GPA from the courses listed above are considered.~~

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.

The plan below is a suggested path to completion of the architectural studies degree. Students will meet with an advisor each semester to confirm academic schedule and monitor progress towards graduation.

Students are required to earn a grade of C or better in all courses required for the degree.

First Year

<i>First Term</i>	<i>Hours</i>
COM 102 [COMM]	3
ENGLISH 101 [WRTG]	3
<u>Humanities [HUM]</u>	<u>3</u>
MATH 106 ⁺	3
SDC 100 [ARTS]	3
SDC 120	3
<i>Second Term</i>	<i>Hours</i>
<u>Diversity [DIVR]</u>	<u>3</u>
FINE ART 101, 201, or 202	3
HISTORY 105 [ROOT]	3
Humanities [HUM]	3
MATH 108 ⁺	2
<u>PSYCH 105 or SOC 101 [SSCI]</u>	<u>3</u>
SDC 140	3
Social Sciences [SSCI]	3

Second Year

<i>First Term</i>	<i>Hours</i>
ARCH 201	<u>45</u>

ARCH 210	3
CST M 201	3
<u>MATH pre-req (if needed)¹ or MATH [QUAN]</u>	<u>3 or 4</u>
PHYSICS 101 [PSCI]	4
SDC 250	3
<i>Second Term</i>	<i>Hours</i>
ARCH 203	45
ARCH 209	3
ARCH 215	3
CST M 202	3
SDC 350 [M]	3
Complete Writing Portfolio	
Third Year	
<i>First Term</i>	<i>Hours</i>
ARCH 301	5
ARCH 309 [M]	3
ARCH 351	3
CST M 332	3
<u>MATH [QUAN]¹ or Elective</u>	<u>3-4</u>
<i>Second Term</i>	<i>Hours</i>
ARCH 303	5
ARCH 352	3
CST M 333	3
<u>MATH [QUAN]¹</u>	<u>3 or 4</u>
<u>PHYSICS 101 [PSCI]</u>	<u>4</u>
Fourth Year	
<i>First Term</i>	<i>Hours</i>
ARCH 401	56
<u>ARCH 463²</u>	<u>3</u>
ARCH 563²	0 or 3
ARCH Emphasis <u>Supportive Elective³</u>	3
Biological Sciences [BSCI]	3 or 4
Diversity [DIVR]	3
<i>Second Term</i>	<i>Hours</i>
ARCH 403 [CAPS]	56
ARCH 531 ²	0 or 3
ARCH 540 573²	0 or 3
ARCH Emphasis <u>Electives³</u>	8
<u>Biological Science [BSCI]</u>	<u>3 or 4</u>
<u>Supportive Elective³</u>	<u>3</u>

	<p>Footnotes</p> <p>¹ All freshmen must take the math placement exam. <u>Completion of MATH 108 with a grade of C or better, a minimum ALEKS math placement score of 75%, or passing MATH 140, 171 or 202 is required for PHYSICS 101 [PSCI]. MATH 106 and MATH 108 or higher are required for certification. One additional course from the following list must be taken to does not fulfill the university [QUAN] requirement for graduation: CPT S 111; ECON 335; MATH 171; MATH 202; PHIL 201; STAT 205 or STAT 212.</u> Students who do not take MATH 106 and 108 prerequisites may need an additional 5 credits to meet the University minimum of 120 credits.</p> <p>² ARCH 463 is required for students intending to enter the M.Arch program. <u>Students not intending to enter the M.Arch program may take ARCH 463 or an additional supportive elective in its place. ARCH 531, 563, and 573 and 540 may be taken and reserved for graduate credit towards the accelerated M. Arch program if a grade of B or better is earned. Courses must be in addition to the requirements for undergraduate degree, and students must have a 3.0 GPA over the last 60 hours of undergraduate work to be eligible.</u></p> <p>³ <u>Supportive Elective: At least 446 hours of any 300-400-level courses from ARCH, CST M, DESIGN, I D, LND ARCH, or SDC, not used to fulfill major requirements.</u></p>	
<p>Electrical Engineering and Computer Science Revise certification and graduation requirements for Bachelor of Science in Software Engineering (Pullman and Everett)</p>	<p>Software Engineering (121 Hours)</p> <p>Students may apply for certification into the Bachelor of Science in Software 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, 122 or 132; MATH 171, 172, 216; PHYSICS 201 <u>or CHEM 105.</u></p> <p><u>Certification in more than one of the following majors is not allowed: BA Computer Science, BS Computer Science, BS Software Engineering. (See academic coordinator for details.)</u></p> <p><u>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.</u></p> <p>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.</p>	<p>8-18</p>

First Year		
<i>First Term</i>		<i>Hours</i>
CPT S 121 or CPT S 131 ¹		4
ENGLISH 101 [WRTG] or ENGLISH 105 [WRTG]		3
MATH 171 [QUAN]		4
<u>Math Requirement²</u>		<u>3</u>
PHIL 201		3
<i>Second Term</i>		<i>Hours</i>
CPT S 122 or CPT S 132		4
HISTORY 105 [ROOT]		3
MATH 172		4
MATH 216		3
Second Year		
<i>First Term</i>		<i>Hours</i>
CPT S 223 or CPT S 233 ¹		3
CPT S 260		3
MATH 220		2
MATH 273 or MATH 301		2 or 3
PHYSICS 201 [PSCI] or <u>CHEM 105 [PSCI]</u>		4
<u>Math Requirement²</u>		<u>2 or 3</u>
<i>Second Term</i>		<i>Hours</i>
CPT S 321		3
CPT S 355		3
Creative & Professional Arts [ARTS]		3
ECONS 101 [SSCI] or ECONS 102 [SSCI]		3
Humanities [HUM]		3
Third Year		
<i>First Term</i>		<i>Hours</i>
CPT S 302		3
CPT S 317		3
CPT S 322 [M]		3
CPT S 360 or CPT S 370		4
ENGLISH 402 [WRTG] or ENGLISH 403 [WRTG]		3
Complete Writing Portfolio		
<i>Second Term</i>		<i>Hours</i>
Biological Science [BSCI]		3
CPT S 350		3
CPT S 487		3
Diversity [DIVR]		3
MATH/CPT S 453		3

	<p>STAT 360 3</p> <p>Fourth Year</p> <p><i>First Term</i> <i>Hours</i></p> <p>CPT S 421 3</p> <p>CPT S 422 [M] 3</p> <p>CPT S 451 or CPT S 455 3</p> <p>CPT S 484 3</p> <p>Software Engineering Option Course¹³ 3</p> <p><i>Second Term</i> <i>Hours</i></p> <p>CPT S 423 [CAPS] 3</p> <p>CPT S 460, CPT S 464, or CPT S 466²⁴ 3</p> <p>CPT S 476 3</p> <p>Software Engineering Option Courses¹³ 6</p> <hr/> <p>Footnotes</p> <p>¹ <u>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 remain in one path option. The Java track is not available in Tri-Cities.</u></p> <p>² <u>Math Requirement: minimum 5 credits from the following: MATH 273, MATH 301, PHIL 201, STAT 212.</u></p> <p>¹³ Software Engineering Option Courses (Nine credits required): Any 400 level course in CPT S, E E, or MATH not used to fulfill major requirements. Upper-division courses in other disciplines may be used with prior approval by advisor.</p> <p>²⁴ Three credits of CPT S 483 may be substituted with prior approval by advisor.</p>	
<p>Electrical Engineering and Computer Science Revise certification and graduation requirements for Bachelor of Science in Electrical Engineering</p>	<p>Electrical Engineering (123 Hours)</p> <p>Students may certify in the Electrical Engineering degree program either in the School of Electrical Engineering and Computer Science, on the <u>(responsible for the program in Bremerton, Everett, and Pullman) campus,</u> or in the School of Engineering and Applied Sciences, on the <u>(responsible for the program in the Tri-Cities) campus.</u> The certification criteria are identical and independently applied by the two schools. <u>Certification requirements are the same on all campuses, but the application process may vary.</u> Students should consult with their <u>an</u> advisor at their campus of residence <u>regarding procedure details, including timing, to apply for certification.</u> for approved alternative course sequences and choices as well as allowed substitutions vis-à-vis the schedule of studies listed below. Please see the following specific policies for each school.</p>	<p>8-18</p>

~~**School of Electrical Engineering and Computer Science, Pullman**~~

Students may apply for certification into the Bachelor of Science in Electrical 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, 220, 273; PHYSICS 201.

Certification Guarantee: Students who have completed the courses noted above with an average GPA of at least 3.2, who have an overall GPA of at least 3.2 in the courses that have been taken that are required in the major, and who have not repeated an required course, are guaranteed certification.

No courses listed in this schedule of study may be taken on a pass/fail basis. With the exception of E E 488, E E 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. Students should also consult with an advisor regarding allowed course substitutions to the schedule of studies listed below.

~~**School of Engineering & Applied Sciences, Tri-Cities**~~

- ~~1. The School Engineering and Applied Sciences will establish the total number of students to be certified into the Electrical Engineering degree program on the Tri-Cities campus.~~
- ~~2. Students may normally apply for certification into the Bachelor of Science in Electrical 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, 220, 273; PHYSICS 201. 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.~~
- ~~3. Students should consult with their advisor about their readiness for certification and then apply for certification as early as possible in their studies after completion of the needed certification courses.~~
- ~~4. Certification applications are accepted on a rolling basis online, under the Certification tab at <https://tricitie.wsu.edu/engineering/seas-advising-gateway/> for the Electrical Engineering degree program and normally processed within two weeks of the date of submittal.~~
- ~~5. Any further questions should be addressed through scheduling an~~

individual meeting with your advisor at <https://tricities.wsu.edu/engineering/undergraduate/advising-form>.

Footnotes

¹ Engineering Science Electives (6 credits): Choose from CE 211, ME 212, 301, MSE 302.

² **Track Electives:** Students follow one of five tracks for an emphasis in their degree program (15 credits minimum): Power Track: required: E E 362 [M], 491, at least 6 credits from E E 486, 489, 492, 493, 494, and remaining credits from list of approved technical electives; Microelectronics Track: required: E E 351, ~~434~~, 476, 496, and at least ~~one~~ two from E E ~~431, 434, 464, 466, 488, 489, 495~~ 499 with a maximum of 3 credits from 488 and 499 combined; Systems Track: required: E E 464, 489, at least one from E E 432, 451, and ~~two~~ one from E E 351, 431, 432, 451, 470, ~~495~~ and remaining credits from list of approved technical electives; General Track: at least one from E E 324 [M], 351, 362 [M], 489, and remaining credits from list of approved technical electives with a minimum of nine credits 400-level E E courses; or Computer Engineering Track: required: E E 434, 466, at least one from E E 324 [M], 334, ~~431, 476~~, CPT S 360, and remaining credits from list of approved technical electives with a minimum of three credits 400-level E E courses.

³ ~~Approved~~ Technical Electives approved for Power Track, ~~Systems Track~~, General Track (minimum 9 credits 400-level E E courses), and Computer Engineering Track (minimum 3 credits 400-level E E courses) include: ASTRONOM 435, CE 463, CHEM 331, 333, 345, MATH 320 [M], 325, 340, 364, 401 [M], 402 [M], 415, 420, 421 [M], 440, 441, 448, 453, 464, 466, ME 304, 401, MSE 402, 403, PHYSICS 303, 304, 320, 443, 450, and 463, or any 300-400-level CPT S or E E course not used to fulfill other requirements.

Engineering and Computer Science WSU-V

Revise certification and graduation requirements for Bachelor of Science in Electrical Engineering (Vancouver only) 312

Bachelor of Science, Electrical Engineering (Vancouver only) (121 Hours)

Students who have completed at least 30 semester hours of course work and who have completed CHEM 105; CS 251; ECE 214, ECE 234, ECE 260, MATH 273, and PHYSICS 202, or their equivalents, are eligible for certification into the Bachelor of Science in Electrical Engineering program. All courses required for certification must be completed with a grade of C or better. Enrollment in many upper-division electrical engineering courses is restricted to certified majors or minors in electrical ~~or mechanical~~ engineering.

When it becomes necessary to limit enrollment, the overall GPA as well as the GPA for the prerequisite courses listed will be important factors. Students who have not completed all of the prerequisite courses will be placed in a pre-engineering ~~major~~ category.

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

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	<p>major, and who have not repeated any required courses, are guaranteed certification.</p> <p>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.</p> <p>Fourth Year</p> <table border="0"> <tr> <td><i>First Term</i></td> <td style="text-align: right;"><i>Hours</i></td> </tr> <tr> <td>ECE 411</td> <td style="text-align: right;">3</td> </tr> <tr> <td>ECE 451</td> <td style="text-align: right;">2</td> </tr> <tr> <td>ECE Electives¹</td> <td style="text-align: right;">9</td> </tr> <tr> <td>Second Term</td> <td style="text-align: right;">Hours</td> </tr> <tr> <td>Creative & Professional Arts [ARTS]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>ECE 405 [M] or CS 402 [M]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>ECE 452 [M] [CAPS]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>ECE Electives¹</td> <td style="text-align: right;">6</td> </tr> </table> <hr/> <p>Footnotes</p> <p>¹ ECE Electives must be chosen from CS 330, 466, ECE 302, 316, 324, 327, 349, 366, 414, 421, 424, 425, 461, 462, 466, 471, 476, 477, 486, 496, MECH 441, 467, 468, or be pre-approved by a faculty advisor.</p>	<i>First Term</i>	<i>Hours</i>	ECE 411	3	ECE 451	2	ECE Electives ¹	9	Second Term	Hours	Creative & Professional Arts [ARTS]	3	ECE 405 [M] or CS 402 [M]	3	ECE 452 [M] [CAPS]	3	ECE Electives ¹	6											
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<p>History Revise graduation requirements for Bachelor of Arts in History - Education Option</p>	<p>History - Education Option (120 Hours)</p> <table border="0"> <tr> <td>First Year</td> <td></td> </tr> <tr> <td><i>First Term</i></td> <td style="text-align: right;"><i>Hours</i></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><i>Second Term</i></td> <td style="text-align: right;"><i>Hours</i></td> </tr> <tr> <td>ECONS 102 [SSCI], <u>or</u> 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 [HUM]</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Physical Sciences [PSCI] with lab or SCIENCE 102 [SCI]¹</td> <td style="text-align: right;">4</td> </tr> <tr> <td>Second Year</td> <td></td> </tr> <tr> <td><i>First Term</i></td> <td style="text-align: right;"><i>Hours</i></td> </tr> <tr> <td>Creative & Professional Arts [ARTS] (<u>non-HISTORY</u>)²</td> <td style="text-align: right;">3</td> </tr> </table>	First Year		<i>First Term</i>	<i>Hours</i>	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	<i>Second Term</i>	<i>Hours</i>	ECONS 102 [SSCI], <u>or</u> POL S 101 [SSCI], or PSYCH 105 [SSCI] ²	3	ENGLISH 101 [WRTG]	3	HISTORY 102 [HUM]	3	Physical Sciences [PSCI] with lab or SCIENCE 102 [SCI] ¹	4	Second Year		<i>First Term</i>	<i>Hours</i>	Creative & Professional Arts [ARTS] (<u>non-HISTORY</u>) ²	3	<p>8-18</p>
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Creative & Professional Arts [ARTS] (<u>non-HISTORY</u>) ²	3																													

ECONS 102 [SSCI]; <u>or</u> POL S 101 [SSCI]; or PSYCH 105 [SSCI] ²	3
ENGLISH 201 [WRTG], 301 [WRTG], 302 [M], or 402 [WRTG] ³	3
HISTORY 110	3
HISTORY 308	3
<i>Second Term</i>	<i>Hours</i>
200-level HISTORY course ⁴	3
Diversity [DIVR] (<u>non-HISTORY</u>) ²	3
ECONS 102, POL S 101, or PSYCH 105 ²	3
HISTORY 111	3
<u>HISTORY 120</u>	<u>3</u>
Complete Writing Portfolio	
Third Year	
<i>First Term</i>	<i>Hours</i>
300-400-level HISTORY courses ⁵	6
HISTORY 300 [M]	3
TCH LRN 301	3
Foreign Language, if needed ⁶	0 - 4
<i>Second Term</i>	<i>Hours</i>
300-400-level HISTORY course ⁵	<u>3</u> 6
HISTORY 422 <u>or</u> 480	3
Integrative Capstone [CAPS] ²	3
TCH LRN 317	2
Foreign Language or Electives, if needed ⁶	0 - 4
<u>Third Term</u>	<u>Hours</u>
<u>TCH LRN 317</u>	<u>2</u>
Fourth Year	
<i>First Term</i>	<i>Hours</i>
300-400-level HISTORY course ⁵	3
HISTORY 469 [M]	3
TCH LRN 464	3
TCH LRN 465	3
TCH LRN 466	2
<u>Elective, if needed</u> ⁷	<u>0-1</u>
<i>Second Term</i>	<i>Hours</i>
ED PSYCH 468	3
HISTORY <u>422 or</u> 480	3
TCH LRN 467 [M]	3
TCH LRN 469	<u>2-3</u>
TCH LRN 470	3

	<p>Fifth Year</p> <p>First Term</p> <p>TCH LRN 415</p> <p>Complete History Department's Exit Survey</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. Only 3 HISTORY courses may be used to meet UCORE 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>⁴ 200-level HISTORY course: Choose one from HISTORY 230, 231, <u>232</u>, 270, 271, 272, 273, <u>274</u>, or 275.</p> <p>⁵ History education majors must choose their 12 hours of 300-400-level electives from the following: one from <u>early U.S.:</u> HISTORY 411, 413, 414, 415, or 416; one from <u>Modern U.S.:</u> HISTORY 412, 417, 418, or 419; one from <u>Europe:</u> HISTORY 340, 341, 342, 350, 381, 382, 386, 435, 440, 441, 444, 445, 447, 448, 449, 450, 453, 454, 455, 459, 463, 466, 467, 468, or 489; and one from <u>non-West:</u> 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 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.</p> <p>⁷ <u>Students must take a minimum of 12 credits per semester to maintain full time status.</u></p>	<p>Hours</p> <p>16</p>
<p>Marketing and International Business</p> <p>Revise certification requirements for Bachelor of Arts in Business Administration - International Business</p>	<p>International Business (120 Hours)</p> <p>Preparation for careers with multinational corporations, governmental and intergovernmental agencies both domestic and international.</p> <p>Students must complete 9 credits of foreign study except for students studying at WSU who reside outside the US and who attended at least one year of secondary school in a foreign country <u>a minimum of one semester of at least 11 weeks in length and 12 transferable credits of a pre-approved study abroad program. Students are also required to demonstrate competency in a foreign language. Foreign language competency can be achieved through coursework equivalent to the WSU FOR LANG 204-level or by testing out at the intermediate level (tests such as STAMP or LTI are acceptable) or certification by a WSU faculty member who is a native speaker of the target language. This requirement is for all students. One year of foreign language is required except for non-native speakers of international students whose primary</u></p>	<p>8-18</p>

	<p>language is not English from outside the US who may substitute satisfactory TOEFL scores. Bilingual Americans may substitute satisfactory ETS scores or certification by a WSU faculty member who is a native speaker of the target language. A third language is strongly encouraged for students who have achieved competency in two languages by the time they enter the university or certify into the major.</p>													
<p>Mechanical and Materials Engineering Correction: Add Exit Survey to requirements, which was missed on UPMCB 6.</p>	<p>Materials Science and Engineering (120 Hours)</p> <p>Fourth Year</p> <table data-bbox="440 688 1360 953"> <thead> <tr> <th data-bbox="440 688 1247 722"><i>Second Term</i></th> <th data-bbox="1250 688 1360 722"><i>Hours</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="440 726 1247 764">ENGLISH 402 [WRTG] [M]</td> <td data-bbox="1250 726 1360 764">3</td> </tr> <tr> <td data-bbox="440 768 1247 806">MSE Elective²</td> <td data-bbox="1250 768 1360 806">3</td> </tr> <tr> <td data-bbox="440 810 1247 848">Technical Elective³</td> <td data-bbox="1250 810 1360 848">3</td> </tr> <tr> <td data-bbox="440 852 1247 890">Engineering and Science Elective¹</td> <td data-bbox="1250 852 1360 890">3</td> </tr> <tr> <td data-bbox="440 894 1247 953"><u>Complete Exit Survey</u></td> <td data-bbox="1250 894 1360 953"></td> </tr> </tbody> </table>	<i>Second Term</i>	<i>Hours</i>	ENGLISH 402 [WRTG] [M]	3	MSE Elective ²	3	Technical Elective ³	3	Engineering and Science Elective ¹	3	<u>Complete Exit Survey</u>		<p>8-18</p>
<i>Second Term</i>	<i>Hours</i>													
ENGLISH 402 [WRTG] [M]	3													
MSE Elective ²	3													
Technical Elective ³	3													
Engineering and Science Elective ¹	3													
<u>Complete Exit Survey</u>														
<p>Mechanical and Materials Engineering Revise certification requirements and add Exit Survey for Bachelor of Science in Mechanical Engineering, (Pullman and Tri-Cities)</p>	<p>Mechanical Engineering (127 Hours)</p> <p>Criteria for Certification – Mechanical Engineering Program</p> <p>Students may certify in the Mechanical Engineering degree program in either in the School of Mechanical and Materials Engineering, on the Pullman campus, or in the School of Engineering and Applied Sciences, on the Tri-Cities campus, the certification criteria are identical and independently applied by the two schools. Students should consult with their advisor at their campus of residence for approved alternative course sequences and choices as well as allowed substitutions vis-à-vis the schedule of studies listed below. Please see the following specific policies for each school. To be eligible for certification students must complete CE 211, CHEM 105, MATH 171, MATH 172, PHYSICS 201, and with a C or better grade and a <u>minimum cumulative GPA of 2.5.</u></p>	<p>8-18</p>												

Transfer students who have completed or are about to complete CE 215, CHEM 106, MATH 220, MATH 273, MATH 315, ME 212, PHYSICS 202, and computer programming before starting at WSU, and have at least a 3.2 average GPA for the math, science, and engineering courses completed can be certified at the time of admission.

Certification requirements are the same on all campuses, but the application process may vary. Students should consult with their advisor about their readiness for certification and then apply for certification as early as possible in their studies after completion of the needed certification courses.

School of Mechanical and Materials Engineering, Pullman
Certification Process

1. The School of Mechanical and Materials Engineering and the School of Engineering and Applied Science will establish the total number of students to be certified into the Mechanical Engineering program on the Pullman each campus.
2. 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 all completed engineering, math, and science courses, and who have not repeated any required courses, are guaranteed certification.

~~2. Students should apply for certification in the semester after they have completed the following five courses: MATH 171, MATH 172, CHEM 105, PHYSICS 201, and CE 211. Students must have a minimum cumulative GPA of 2.5 and a C or better grade for each of the five courses listed above to be considered for certification. Transfer students who meet the aforementioned minimum requirements may apply during their first semester at WSU, but no decision will be made until the end of the semester when the final grades become available. Exception to this residence requirement is described in item 3. Note that the actual cutoff grade point based on the ranking (see item 4) is usually higher than 2.5*.~~

~~3. Transfer students who have completed or are about to complete MATH 220, MATH 273, MATH 315, CHEM 106, PHYSICS 202, ME~~

212, CE 215, and computer programming before starting at WSU, and have at least a 3.2 average GPA for the math, science, and engineering courses completed can be certified at the time of admission.

4. Students need to submit an application for certification to the Undergraduate Student Services office, Sloan 205 or electronically to newcoug@mme.wsu.edu. The application deadline is the Monday after finals week in December and May for the fall and the spring semester respectively.

3. 5. If the number of students who meet minimum certification requirements exceeds the number of available spaces, students

The applicants will be ranked based on the GPA of the engineering, math, and science, and engineering courses completed. For those who are borderline, tThe semester and cumulative GPA will be considered and used as a reference. In addition to GPA, other factors may also be taken into consideration, such as the number of engineering math, and science, and engineering courses taken at WSU. The independent committee at each campus has the authority to weigh these factors in its decision for certification.

4. 6. The certification is only valid for the current ~~resident~~ campus of residence. Should a student decide to change campus after certification, they will need to reapply for certification for the campus to which they transfer.

5. 7. Students who are deficient under the University's Academic Regulations are subject to decertification. The undergraduate studies committee will determine the eligibility and probation conditions for decertified students who will be permitted to apply for recertification.

8. Any further questions should be addressed to the Undergraduate Student Services Office in Sloan 205 or newcoug@mme.wsu.edu.
*The cutoff GPA fluctuates each semester depending on the number of applicants. Contact the department for details.

School of Engineering and Applied Sciences, Tri-Cities

1. The School Engineering and Applied Sciences will establish the total number of students to be certified into the Mechanical Engineering degree program on the Tri-Cities campus.

2. Students should normally apply for certification in the semester after they have completed the following five courses: MATH 171, MATH 172, CHEM 105, PHYSICS 201, and CE 211. Students must have a minimum cumulative GPA of 2.5 and a C or better grade for each of

	<p>the five courses listed above to be considered for certification. Transfer students who meet the aforementioned minimum requirements may apply during their first semester at WSU, Those transfer students who have completed or are about to complete MATH 220, MATH 273, MATH 315, CHEM 106, PHYSICS 202, ME 212, CE 215, and computer programming before starting at WSU, and have at least a 3.2 average GPA for the math, science, and engineering courses completed can be certified at the time of admission.</p> <p>3. Students should consult with their advisor about their readiness for certification and then apply for certification as early as possible in their studies after completion of the needed certification courses.</p> <p>4. Certification applications are accepted on a rolling basis online, under the Certification tab at https://tricitie.wsu.edu/engineering/seas-advising_gateway/ for the Mechanical Engineering degree program, and normally processed within two weeks of the date of submittal.</p> <p>5. Any further questions should be addressed through scheduling an individual meeting with your advisor at https://tricitie.wsu.edu/engineering/undergraduate/advising-form. Students are encouraged to consult with their advisor at their campus of residence for approved alternative course sequences as well as allowed substitutions to the schedule studies.</p> <p>Fourth Year</p> <table data-bbox="440 1045 1360 1360"> <thead> <tr> <th><i>Second Term</i></th> <th><i>Hours</i></th> </tr> </thead> <tbody> <tr> <td>Humanities [HUM]</td> <td>3</td> </tr> <tr> <td>ME 406 [M]</td> <td>3</td> </tr> <tr> <td>ME 416 [CAPS]</td> <td>3</td> </tr> <tr> <td>Technical Elective¹</td> <td>3</td> </tr> <tr> <td>Complete Fundamentals of Engineering Exam</td> <td></td> </tr> <tr> <td><u>Complete Exit Survey</u></td> <td></td> </tr> </tbody> </table>	<i>Second Term</i>	<i>Hours</i>	Humanities [HUM]	3	ME 406 [M]	3	ME 416 [CAPS]	3	Technical Elective ¹	3	Complete Fundamentals of Engineering Exam		<u>Complete Exit Survey</u>		
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Complete Fundamentals of Engineering Exam																
<u>Complete Exit Survey</u>																
<p>Nutrition and Exercise Physiology Revise certification and graduation requirements for Bachelor of Science in Nutrition and Exercise Physiology.</p>	<p>Bachelor of Science in Nutrition and Exercise Physiology (123 Hours)</p> <p><u>Completion of the B.S. in Nutrition and Exercise Physiology (NEP) requires a C or higher grade in all NEP courses required for the major and a minimum cumulative GPA of 2.5 in all required NEP courses completed at WSU.</u></p> <p>Fourth Year</p> <table data-bbox="440 1822 1360 1950"> <thead> <tr> <th><i>Second Term</i></th> <th><i>Hours</i></th> </tr> </thead> <tbody> <tr> <td>WSU Spokane MGMT 301</td> <td>3</td> </tr> </tbody> </table>	<i>Second Term</i>	<i>Hours</i>	WSU Spokane MGMT 301	3	<p>8-18</p>										
<i>Second Term</i>	<i>Hours</i>															
WSU Spokane MGMT 301	3															

	<u>NEP 450</u> 3 NEP 480 4 NEP 482 2 NEP 495 [CAPS] [M] 3	
Pharmacy Revise graduation requirements for Doctor of Pharmacy (PHARMD)	DOCTOR OF PHARMACY (PHARMD) CURRICULUM (134 Hours) First Year <i>First Term</i> <i>Hours</i> PHARDSCI 502 4 PHARDSCI 504 1 PHARDSCI 508 3 PHARDSCI 528 3 PHARMACY 507 1 PHARMACY 509 1 PHARMACY 516 2 <u>Electives</u> ¹ 2 <i>Second Term</i> <i>Hours</i> PHARDSCI 510 2 PHARDSCI 512 4 PHARDSCI 518 2 PHARDSCI 519 1 PHARMACY 501 1 PHARMACY 513 1 PHARMACY 514 4 Electives ¹ 2 Second Year <i>First Term</i> <i>Hours</i> PHARDSCI 532 4 PHARMACY 530 2 PHARMACY 531 1 PHARMACY 533 3 PHARMACY 534 4 PHARMACY 545 3 PHARMACY 565 2 Electives ¹ 2 <i>Second Term</i> <i>Hours</i> PHARDSCI 542 4 <u>PHARDSCI 547</u> 2 PHARMACY 541 1 PHARMACY 543 1	8-18

PHARMACY 544	4
PHARMACY 546	2
PHARMACY 558	2
PHARMACY 559	2
Electives ¹	2
Third Year	
<i>First Term</i>	<i>Hours</i>
PHARMACY 551	2
PHARMACY 553	3
PHARMACY 554	4
PHARMACY 566	3
PHARMACY 567	2
Electives ¹	2
Second Term	Hours
PHARMACY 555	4
PHARMACY 557	4
PHARMACY 561	2
PHARMACY 563	2
PHARMACY 564	3
Electives ¹	2
Fourth Year	
<i>First Term</i>	<i>Hours</i>
Advanced Pharmacy Practice Experiences (APPE) ²	15
<i>Second Term</i>	<i>Hours</i>
Advanced Pharmacy Practice Experiences (APPE) ²	15
Footnotes	
¹ Elective Courses: 40-12 credits of electives involving a minimum of 4 courses are required throughout the first three years of the curriculum. Select from: PHARMACY 499, 570-576 through 580, 588, 590, through 591, 594, 596, 598, 599 , PHARDSCI 499, 599 or any other College approved electives.	
² Advanced Pharmacy Practice Experiences (APPE) courses are: PHARMACY 581, 582, 583, 584, 585, 586, 587, <u>589</u> .	