# UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 6
## Spring 2024

## --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 |
|---|---|---|
| **Business** Revise requirements for minor Senior Living Management | **Senior Living Management**<br><br>    Please see the Carson College of Business section of this Catalog for additional instructions. To be admitted into the Senior Living Management (SLM) minor, students must meet the following minimum requirements:<br>        Complete 27 credits.<br>        WSU cumulative GPA of at least 2.50 and not on academic probation.<br>    The minor in senior living management requires a minimum of 19 credits of coursework including:<br>        ACCTG 220 or 230<br>        HBM 101 or 401<br>        <u>HBM 270</u><br>        ~~HBM 375~~<br>        H D 308, 350, 360, or 405, or PSYCH 363<br>        HBM 494<br>        HBM 470<br>        Any CCB course – 3 credits (HBM 280 or MKTG 360 or MGMT 450 are recommended)<br>        Students must maintain an overall GPA of at least 2.50 in SLM minor courses.<br>        A minimum of 9 credits of upper-division coursework must be taken in residence at WSU or though WSU-approved education abroad or educational exchange courses.<br>        Up to 6 credits may be transferred from another institution.<br>    To be admitted into this minor, students must meet with a business advisor and declare their interest. Students must ensure that they meet all course prerequisites before enrolling in any College of Business courses.<br>    In addition, students must complete 400 hours of internship/industry experience to earn the minor. In order for hours to count for the requirement, they must meet the following criteria:<br>        Hours must be worked after high-school graduation;<br>        All hours must be documented as paid;<br>        Hours must be worked at a company whose primary source of revenue is derived from hospitality services; and<br>        The employer evaluation for the hours must reflect an average of 80% across the ratings criteria on the form. | 8-24 |

| Chemical Engineering and Bioengineering<br>New plan (major) under BS in Bioengineering: Pre-Med - Cellular and Molecular Option | **Bioengineering - Pre-Med – Cellular and Molecular Option (128 Credits)**<br><br>At least 50 of the total credits required for this degree must be in 300-400-level courses.<br><br>Students who plan to pursue pre-med studies should consult their advisor for further information about appropriate courses.<br><br>**Admission to the Major Criteria – Bioengineering Program**<br>Incoming first-year students, transfer students, and students changing from a different major may be admitted to the Bioengineering degree program upon completion of MATH 171 with a C or better or concurrent enrollment, and CHEM 105 with a C or better or concurrent enrollment. To remain in the major the student must earn a grade of C or better in all courses and maintain good academic standing (i.e., a 2.0 or higher GPA each term and an overall cumulative GPA of 2.0 at WSU).<br><br>Students who are deficient under the University's Academic Regulations 38 and 39 or whose GPA in Bioengineering courses falls below 2.0 are subject to loss of eligibility of the major. The Bioengineering undergraduate studies committee will determine the eligibility for readmission and probation conditions for students who are deficient and apply for re-entry into the major.<br><br>**Graduation Requirements**<br>No Washington State University courses listed in this schedule of study may be taken on a pass/fail basis. With the exception of BIO ENG 140, 488, 495, 499, and ENGR 489, all listed BIO ENG courses, required electives, and the prerequisites to these courses must be completed with a grade of C or better. | 8-24 |

**First Year**

| *First Term* | *Credits* |
|---|---|
| BIO ENG 140 | 1 |
| CHEM 105 [PSCI] | 4 |
| ENGR 120[1] | 2 |
| HISTORY 105 [ROOT] or 305 [ROOT] | 3 |
| MATH 171 [QUAN] | 4 |

| *Second Term* | *Credits* |
|---|---|
| BIOLOGY 107 [BSCI] | 4 |
| CHEM 106 or 116 | 4 |
| ENGLISH 101 [WRTG] | 3 |
| MATH 172 or 182 | 4 |
| UCORE Inquiry[2] | 3 |

**Second Year**

| *First Term* | *Credits* |
|---|---|
| CHE 201 | 3 |
| CHEM 345 | 4 |
| MATH 220 or 230 | 2 or 3 |
| MATH 273 or 283 | 2 |
| PHYSICS 201 and 211, or 205 | 4 or 5 |

| *Second Term* | *Credits* |
|---|---|
| BIO ENG 210 | 3 |
| CHEM 348 | 4 |
| MATH 315 | 3 |
| MBIOS 303 | 4 |
| PHYSICS 202 and 212, or 206 | 4 or 5 |
| Complete Writing Portfolio | |

**Third Year**

| *First Term* | *Credits* |
|---|---|
| BIO ENG 310 | 3 |
| BIO ENG 315 | 3 |
| BIO ENG 325 [M] | 2 |
| BIOLOGY 106 | 4 |
| MBIOS 301, 305, 401 or 413 | 3 or 4 |
| STAT 370 or 423 | 3 |

| *Second Term* | *Credits* |
|---|---|
| BIO ENG 305 | 3 |
| BIO ENG 350 | 3 |
| BIO ENG 360 | 3 |
| ENGLISH 402 [WRTG] or 403 [WRTG] | 3 |
| Technical Elective[3] | 3 |

**Fourth Year**

| *First Term* | *Credits* |
|---|---|
| BIO ENG 410 [M] | 3 |
| BIO ENG 456 | 3 |
| BIO ENG 475 | 3 |
| ECONS 101 [SSCI] or 102 [SSCI] or 198 | 3 |
| UCORE Inquiry[2] | 3 |

| *Second Term* | *Credits* |
|---|---|

| | BIO ENG 411 [CAPS] | 3 | |
|---|---|---|---|
| | BIO ENG 476 | 3 | |
| | Bioengineering Electives[4] | 6 | |
| | UCORE Inquiry[2] | 3 | |
| | Complete BIO ENG Exit Interview | | |

**Footnotes**

[1] A 3 credit 300-400 level engineering course may be substituted for ENGR 120 by approval of advisor.

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

[3] Technical Electives (3 credits): Approved courses include BIOLOGY 251, C E 211, CPT S 121, E E 214, 261, 262, ME 116, 212, 216, MSE 201, any 300-400 level BIO ENG, BIOLOGY, CE, CHE, CHEM, CPT S, E E, MATH, MBIOS, ME, MSE, NEUROSCI, PHYSICS, or STAT course, or other courses as approved by advisor.

[4] Bioengineering Electives (3 credits): Any 400-level BIO ENG course not used to fulfill major requirements. A maximum of 3 credits is allowed in BIO ENG 488, 495, and 499 combined. Students may replace three credits with three credits of a 300-400-level CHE course or an additional MBIOS 301, 305, 401, or 413 with advisor approval.

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**Chemical Engineering and Bioengineering**
Revise requirements for BS in Bioengineering - Pre-Med Option and change name of option to Pre-Med - Biomedical Systems Option

**Bioengineering - Pre-Med- Biomedical Systems Option (~~125~~ 128 Credits)**

8-25

At least 50 of the total credits required for this degree must be in 300-400-level courses.

Students who plan to pursue pre-med studies should consult their advisor for further information about appropriate courses.

**Admission to the Major Criteria – Bioengineering Program**
Incoming first-year students, transfer students, and students changing from a different major may be admitted to the Bioengineering degree program upon completion of MATH 171 with a C or better or concurrent enrollment, and CHEM 105 with a C or better or concurrent enrollment. To remain in the major the student must earn a grade of C or better in all courses and maintain good academic standing (i.e., a 2.0 or higher GPA each term and an overall cumulative GPA of 2.0 at WSU).

Students who are deficient under the University's Academic Regulations 38 and 39 or whose GPA in Bioengineering courses falls below 2.0 are subject to loss of eligibility of the major. The Bioengineering undergraduate studies committee will determine the eligibility for readmission and probation conditions for students who are deficient and apply for re-entry into the major.

**Graduation Requirements**
No Washington State University courses listed in this schedule of study may be taken on a pass/fail basis. With the exception of BIO ENG 140, 488, 495, 499, and ENGR 489, all listed BIO ENG courses, required electives, and the prerequisites to these courses must be completed with a grade of C or better.

**First Year**

| *First Term* | *Credits* |
|---|---|
| BIO ENG 140 | 1 |
| CHEM 105 [PSCI] | 4 |
| ENGR 120[1] | 2 |
| HISTORY 105 [ROOT] or 305 [ROOT] | 3 |
| MATH 171 [QUAN] | 4 |

| *Second Term* | *Credits* |
|---|---|
| BIOLOGY 107 [BSCI] | 4 |
| CHEM 106 or 116 | 4 |
| ENGLISH 101 [WRTG] | 3 |
| MATH 172 or 182 | 4 |
| UCORE Inquiry[2] | 3 |

**Second Year**

| *First Term* | *Credits* |
|---|---|
| CHE 201 | 3 |
| CHEM 345 | 4 |
| MATH 220 or 230 | 2 or 3 |
| MATH 273 or 283 | 2 |
| PHYSICS 201 and 211, or 205 | 4 or 5 |

| *Second Term* | *Credits* |
|---|---|
| BIO ENG 210 | 3 |
| CHEM 348 | 4 |
| MATH 315 | 3 |
| MBIOS 303 | 4 |
| PHYSICS 202 and 212, or 206 | 4 or 5 |
| Complete Writing Portfolio | |

**Third Year**

| *First Term* | *Credits* |
|---|---|
| BIO ENG 310 | 3 |
| BIO ENG 315 | 3 |
| BIO ENG 325 [M] | 2 |
| BIOLOGY 106 | 4 |
| CE 211 | 3 |
| STAT 370 or 423 | 3 |
| Concentration Elective[2] | 3 |

| *Second Term* | *Credits* |
|---|---|
| BIO ENG 305 | 3 |

| | |
|---|---|
| | BIO ENG 350     3 |
| | BIO ENG 360     3 |
| | <u>E E 261</u>     <u>3</u> |
| | ENGLISH 402 [WRTG] or 403 [WRTG]     3 |
| | ~~Concentration Elective²~~     ~~3~~ |

**Fourth Year**

| *First Term* | *Credits* |
|---|---|
| BIO ENG 410 [M] | 3 |
| <u>BIO ENG 420</u> | <u>3</u> |
| <u>BIO ENG 430</u> | <u>3</u> |
| ECONS 101 [SSCI] or 102 [SSCI] or 198 | 3 |
| UCORE Inquiry³² | ~~6~~<u>3</u> |
| ~~Concentration Electives²~~ | ~~6~~ |

| *Second Term* | *Credits* |
|---|---|
| BIO ENG 411 [CAPS] | 3 |
| <u>BIO ENG 440</u> | <u>3</u> |
| Bioengineering Electives⁴³ | 3 |
| ~~Concentration Elective²~~ | ~~3~~ |
| <u>MBIOS 301, 305, 401, or 413</u> | <u>3 or 4</u> |
| UCORE Inquiry³² | 3 |
| ~~Pre Med Elective⁵~~ | ~~0-3~~ |
| Complete BIO ENG Exit Interview | |

Footnotes

1  3 credit 300-400 level engineering course may be substituted for ENGR 120 by approval of advisor.

2  ~~Students completing the Biomedical Systems Engineering concentration must take CE 211, EE 261, BIO_ENG 420, BIO_ENG 430, BIO_ENG 440 and 3 credits of a BIO_ENG elective. Students completing the Cellular and Molecular Bioengineering concentration must take 3 credits of MBIOS 301, 305, or 413; BIO_ENG 456, BIO_ENG 475, BIO_ENG 476, and 6 credits of BIO_ENG electives (see footnote 4)~~

³²  Must complete 3 of these 4 UCORE designations: ARTS, DIVR, EQJS, HUM.

⁴³  Bioengineering Electives (3 credits): Any 400-level BIO ENG course not used to fulfill major requirements. A maximum of 3 credits is allowed in BIO ENG 488, 495, and 499 combined.

5  ~~Pre-Med Electives (3 credits): Students must complete three credits of MBIOS 301, 305, or 413. Students completing the Cellular and Molecular Bioengineering concentration satisfy this requirement as part of their concentration and may elect to complete this requirement in the Spring of the 4th year rather than the Spring of the 3rd year.~~

| | | |
|---|---|---|
| **Data Analytics** Revise requirements for BS in Data Analytics - Data Visualization Option | **Data Visualization Option (120 Credits)**<br><br>Students are admitted to the Data Analytics major upon completion of 24 semester credits with a 2.0 cumulative GPA.<br><br><br>**First Year** | **8-24** |

| First Term | Credits |
|---|---|
| CPT S 121 or 131, or CS 121 [1] | 4 |
| DATA 115 | 3 |
| ENGLISH 101 [WRTG] | 3 |
| MATH 171 [QUAN] | 4 |
| Electives | 1 |

| Second Term | Credits |
|---|---|
| ~~CPT S 122 or 132, or CS 122~~ | 4 |
| MATH 220 or DATA 225 | 2 or 3 |
| HISTORY 105 [ROOT] | 3 |
| UCORE Inquiry [1,2] | 3 |
| Electives | ~~5~~7 |

**Second Year**

| First Term | Credits |
|---|---|
| ~~CPT S / CS 215~~ | 3 |
| DATA 219 | 3 |
| DTC 201 [ARTS] | 3 |
| ~~MATH 220~~ | 2 |
| STAT 360 | 3 |
| UCORE Inquiry [1,2] | 4 |
| Electives | 2 |

| Second Term | Credits |
|---|---|
| Communication [COMM] or Written Communication [WRTG] | 3 |
| ~~CPT S / CS 315~~ | 3 |
| DATA 319 | 3 |
| DTC 101 or 209 | 3 |
| UCORE Inquiry [1,2] | 3 |
| Electives | 3 |
| Complete Writing Portfolio | |

**Third Year**

| First Term | Credits |
|---|---|
| CPT S / CS 415 [1] | 3 |
| STAT 435 [M] | 3 |
| Option Courses [2,3] | 6 |
| Electives | 3 |

| Second Term | Credits |
|---|---|
| CPT S 451 or CS 351 [1] | 3 |

| | | |
|---|---|---|
| | STAT 437 | 3 |
| | UCORE Inquiry [1,2] | 3 |
| | Option Courses [2,3] | 6 |
| | | |
| | **Fourth Year** | |
| | | |
| | *First Term* | *Credits* |
| | DATA 498 Internship | 3 |
| | ~~STAT 419~~ | ~~3~~ |
| | ~~UCORE Inquiry[1]~~ | ~~3~~ |
| | ECONS 101 [SSCI] or 102 [SSCI] | ~~6~~3 |
| | Electives | 9 |
| | | |
| | *Second Term* | *Credits* |
| | DATA 424 [CAPS] [M] | 3 |
| | PHIL 450 [HUM] | 3 |
| | Electives | 9 |

Footnotes

[1] CS courses offered at Vancouver only.

[2] Must complete ~~5~~4 of these ~~6~~5 UCORE designations: BSCI, DIVR, EQJS, ~~HUM,~~ PSCI, SSCI. One lab science (BSCI or PSCI) must be completed.

[3] Option Courses (12 credits): Choose four from: DTC 335, 336, 354, 355, 435, 477, 478.

| | | |
|---|---|---|
| **Data Analytics** Revise requirements for BS in Data Analytics - Economics Option | **Economics Option (120 Credits)** Students are admitted to the Data Analytics major upon completion of 24 semester credits with a 2.0 cumulative GPA. | **8-24** |

**First Year**

| *First Term* | *Credits* |
|---|---|
| CPT S 121 or 131, or CS 121 [1] | 4 |
| DATA 115 | 3 |
| ENGLISH 101 [WRTG] | 3 |
| MATH 171 [QUAN] | 4 |

| *Second Term* | *Credits* |
|---|---|
| ~~CPT S 122 or 132, or CS 122~~ | ~~4~~ |
| MATH 220 or DATA 225 | 2 or 3 |
| ECONS 101 [SSCI] | 3 |
| HISTORY 105 [ROOT] | 3 |
| Electives | ~~4~~6 |

**Second Year**

| First Term | Credits |
|---|---|
| ~~CPT S / CS 215~~ | ~~3~~ |
| DATA 219 | 3 |
| ECONS 102 | 3 |
| ECONS 301 | 4 |
| ~~MATH 220~~ | ~~2~~ |
| STAT 360 | 3 |
| UCORE Inquiry [1,2] | 4 |

| Second Term | Credits |
|---|---|
| Communication [COMM] or Written Communication [WRTG] | 3 |
| ~~CPT S / CS 315~~ | ~~3~~ |
| DATA 319 | 3 |
| UCORE Inquiry [1,2] | 3 |
| Electives | ~~3~~6 |
| Complete Writing Portfolio | |

**Third Year**

| First Term | Credits |
|---|---|
| CPT S / CS 415 [1] | 3 |
| ECONS 302 | 3 |
| STAT 435 [M] | 3 |
| UCORE Inquiry [1,2] | 3 |
| Option Course [2,3] | 3 |

| Second Term | Credits |
|---|---|
| CPT S 451 or CS 351 [1] | 3 |
| STAT 437 | 3 |
| UCORE Inquiry [1,2] | 3 |
| Option Courses [2,3] | 6 |

**Fourth Year**

| First Term | Credits |
|---|---|
| DATA 498 Internship | 3 |
| ~~STAT 419~~ | ~~3~~ |
| ~~UCORE Inquiry [1]~~ | ~~3~~ |
| Electives | ~~6~~12 |

| Second Term | Credits |
|---|---|
| DATA 424 [CAPS] [M] | 3 |
| PHIL 450 [HUM] | 3 |
| Electives | ~~10~~9 |

| | | |
|---|---|---|
| | Footnotes<br><br>[1] CS courses offered at Vancouver only.<br><br>[2] Must complete ~~5~~4 of these ~~6~~5 UCORE designations: ARTS, BSCI, DIVR, EQJS, ~~HUM,~~ PSCI. One lab science (BSCI or PSCI) must be completed.<br><br>[3] Option Courses (9 credits): Choose three from ECONS 311, 321, 323, 324, 327, 424, 425, 426, 451, 452, 490, STAT 443. | |
| **Data Analytics**<br>Revise requirements for BS in Data Analytics - Life Sciences Option | **Life Sciences Option (120 Credits)**<br><br>Students are admitted to the Data Analytics major upon completion of 24 semester credits with a 2.0 cumulative GPA.<br><br>**First Year** | **8-24** |

**First Term**

| | Credits |
|---|---|
| CPT S 121 or 131, or CS 121 [1] | 4 |
| DATA 115 | 3 |
| ENGLISH 101 [WRTG] | 3 |
| MATH 171 [QUAN] | 4 |

**Second Term**

| | Credits |
|---|---|
| BIOLOGY 106 [BSCI] | 4 |
| ~~CPT S 122 or 132, or CS 122~~ | ~~4~~ |
| MATH 220 or DATA 225 | 2 or 3 |
| HISTORY 105 [ROOT] | 3 |
| Electives | ~~4~~6 |

**Second Year**

**First Term**

| | Credits |
|---|---|
| BIOLOGY 107 | 4 |
| CHEM 101 [PSCI] or CHEM 105 [PSCI] | 4 |
| ~~CPT S / CS 215~~ | ~~3~~ |
| DATA 219 | 3 |
| ~~MATH 220~~ | ~~2~~ |
| STAT 360 | 3 |

**Second Term**

| | Credits |
|---|---|
| CHEM 102 or CHEM 106 | 4 |
| Communication [COMM] or Written Communication [WRTG] | 3 |
| ~~CPT S / CS 315~~ | ~~3~~ |
| DATA 319 | 3 |
| UCORE Inquiry [1,2] | 3 |
| Electives | 3 |
| Complete Writing Portfolio | |

| | | |
|---|---|---|
| | **Third Year** | |
| | *First Term* | *Credits* |
| | BIOLOGY 301 or MBIOS 301 | 4 |
| | CPT S / CS 415 [1] | 3 |
| | STAT 435 [M] | 3 |
| | UCORE Inquiry [1,2] | 3 |
| | Electives | 3 |
| | *Second Term* | *Credits* |
| | CPT S 451 or CS 351 [1] | 3 |
| | STAT 437 | 3 |
| | UCORE Inquiry [1,2] | 3 |
| | Recommended Option Course or Electives [2,3] | 6 |
| | **Fourth Year** | |
| | *First Term* | *Credits* |
| | DATA 498 Internship | 3 |
| | ~~STAT 419~~ | ~~3~~ |
| | ~~UCORE Inquiry[1]~~ | ~~3~~ |
| | Recommended Option Course or Electives [2,3] | 3 |
| | Electives | ~~3~~9 |
| | *Second Term* | *Credits* |
| | DATA 424 [CAPS] [M] | 3 |
| | PHIL 450 [HUM] | 3 |
| | Electives | ~~7~~9 |

Footnotes

[1] CS courses offered at Vancouver only.

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

[3] Recommended Option Courses: BIOLOGY 335, 474, MBIOS 478. Electives must include sufficient 300-400-level coursework to meet the University requirement of 40 credits of upper-division coursework.

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| **Data Analytics** Revise requirements for BS in Data Analytics - Physical Sciences Option | **Physical Sciences Option (120 Credits)** | **8-24** |
|---|---|---|
| | Students are admitted to the Data Analytics major upon completion of 24 semester credits with a 2.0 cumulative GPA. | |
| | **First Year** | |
| | *First Term* | *Credits* |
| | CPT S 121 or 131, or CS 121[1] | 4 |
| | DATA 115 | 3 |

| | |
|---|---|
| ENGLISH 101 [WRTG] | 3 |
| MATH 171 [QUAN] | 4 |
| Electives | 1 |
| | |
| *Second Term* | *Credits* |
| CHEM 105 [PSCI] | 4 |
| ~~CPT S 122 or 132, or CS 122~~ | ~~4~~ |
| <u>MATH 220 or DATA 225</u> | <u>2 or 3</u> |
| HISTORY 105 [ROOT] | 3 |
| Electives | ~~4~~<u>6</u> |
| | |
| **Second Year** | |
| | |
| *First Term* | *Credits* |
| CHEM 106 | 4 |
| ~~CPT S / CS 215~~ | ~~3~~ |
| ~~MATH 220~~ | ~~2~~ |
| <u>DATA 219</u> | <u>3</u> |
| STAT 360 | 3 |
| UCORE Inquiry [1,2] | 3 |
| | |
| *Second Term* | *Credits* |
| Communication [COMM] or Written Communication [WRTG] | 3 |
| ~~CPT S / CS 315~~ | ~~3~~ |
| <u>DATA 319</u> | <u>3</u> |
| MATH 273 | 3 |
| UCORE Inquiry [1,2] | 3 |
| Electives | 3 |
| Complete Writing Portfolio | |
| | |
| **Third Year** | |
| | |
| *First Term* | *Credits* |
| CPT S / CS 415 [1] | 3 |
| PHYSICS 201 | 3 |
| PHYSICS 211 | 1 |
| STAT 435 [M] | 3 |
| UCORE Inquiry [1,2] | 3 |
| Electives | 3 |
| | |
| *Second Term* | *Credits* |
| CPT S 451 or CS 351 [1] | 3 |
| PHYSICS 202 | 3 |
| PHYSICS 212 | 1 |

| | | |
|---|---|---|
| | STAT 437 | 3 | |
| | UCORE Inquiry [1][2] | 3 | |
| | Option Course [2][3] | 3 | |
| | | | |
| | **Fourth Year** | | |
| | *First Term* | *Credits* | |
| | DATA 498 Internship | 3 | |
| | ~~STAT 419~~ | ~~3~~ | |
| | ~~UCORE Inquiry[1]~~ | ~~3~~ | |
| | Option Course [2][3] | 1 or 2 | |
| | Electives | ~~3~~11 | |
| | | | |
| | *Second Term* | *Credits* | |
| | DATA 424 [CAPS] [M] | 3 | |
| | PHIL 450 [HUM] | 3 | |
| | Electives | 9 | |

Footnotes

[1] CS courses offered at Vancouver only.

[2] Must complete ~~5~~4 of these ~~6~~5 UCORE designations: ARTS, BSCI, DIVR, EQJS, ~~HUM,~~ SSCI.

[3] Option Course (4 or 5 credits): Choose one pair from CHEM 331 and 333 or CHEM 332 and 334.

| | | |
|---|---|---|
| **Data Analytics** Revise requirements for BS in Data Analytics - Social Sciences Option | **Social Sciences Option (120 Credits)** | **8-24** |

**Social Sciences Option (120 Credits)**

Students are admitted to the Data Analytics major upon completion of 24 semester credits with a 2.0 cumulative GPA.

**First Year**

| | |
|---|---|
| *First Term* | *Credits* |
| CPT S 121 or 131, or CS 121 [1] | 4 |
| DATA 115 | 3 |
| ENGLISH 101 [WRTG] | 3 |
| MATH 171 [QUAN] | 4 |
| Electives | 1 |
| *Second Term* | *Credits* |
| ~~CPT S 122 or 132, or CS 122~~ | ~~4~~ |
| MATH 220 or DATA 225 | 2 or 3 |
| HISTORY 105 [ROOT] | 3 |
| SOC 101 [SSCI] | 3 |
| Electives | ~~5~~7 |

**Second Year**

| *First Term* | *Credits* |
|---|---|
| ~~CPT S / CS 215~~ | ~~3~~ |
| DATA 219 | 3 |
| ~~MATH 220~~ | ~~2~~ |
| POL S 201 or SOC 317 | 3 |
| STAT 360 | 3 |
| UCORE Inquiry [1,2] | 4 |
| Electives | 2 |

| *Second Term* | *Credits* |
|---|---|
| Communication [COMM] or Written Communication [WRTG] | 3 |
| ~~CPT S / CS 315~~ | ~~3~~ |
| DATA 319 | 3 |
| SOC 340 ~~[DIVR]~~ [EQJS] | 3 |
| UCORE Inquiry [1,2] | 3 |
| Electives | 3 |
| Complete Writing Portfolio | |

**Third Year**

| *First Term* | *Credits* |
|---|---|
| CPT S / CS 415 [1] | 3 |
| POL S 316 | 3 |
| STAT 435 [M] | 3 |
| UCORE Inquiry [1,2] | 3 |
| Option Course [2,3] | 3 |

| *Second Term* | *Credits* |
|---|---|
| CPT S 451 or CS 351 [1] | 3 |
| STAT 437 | 3 |
| ~~UCORE Inquiry[1]~~ | ~~3~~ |
| Option Courses [2,3] | 6 |
| Electives | 3 |

**Fourth Year**

| *First Term* | *Credits* |
|---|---|
| DATA 498 Internship | 3 |
| ~~STAT 419~~ | ~~3~~ |
| Electives | ~~9~~12 |

| *Second Term* | *Credits* |
|---|---|

| | DATA 424 [CAPS] [M] | 3 | |
| | PHIL 450 [HUM] | 3 | |
| | Electives | 9 | |

**Footnotes**

¹ CS courses offered at Vancouver only.

² Must complete ~~4~~3 of these ~~5~~4 UCORE designations: ARTS, BSCI, ~~EQJS~~ DIVR, HUM, PSCI. One lab science (BSCI or PSCI) must be completed.

3 Option Courses (9 credits): Choose three from ED PSYCH 400, 404, PHIL 350, POL S 416, PSYCH 105, 333, SOC 230.

| | | |
|---|---|---|
| **Design and Construction** Revise requirements for minor in Construction Management | **Construction Management**<br><br>The minor in construction management requires a minimum of 18 credits, 9 of which must be upper-division and taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. To be eligible to apply for the minor a student must be admitted to a major and have a minimum GPA of 2.70. ~~The minor is limited to 10 students per year.~~ The required courses are CST M 102, 252*, 370*, 462*, 3 credits of business electives, and 3 credits of construction emphasis electives. Approved business electives include ECONS 327, ~~WGSS 315,~~ or any 300-400-level ACCTG, B LAW, ENTRP, FIN, HBM, I BUS, MGMT, MGTOP, MIS, or MKTG course. Approved construction emphasis electives include any 300-400-level CST M course. *CST M 252, 370, 462 are only offered in the summer.<br><br>Enrollment is limited to 25-28 students per calendar year and will be prioritized by academic level or class standing (e.g., seniors, followed by juniors, then sophomores). Application requirements and submission deadlines for the minor are due by April 1ˢᵗ of the spring semester prior to when a student would like to be considered for enrollment in summer courses. Confirmation of acceptance into the minor will be sent to students at their WSU e-mail address. | **8-24** |
| **Electrical Engineering and Computer Science** Revise requirements for BS in Electrical Engineering | **Electrical Engineering (124 Credits)**<br><br>Students are admitted to the Electrical 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 80% or higher; or completion of MATH 106 and 108, ~~and~~ 171 or a higher calculus course with a grade of C or better~~;~~, or completing the ~~Math~~Calculus AP Exam with a score of 2 or higher~~(places the student in MATH 171), or 3 (credit is given for MATH 171)~~.<br><br>To remain in good standing students must complete CPT S 121 or 131, MATH 171, 172, 220, 273, 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.<br><br>Alternate Pathway:<br>Completion of ALL standard pathway benchmarks and additionally: ENGLISH 101, CHEM 105, PHYSICS 202/212, E E 261, 262, MATH 315, all with a | **8-24** |

grade of C or better, and a 2.5 cumulative WSU GPA (or transfer GPA if no WSU GPA exists). Everett and Bremerton 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 E E 488, E E 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. Students should also consult with an advisor regarding allowed course substitutions to the schedule of studies listed below.

**First Year**

| *First Term* | *Credits* |
|---|---|
| CHEM 105 [PSCI] | 4 |
| ENGLISH 101 [WRTG] | 3 |
| ENGR 120 | 2 |
| HISTORY 105 [ROOT] | 3 |
| MATH 171 [QUAN] | 4 |

| *Second Term* | *Credits* |
|---|---|
| CPT S 121 or 131 | 4 |
| MATH 172 | 4 |
| MATH 220 | 2 |
| PHYSICS 201 | 3 |
| PHYSICS 211 | 1 |

**Second Year**

| *First Term* | *Credits* |
|---|---|
| CPT S 122 or 132 | 4 |
| E E 214 | 4 |
| MATH 273 | 2 |
| PHYSICS 202 | 3 |
| PHYSICS 212 | 1 |
| UCORE Inquiry[1] | 3 |

| *Second Term* | *Credits* |
|---|---|
| E E 234 | 4 |
| E E 261 | 3 |
| E E 262 | 1 |
| ECONS 101 [SSCI] or 102 [SSCI] | 3 |
| MATH 315 | 3 |
| UCORE Inquiry[1] | 3 |
| Complete Writing Portfolio | |

**Third Year**

*First Term*                                    *Credits*

E E 311                                               3

E E 321                                               3

E E 331                                               3

E E 352 [M]                                           3

Engineering Science Elective [2]                      3

*Second Term*                                   *Credits*

E E 302                                               3

E E 341                                               3

E E 361                                               3

STAT 360                                              3

E E Area Elective[3]                                  3

~~Track Elective[3,4]~~                               ~~3~~

**Fourth Year**

*First Term*                                    *Credits*

E E 415                                               3

~~Engineering Science Elective [2]~~                  ~~3~~

ENGLISH 402 [WRTG]                                    3

E E Area Elective[3]                                  6

Technical Elective[4]                                 3

~~Track Electives[3,4]~~                              ~~6~~

~~UCORE Inquiry[1]~~                                  ~~3~~

*Second Term*                                   *Credits*

~~300-400-level Track Electives[3,4]~~                ~~6~~

E E 416 [CAPS] [M]                                    3

E E Area Elective[3]                                  3

Technical Elective[4]                                 3

UCORE Inquiry[1]                                      6 ~~or 7~~

Complete E E Exit Interview and Survey

Footnotes

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

[2] Engineering Science Electives (~~6~~3 credits): Choose from CE 211, ME 212, 301, MSE 302.

[3] ~~Track Electives: Students follow one of five tracks for an emphasis in their degree program. A total of 15 credits are required for each track. Any electives within a track must be chosen from the list of approved technical electives in footnote 3. Power Track: required: E E 362, 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, 476, at least two from E E 431, 434, 496, and one from E E 431, 434, 466, 488, 496, 499, ENGR 489 with a combined maximum of 3 credits total from E E 488 and ENGR 489 or E E 499; Systems Track: required: E E 464, 489, at least one from E E 432, 451, and~~

| | | |
|---|---|---|
| | ~~one from E E 351, 431, 432, 451, and remaining credits from list of approved technical electives; General Track: at least one from E E 324, 351, 362, 489; at least three 400-level E E letter graded course not used to meet other program requirements, and one course from the list of approved technical electives; or Computer Engineering Track: required: E E 434, 466, at least one from E E 324, 334, 431, 476, CPT S 360, and remaining credits from list of approved technical electives and at least one 400-level E E letter graded course not used to meet other program requirements.~~ <u>E E Area Electives (12 credits) from the areas of Digital Computing: CPT S 360, 437, 466, E E 324, 334, 434, 466; Microelectronics: E E 351, 431, 434, 466, 476, 496; Power: E E 362, 485, 486, 491, 492, 493, 494; Systems: E E 432, 451, 464, 489. Must include 9 credits of 400-level E E courses and at least one from E E 324, 351, 362, 489. E E 483 special topics course may also be considered as an E E Area Elective with department approval.</u><br><br>[4] Technical Electives <u>(6 credits) from</u> ~~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 <u>321,</u> 463, CHEM 331, ~~333,~~ 345, <u>E M 464,</u>  ENGR <u>320,</u> MATH 320, 325, 340, 364, 401, 402, 415, 420, 421, 440, 441, 448, 453, 464, 466, ME <u>241, 301,</u> 304, 401, <u>MSE 302,</u> 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. <u>Additional Technical Elective choices include 3 credits of E E 499, or a combined 3 credits of E E 488 and ENGR 489. Credit allowed for only one of CE 321, MATH 448, or ME 241 and only one of CE 463, E M 464, or ENGR 320. Courses used to satisfy other requirements cannot also be used as Technical Electives.</u> | |
| **{S} Engineering and Computer Science WSU-Vancouver**<br>Revise graduation requirements for BS in Electrical Engineering (Vancouver Only) | # Bachelor of Science, Electrical Engineering (Vancouver only) (121 Credits)<br><br>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.<br><br>~~To remain in good standing, students must complete the benchmark courses:~~ <u>To keep their status as Electrical Engineering majors and to remain in good academic standing, students must pass</u> 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~~ <u>2.0</u> or higher ~~when the final benchmark course is completed~~.<br><br>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.<br><br>**First Year** | **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* |
|---|---|
| ECE 214 | 3 |
| 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 |
| CS 251 | 4 |
| 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<br>ECE Electives[2]     6<br>UCORE Inquiry[1]     3 | |
| | **Footnotes**<br>[1] Must complete 3 of these 4 UCORE categories: ARTS, DIVR, EQJS, HUM.<br>[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. | |
| **{S} Engineering and Computer Science WSU-Vancouver**<br>Revise graduation requirements for BS in Mechanical Engineering (Vancouver Only) | **Bachelor of Science, Mechanical Engineering (Vancouver Only) (120 Credits)**<br><br>For the major in the Mechanical Engineering degree program on the Vancouver campus, students are admitted to the Mechanical Engineering major upon demonstrating they are ready to take MATH 171 (Calculus I) or higher and making their intentions known to the department.<br><br>~~To remain in good standing, students must complete the benchmark courses:~~ <u>To keep their status as Mechanical Engineering majors and remain in good academic standing, students must pass</u> MECH 211, 212, 215, MATH 171, 172, 220, 273, 315, CHEM 105, and PHYSICS 201 and 211 (or their transfer equivalents) with a grade of C or better and obtain a WSU cumulative GPA of ~~2.5~~ <u>2.0</u> or higher ~~when the final benchmark is completed~~.<br><br>No courses listed in this schedule of studies may be taken on a pass/fail basis. All upper-division mechanical engineering courses must be completed with a minimum 2.0 average GPA.<br><br>**First Year** | **8-24** |

**First Year**

| *First Term* | *Credits* |
|---|---|
| CHEM 105 [PSCI] | 4 |
| HISTORY 105 [ROOT] | 3 |
| MATH 171 [QUAN] | 4 |
| MECH 103 | 2 |
| UCORE Inquiry[1] | 3 |

| *Second Term* | *Credits* |
|---|---|
| ENGLISH 101 [WRTG] | 3 |
| MATH 172 | 4 |
| MATH 220 | 2 |
| MECH 101 | 2 |
| UCORE Inquiry[1] | 3 |

**Second Year**

| *First Term* | *Credits* |
| --- | --- |
| ECONS 101 [SSCI] or 102 [SSCI] | 3 |
| MATH 273 | 2 |
| MECH 211 | 3 |
| MECH 251 | 2 |
| PHYSICS 201 | 3 |
| PHYSICS 211 | 1 |

| *Second Term* | *Credits* |
| --- | --- |
| Biological Sciences [BSCI] | 3 or 4 |
| MATH 315 | 3 |
| MECH 212 | 3 |
| MECH 215 | 3 |
| PHYSICS 202 | 3 |
| PHYSICS 212 | 1 |
| Complete Writing Portfolio | |

**Third Year**

| *First Term* | *Credits* |
| --- | --- |
| ENGLISH 402 [WRTG] | 3 |
| MECH 301 | 3 |
| MECH 303 | 3 |
| MECH 304 | 3 |
| MECH 309 [M] | 3 |

| *Second Term* | *Credits* |
| --- | --- |
| MECH 310 | 4 |
| MECH 314 | 3 |
| MECH 348 | 3 |
| MECH 404 | 3 |
| 400-level MECH Option Courses/Technical Electives[2] | 3 |

**Fourth Year**

| *First Term* | *Credits* |
| --- | --- |
| MECH 402 | 3 |
| MECH 414 | 3 |
| MECH 416 [M] | 2 |
| 400-level MECH Option Courses/Technical Electives[2] | 6 |

| *Second Term* | *Credits* |
| --- | --- |
| MECH 417 [CAPS] | 3 |
| UCORE Inquiry[1] | 3 |

| | 400-level MECH Option Courses/Technical Electives[2] | 9 | |
|---|---|---|---|

Footnotes

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

[2] Technical Electives or 400-level MECH Option Courses: The program emphasizes fundamentals and provides flexibility in selecting a course of study through five technical electives. Students can either take any six elective courses (18 credits), provided they meet the prerequisites, or they can choose to take a set of related electives comprising an option area and additional electives of their choice. The following are the technical elective courses and option areas: (Option 1) Micro and Nanotechnology: MECH 431, 435, 438, 450; (Option 2) Design and Manufacturing: MECH 476, 477, 485, 489; (Option 3) Mechatronics: MECH 405, 467, 468; (Option 4) Renewable Energy: MECH 441, ECE 421, choice of two courses from MECH 405, 431, 439, 442, 450, 468.

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**English**
Revise requirements for BA in English - Integrative English Studies Option and extend this option to Global campus

**Integrative English Studies Option (120 Credits)**                    **8-24**

A student may be admitted to the English – Integrative English Studies Option upon making their intention known to the department.

Requirements for this degree include ~~24~~ 21 credits of core classes; 3 credits of an Internship or other High-Impact Practice (ENGLISH 498 and/or 499), and ~~18~~ 15 credits of English and Humanities electives to include a maximum of 3 credits of 100-200-level coursework and a minimum of ~~9~~ 6 credits of 400-level coursework.

**First Year**

| *First Term* | *Credits* |
|---|---|
| Biological Sciences [BSCI] with lab[1] | 4 |
| HISTORY 105 [ROOT] | 3 |
| Humanities [HUM][2] | 3 |
| Quantitative Reasoning [QUAN] | 3 |
| Electives[3] | 3 |

| *Second Term* | *Credits* |
|---|---|
| Arts [ARTS][2] | 3 |
| ENGLISH 101 [WRTG] | 3 |
| Physical Sciences [PSCI] with lab[1] | 4 |
| Social Sciences [SSCI] | 3 |
| Electives[3] | 3 |

**Second Year**

| *First Term* | *Credits* |
|---|---|
| Communication [COMM] or Written Communication [WRTG][2] | 3 |
| Diversity [DIVR][2] | 3 |
| ENGLISH or HUMANITY Elective[34] | 3 |
| Equity and Justice [EQJS][2] | 3 |
| Electives[3] | 3 |

| *Second Term* | *Credits* |
|---|---|
| ENGLISH 251, 339, 342, 361, or 357 | 3 |
| ENGLISH 256, 301, 307 [M], 308 [M], 360, or WGSS 300 [M] | 3 |
| ENGLISH 302 [M] | 3 |
| Electives[3] | 6 |
| Complete Writing Portfolio | |

**Third Year**

| *First Term* | *Credits* |
|---|---|
| ENGLISH 305, 306, 366, 368, 370, 371, 372, 401, or 454 | 3 |
| ENGLISH 373 or 489 | 3 |
| ENGLISH Elective[34] | 3 |
| Foreign Language, if needed, or Electives[45] | 4 |
| Electives[3] | 3 |

| *Second Term* | *Credits* |
|---|---|
| ENGLISH 309, 317, or 363 | 3 |
| ENGLISH 322 or 362 | 3 |
| Foreign Language, if needed, or Electives[45] | 3 or 4 |
| Electives[3] | 6 |

**Fourth Year**

| *First Term* | *Credits* |
|---|---|
| ENGLISH 472 or 419 | 3 |
| 300-400-level ENGLISH Elective[34] | 3 |
| 400-level ENGLISH Electives[34] | 6 |
| Electives[3] | 3 |
| Complete English Portfolio | |

| *Second Term* | *Credits* |
|---|---|
| ENGLISH 410 [CAPS], 415 [CAPS], 494 [CAPS], or Integrative Capstone[2] | 3 |
| ENGLISH 498 (Internship) or 499 (Independent Study)[56] | 3 |
| 400-level ENGLISH Elective[34] | 3 |
| Electives[63] | 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]  Only 3 ENGLISH courses may be used to fulfill UCORE requirements.

[3]  Electives must include sufficient 300-400-level coursework to meet the University requirement of 40 credits of upper-division coursework.

[34] English and Humanities Electives: (18 15 credits) Approved courses include any ENGLISH course 108-495 (excluding ENGLISH 402 and 403) not used to fulfill other requirements; HUMANITY 101,

| | | |
|---|---|---|
| | 103, 130, 302, 304, 335, 350, 410, 450. Maximum of 3 credits HUMANITY courses; maximum of 3 credits of 100-200 level coursework and minimum of ~~9~~ 6 credits of 400-level coursework. May need to include [M] course to meet University requirements.<br><br>[45] 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.<br><br>[56] Internship and Independent Study credit may vary depending on the scale of the project. Students must complete at least 3 credits of ENGLISH 498 and/or 499.<br><br>[6] ~~Electives must include sufficient 300-400 level coursework to meet the University requirement of 40 credits of upper-division coursework.~~ | |
| **History**<br>Revise requirements for minor in Modern Global Issues | **Modern Global Issues**<br><br>The minor in Modern Global Issues examines modern world events/themes/issues in the United States, Europe, and the non-Western world ~~and admits students from all majors who have completed 60 credits~~.<br><br>~~The minor requires a 2.0 GPA and a minimum of 18 credits.~~ A minor in Modern Global Issues requires 18 credits from the courses listed below, 9 of which must be upper division taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. A grade of C or better is required in all course work for the minor. Required courses are HISTORY 105 or HISTORY 305; HISTORY 121. Four elective courses (12 credits) may be taken from the following:<br><br>Gender: HISTORY 335, 369, 399<br><br>Race & Ethnicity: HISTORY 235, 250, 273, 280, 339, 360, 361<br><br>Conflict: HISTORY 319, 334, 364, 366, 378, 436, 474<br><br>Inequality: HISTORY 230, 315, 332, 342, 410, 426, ~~342,~~ 436<br><br>Environment: HISTORY 294, 409<br><br>Pop Culture & Information Technology: HIST 309, 320, 322<br><br>~~These courses must be taken in residence at WSU, through WSU Global Campus, or through departmental approval of education abroad or educational exchange courses.~~ | **8-24** |
| **{S} History**<br>Revise requirements for minor in War and Society | **War and Society**<br><br>The minor in War and Society addresses political, social, economic, and cultural impacts of war. The minor requires 18 credits, 9 of which must be taken in residence at WSU or through WSU-approved education abroad or educational exchange courses. A grade of C or better is required in all course work for the minor. Approved courses include: HISTORY 285, 314, 316, 318, 319, 345, 349, 366, 368, 386, 387, 388, 390, 391. | **8-24** |

| | | |
|---|---|---|
| **Languages, Cultures, and Race**<br>New undergraduate certificate in Race and Ethnicity in the Corporate World (for Pullman and Vancouver campuses) | **Race and Ethnicity in the Corporate World Certificate**<br><br>This interdisciplinary certificate is open to enrolled WSU students majoring or minoring in Comparative Ethnic Studies or Business. The certificate requires completion of a minimum of 15 credits, including CES 101 or 201; CES 207; one course from HBM 235, IBUS 435, or IBUS 453; and two courses, at least one of which must be a 300-400-level course, from CES 244, 260, 301, 440, 446, 462, 465, 491. | **8-24** |
| **Music**<br>New undergraduate certificate in Music Production (for Pullman campus) | **Music Production Certificate**<br><br>The Music Production Certificate is open to students from all majors. The certificate offers students the opportunity to learn and apply home recording production utilizing DAW software, notation software for music publishing, mixing, mastering, and techniques used in studio recording and live sound reinforcement. Credits earned toward this certificate may apply to a bachelor's degree. This certificate does not require an audition.<br>The music production curriculum focuses on fundamental knowledge in the music entrepreneurship world. The certificate requires completion of the following courses with a minimum GPA of 2.0: MUS 181 or 102, 164, 241, 242, 264, 364, 464. | **8-24** |