UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 8

Spring 2026

--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} Agricultural and Food Systems Revise requirements for BS in Agriculture and Food Systems - Agricultural and Food Business Economics	**Agricultural and Food Business Economics (120 Credits)** The Agricultural and Food Business Economics major gives students what they need to succeed in the food and agricultural business world – knowledge of business and economics practices as well as a deep understanding of animal, plant, and food systems. Graduates in this major are highly qualified to fill positions ranging from market researcher to product analyst to food broker in a variety of venues, including private industry, commercial farms and ranches, government agencies, production agriculture, and universities. A student may be admitted to the Agricultural and Food Business Economics major upon making their intention known to the department.	8-26

First Year

First Term	Credits
ANIM SCI 101	3
ECONS 101 [SSCI] or 102 [SSCI]	3
HISTORY 105 [ROOT]	3
HORT / CROP SCI 102	3
MATH 201[1]	3

Second Term	Credits
[COMM] Course (COM 102 [COMM] or H D 205 [COMM] recommended)	3 or 4
ECONS 101 or 102	3
ENGLISH 101 [WRTG]	3
MATH 202 [QUAN][1]	3
UCORE Inquiry[2]	3

Second Year

First Term	Credits
AFS 201	3
CHEM 101 [PSCI] or 105 [PSCI]	4
STAT 212 or MGTOP 215	4

UCORE Inquiry[2]	3	
Electives	3	
Second Term	*Credits*	
ACCTG 220 or 230	3	
CHEM 102 or 106	4	
SOIL SCI 201 [BSCI]	3	
UCORE Inquiry[2]	3	
Complete Writing Portfolio		
Third Year		
First Term	*Credits*	
~~AFS Core Systems Elective[3]~~	~~3~~	
BIOLOGY 120	4	
ECONS 301	3	
ECONS 350~~[4]~~[3]	3	
Electives	~~3~~6	
Second Term	*Credits*	
BIOLOGY 106	4	
ECONS 302	3	
ECONS 311 [M]	3	
ECONS 335	3	
Electives	3	
Fourth Year		
First Term	*Credits*	
300-400-level Electives	6	
CROP SCI 360	3	
ECONS 452 [M]	3	
Second Term	*Credits*	
300-400-level Electives	3	
AFS 401 [CAPS] ~~[M]~~	3	
ECONS 450 [M] or 453	3	
ECONS 451	3	
Electives	4	

Footnotes

[1] An alternative to MATH 201 is MATH 106, 172, or 220. An alternative to MATH 202 is MATH 171.
[2] Must complete 3 of these 4 UCORE designations: ARTS, DIVR, EQJS, HUM.

| {S} Agricultural and Food Systems Revise requirements for BS in Agriculture and Food Systems - Agricultural Education | **Agricultural Education (~~125~~122 Credits)** | 8-26 |

Agricultural Education (~~125~~122 Credits)

Combining the best of both agriculture and teaching, the Agricultural Education major prepares students to educate the next generation of agricultural leaders and consumers. Highly sought after by employers, they teach high school and middle school agricultural science classes, as well as serve as FFA advisors, adult education instructors, community outreach coordinators, university extension agents, etc.

This major requires students to complete the AFS core courses and agricultural education required courses, as well as a series of teaching and learning courses to meet initial teacher certification requirements. Students also spend a semester student teaching in an agricultural education program in a Washington high school.

A student may be admitted to an AFS major upon making their intention known to the department.

First Year	
First Term	***Credits***
AG ED 110	2
BIOLOGY 120 [BSCI]	4
ENGLISH 101 [WRTG]	3
HISTORY 105 [ROOT]	3
HORT / CROP SCI 102	3
Second Term	***Credits***
AGTM 201	3
ANIM SCI 101	3
BIOLOGY 106 or 107[1]	4
ENGLISH 201 [WRTG]	3
UCORE Inquiry[2]	3
Second Year	
First Term	***Credits***
AFS 201	3
CHEM 101 [PSCI]	4
ECONS 101 [SSCI]	3
TCH LRN 301	3
UCORE Inquiry[2]	3
Second Term	***Credits***

CHEM 102	4	
SOIL SCI 201	3	
STAT 212 [QUAN], MATH 140 [QUAN], 171 [QUAN], or 202 [QUAN]	3 or 4	
UCORE Inquiry[2]	3	
300-400-level Agricultural Elective[3]	3	
Apply to College of Education, Sport, and Human Sciences		
Complete Writing Portfolio		
Third Term	*Credits*	
TCH LRN 317	2	
Third Year		
First Term	*Credits*	
~~AFS Core Systems Elective[4]~~	~~3~~	
AG ED 471	2	
CROP SCI 360	3	
ECONS 350~~[5]~~[4]	3	
300-400-level Agricultural Elective[3]	3	
Second Term	*Credits*	
AGTM 402	3	
TCH LRN 464	3	
TCH LRN 465	3	
TCH LRN 466	2	
300-400-level Agricultural Elective[3]	3	
Fourth Year		
First Term	*Credits*	
AG ED 440 [M]	2	
AG ED 450	3	
ED PSYCH 468	3	
TCH LRN 467 [M]	3	
TCH LRN 469	2	
TCH LRN 470	3	
Second Term	*Credits*	
AG ED 407 [CAPS]	8	
TCH LRN 415	8	

Footnotes

[1] BIOLOGY 106 is recommended.

{S} Agricultural and Food Systems Revise requirements for BS in Agriculture and Food Systems - Agricultural Technology and Production Management	**Agricultural Technology and Production Management (120 Credits)**	**8-26**

Agricultural Technology and Production Management (120 Credits)

Students in this hands-on major gain a science-based overview of agriculture and food systems, with an emphasis on the practical application of technology to agricultural production systems. The program combines students' inherent creativity and interest in physical and biological sciences, technology, mathematics, business, and related subjects with their desire to develop innovative solutions to a variety of agricultural problems.

Areas of application include precision agricultural operations and services, management of agricultural businesses, production operations, sales, and promotional work in domestic and international agricultural communities. Graduates are prepared to own, operate, and manage their own enterprises or to provide services for private or governmental entities.

A student may be admitted to the Agricultural Technology and Production Management major upon making their intention known to the department.

First Year	
First Term	*Credits*
AFS 101	1
AFS 103	1
AGTM 201	3
BIOLOGY 120 [BSCI]	4
HISTORY 105 [ROOT]	3
HORT / CROP SCI 102	3
Second Term	*Credits*
BIOLOGY 106 or 107	4
ECONS 101 [SSCI]	3
ENGLISH 101 [WRTG]	3
MATH 140 [QUAN], 171 [QUAN], 202 [QUAN] or STAT 212 [QUAN]	4 or 3
SOIL SCI 201	3
Second Year	
First Term	*Credits*

AFS 201	3
AGTM 314	3
ANIM SCI 101	3
CHEM 101 [PSCI] or 105 [PSCI]	4
UCORE Inquiry[1]	3
Second Term	**Credits**
ACCTG 220	3
AFS 102	1
CHEM 102 or 106	4
COM 102 [COMM] or H D 205 [COMM]	3 or 4
UCORE Inquiry[1]	3
Complete Writing Portfolio	
Third Year	
First Term	**Credits**
AGTM 305	3
AGTM 315	3
CROP SCI 305, 403, or PL P 429[2]	3
CROP SCI 360	3
ECONS 350[3]	3
Second Term	**Credits**
AGTM 330	3
AGTM 405	2
ECONS 450 [M] or [M] Elective[4]	3
MGMT 301 or Elective[4]	3
UCORE Inquiry[1]	3
Third Term	**Credits**
AGTM 495 (recommended)[5]	0-3
Fourth Year	
First Term	**Credits**
400-level Business or Elective[4]	3
AFS 336[6]	3
AFS Core Systems Elective[7]	3
ENGLISH 402 [M], ENGLISH 403 [M], or COM 400	3
MKTG 360 or Elective[4]	3
Electives[4]	3

Second Term	Credits
AFS 401 [CAPS] [M]	3
AGTM 412	3
AGTM 416	3
Electives[4]	5

Footnotes

[1] Must complete 3 of these 4 UCORE designations: ARTS, DIVR, EQJS, HUM.
[2] ENTOM 351 can be taken in the spring as an alternative to the other courses listed.
[3] ECONS 352, which is only offered in the spring, may be used as an alternative for ECONS 350.
[4] Completion of a Business minor is recommended. Working with their advisors, students are encouraged to apply electives towards a minor of their choice.
[5] Completion of a 2-credit AGTM 495 internship is recommended.
[6] SOE 312 [DIVR] can be taken in the spring as an alternative to AFS 336.
[7] ~~AFS Core Systems Electives: AGTM 310, ANIM SCI 464 [M], 472 [M], 474 [M], BIOLOGY 372 [M], CROP SCI 302, ECONS 351, HORT 320, SOE 300, SOIL SCI 368, or other systems courses approved by your advisor. Coursework must include a total of two [M] courses.~~

{S} Agricultural and Food Systems
Revise requirements for BS in Agriculture and Food Systems - Human Nutrition and Food Systems

Human Nutrition and Food Systems (120 Credits)

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Students in this major are the next generation of population health scientists, plant breeders, and researchers. This major focuses on understanding our obligation to meet the nutritional needs of a growing population by producing sustainable, nutrient-rich foods, that benefit the health of people and the planet.

Students learn to understand the complexity of relationships within agricultural ecosystems, how external factors influence these systems, and how research advances our ability to provide nutrient-rich food without incurring undue risks to human or environmental health. Course offerings begin with a strong scientific base in biology, chemistry, and human biochemistry; and expand to focus on crop science, soil science, nutrition and health.

The major is an exciting blend of classroom instruction and field experience that is tailored to the eventual employment goals of the student. Excellent employment opportunities exist within research and development programs for state, federal, and international agricultural, environmental, and regulatory agencies, agricultural and environmental consulting firms, local health departments, nutritionists, food processing companies, and a wide range of other agribusiness enterprises.

A student may be admitted to the Human Nutrition and Food Systems major upon making their intention known to the department.

First Year

First Term	Credits
ANIM SCI 101	3
CHEM 101 [PSCI]	4
ECONS 101 [SSCI]	3
HISTORY 105 [ROOT]	3

HORT / CROP SCI 102	3	
Second Term	**Credits**	
[COMM] Course (COM 102 [COMM] or H D 205 [COMM] recommended)	3 or 4	
CHEM 102	4	
ENGLISH 101 [WRTG]	3	
HORT / CROP SCI 202	4	
Second Year		
First Term	**Credits**	
AFS 201	3	
BIOLOGY 107 [BSCI]	4	
SOIL SCI 201	3	
UCORE Inquiry[1]	6	
Second Term	**Credits**	
~~AFS Core Elective[2]~~	~~3~~	
BIOLOGY 106	4	
FS 220	3	
STAT 212 [QUAN]	4	
UCORE Inquiry[1]	3	
Electives	3	
Complete Writing Portfolio		
Third Year		
First Term	**Credits**	
BIOLOGY 333	3	
CROP SCI 305	3	
CROP SCI 360	3	
ECONS 350[~~3~~2]	3	
Electives	3	
Second Term	**Credits**	
IPM 452	3	
NEP 330	3	
SOIL SCI/AFS 302 [M][~~4~~3]	3	
Electives	5	
Fourth Year		
First Term	**Credits**	
AFS 336	3	

CROP SCI 403	3	
FS 436	3	
NEP 400	3	
Electives	3	
Second Term	***Credits***	
400-500-level Seminar in CAHNRS[54]	1	
AFS 401 [CAPS] [M]	3	
NEP 402	3	
NEP 431	3	
Electives	3	

Footnotes

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

[2] ~~AFS Core Systems Electives: AGTM 310, ANIM SCI 464 [M], 472 [M], 474 [M], BIOLOGY 372 [M], CROP SCI 302, ECONS 351, HORT 320, SOE 300, SOIL SCI 368, or other systems courses approved by your advisor. Coursework must include a total of two [M] courses.~~

[32] ECONS 352, which is only offered in the spring, may be used as an alternative for ECONS 350.

[43] SOIL SCI 414 and 415 can be taken as an alternative to SOIL SCI 302 [M]. However another [M] course will be required.

[54] 400-500-level Seminar: AGTM 451, CROP SCI/SOIL SCI 412, HORT/VIT ENOL 409, or as approved by advisor.

| **{S} Agricultural and Food Systems** Revise requirements for BS in Agriculture and Food Systems - Organic and Sustainable Agriculture | # Organic and Sustainable Agriculture (120 Credits)

Significantly different than conventional agriculture, organic food production is one of the fastest growing segments of agriculture, with retail sales increasing by ~~20~~ over five percent annually since 1991. In many ways, Washington State has been a leader in this burgeoning ~~new~~ industry. This revolutionary ~~new~~ major is the first of its kind to be offered in the United States. Students in this major take a diverse array of courses in the natural, environmental, economic, and social sciences, as well as a number of courses focused on organic production practices.

Students wanting a hands-on degree experience thrive in the ~~organic~~ OSA major. WSU has over a four-acre certified organic teaching farm where students learn to produce certified organic vegetables, fruit, herbs, and flowers that they distribute through local restaurants and food banks, on-campus food service, ~~a 100-member CSA (community supported agriculture),~~ and ~~a local farmers' market~~ online and on-farm sales. Students have the opportunity to tailor their program of study to specific areas of emphasis, such as organic animal and dairy production, economics and marketing, crop production, food science, pest management, soil management, etc. in consultation with their advisor.

The Organic and Sustainable Agriculture ~~Program~~ major at WSU prepares students to work on or develop their own organic farm. It also prepares students for employment opportunities with nonprofit organizations and government agencies involved in environmental and food safety, as well as private-sector food processing, marketing, organic certification, and product development industries. | **8-26** |

Students may be admitted to the Organic and Sustainable Agriculture major upon making their intentions known to the department.

First Year

First Term	Credits
ANIM SCI 101 or FS 110	3
CHEM 101 [PSCI] or 105 [PSCI]	4
ECONS 101 [SSCI]	3
ENGLISH 101 [WRTG]	3
HORT / CROP SCI 102	3

Second Term	Credits
CHEM 102 or 106	4
HISTORY 105 [ROOT]	3
HORT / CROP SCI 202	4
SOIL SCI 101	3

Second Year

First Term	Credits
AFS 201	3
BIOLOGY 106 [BSCI] or 120 [BSCI]	4
STAT 212 [QUAN]	4
UCORE Inquiry[1]	3

Second Term	Credits
[COMM] Course (COM 102 [COMM] or H D 205 [COMM] recommended)	3 or 4
BIOLOGY 107	4
ENTOM 351	3
SOIL SCI 201	3
UCORE Inquiry[1]	3
Complete Writing Portfolio	

Third Year

First Term	Credits
AFS 336	3
CROP SCI 305	3
CROP SCI 360	3
Horticulture Production Elective[2]	3
PL P 429	3

Second Term	Credits

AFS 445	3	
ECONS 352[3]	3	
SOIL SCI 302 [M]	3	
SOIL SCI 478	2	
UCORE Inquiry[1]	3	

Fourth Year

First Term	*Credits*
~~AFS Core Systems Elective[4]~~	~~3~~
SOIL SCI 443	3
SOIL SCI 479	2
Electives	~~10~~ 13

Second Term	*Credits*
AFS 401 [CAPS] [M]	3
SOIL SCI 303	2
SOIL SCI 441	3
SOIL SCI 480	2
SOIL SCI 498	3

Footnotes

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

[2] Horticulture Production Electives: CROP SCI 403, HORT 310, HORT 313, HORT 357 (spring), or as approved by advisor.

[3] ECONS 350, which is only offered in the fall, may be used as an alternative for ECONS 352.

[4] ~~AFS Core Systems Electives: AGTM 310, ANIM SCI 464 [M], 472 [M], 474 [M], BIOLOGY 372 [M], CROP SCI 302, ECONS 351, HORT 320, SOE 300, SOIL SCI 368, or other systems courses approved by your advisor. Coursework must include a total of two [M] courses.~~

{S} Animal Sciences Revise requirements for BS in Animal Sciences - Accelerated Pre-Veterinary Option	**Animal Sciences - Accelerated Pre-Veterinary Option (127 Credits)** NOTE: Students must complete a minimum of 90 undergraduate credits – including 30 credits of 300-400-level course work - and be accepted into the Veterinary Medicine program to complete this option. In order to meet the increasing demand for food-animal veterinarians, the Department of Animal Sciences and the College of Veterinary Medicine have created a combined program designed to train selected, highly qualified students to earn both a Bachelor of Science in Animal Sciences and a Doctor of Veterinary Medicine (DVM) degree within a seven-year program. Students will take a three-year animal science program, completing all UCORE requirements, animal sciences requirements, and pre-veterinary medicine requirements. This program includes mathematics; chemistry, including organic and biochemistry; general biology; physics; and animal sciences courses, including an introduction to livestock; then further education in animal nutrition, breeding and genetics, reproduction, and the economics of animal management. Students will then enter the College of Veterinary Medicine and complete the requirements for total hours	**8-26**

and 300-400-level hours before earning the BS in Animal Sciences. Students will continue the curriculum, leading to the DVM degree after a total of seven years of college work.

Qualified students in the Department of Animal Sciences with high scholastic achievement and demonstrated experience and interest in working with livestock will be invited to apply for the accelerated program after the second semester of the first year. Selected students are admitted to the major in the first semester of the sophomore year. Application and acceptance procedures for the DVM program are the same as those for other applicants. Successful participants will complete the three-year animal sciences program and begin the veterinary medicine curriculum in their fourth year of study. If the student is not accepted or withdraws from the DVM program, the student is required to complete additional undergraduate coursework to earn the BS in Animal Sciences.

First Year

First Term	Credits
ANIM SCI 101	3
ANIM SCI 172, 174, or 178	1
ANIM SCI 180	1
CHEM 105 [PSCI]	4
HISTORY 105 [ROOT]	3
MATH Requirement[1]	4

Second Term	Credits
BIOLOGY 106 [BSCI]	4
CHEM 106	4
ENGLISH 101 [WRTG]	3
~~H D 205 [COMM] or Communication [COMM]/[WRTG]~~	~~3 or 4~~
<u>H D 205 [COMM] or COM 102 [COMM]</u>	<u>3 or 4</u>
MATH Requirement or Electives[1]	2 or 3

Second Year

First Term	Credits
ANIM SCI Electives[2]	3
BIOLOGY 107	4
CHEM 345	4
UCORE Inquiry[3]	6

Second Term	Credits
ANIM SCI 240	3
ECONS 101 [SSCI] <u>or ECONS 102 [SSCI] or ECONS 198</u>	3
MBIOS 301	4
STAT 212 [QUAN]	4

UCORE Inquiry[3]	3	
Complete Writing Portfolio		
Third Year		
First Term	*Credits*	
ANIM SCI 313	4	
ANIM SCI 330	3	
ANIM SCI 380	1	
ANIM SCI 440 [M], 464 [CAPS] [M], 466 [CAPS] [M], 472 [CAPS] [M], or 488 [M][4]	3	
CHEM 370 or MBIOS 303	3 or 4	
Second Term	*Credits*	
ANIM SCI 350	3	
ANIM SCI 351	1	
ANIM SCI 408 [M], 451 [M], 473 [M], 474 [CAPS] [M], or 485 [M][4]	3	
ANIM SCI Electives[2]	6	
PHYSICS 101	3	
PHYSICS 111	1	
Fourth Year		
First Term	*Credits*	
DVM Coursework	15	
Second Term	*Credits*	
DVM Coursework	15	
Footnotes		

[1] MATH requirement may be satisfied by completing MATH 106 and 108, 140 [QUAN], or 171 [QUAN].
[2] ANIM SCI Electives (9 credits): Any 300-400-level ANIM SCI course not S, F-graded and not used to fulfill other requirements, or as approved by advisor.
[3] Must complete 3 of these 4 UCORE designations: ARTS, DIVR, EQJS, HUM.
[4] To fulfill UCORE [CAPS] requirement, must include one of the following courses: ANIM SCI 464 [CAPS], 466 [CAPS], 472 [CAPS], or 474 [CAPS].

{S} Animal Sciences Revise requirements for BS in Animal Sciences - Animal Science, Technology and Production Option	**Animal Sciences – Animal Science, Technology, and Production Option (120 Credits)** Honors students complete the Honors College requirements, which replace the UCORE requirements. Newly matriculated students may be admitted to the animal sciences major upon making their intention known to the department. Current students seeking admission to the major must have a cumulative GPA of 2.0 or better and be in good academic standing with the University.	8-26

First Year		
First Term	*Credits*	

ANIM SCI 101	3	
ANIM SCI 180	1	
CHEM 101 [PSCI] or 105 [PSCI]	4	
HISTORY 105 [ROOT]	3	
MATH Requirement[1]	3 or 4	
Second Term	*Credits*	
BIOLOGY 106 [BSCI]	4	
CHEM 102 or 106	4	
ENGLISH 101 [WRTG]	3	
~~H D 205 [COMM] (recommended) or other [COMM] course~~	~~3 or 4~~	
<u>H D 205 [COMM] or COM 102 [COMM]</u>	<u>3 or 4</u>	
Second Year		
First Term	*Credits*	
BIOLOGY 107	4	
Lab Management Requirement [2]	1	
UCORE Inquiry[3]	3	
MATH Requirement and /or Electives[1]	6	
Second Term	*Credits*	
ANIM SCI 240	3	
ECONS 101 [SSCI] <u>or ECONS 102 [SSCI] or ECONS 198</u>	3	
STAT 212 [QUAN], 412, or PSYCH 311 [QUAN][4]	3 or 4	
UCORE Inquiry[3]	3	
Electives	3	
Complete Writing Portfolio		
Third Year		
First Term	*Credits*	
ANIM SCI 313	4	
ANIM SCI 330	3	
ANIM SCI 380	1	
ANIM SCI Group 1 Elective[5]	2 or 3	
Business and Economics Course[6]	3	
Electives	3	
Second Term	*Credits*	
ANIM SCI 350	3	
ANIM SCI 351	1	
ANIM SCI Group 1 Elective [5]	2 or 3	

Business and Economics Course[6]	3	
UCORE Inquiry[3]	3	
VET CLIN 361, 367, or VET PH 308	3 or 4	
Fourth Year		
First Term	*Credits*	
Ag Sciences Elective[7]	3	
~~ANIM SCI 464 [CAPS] [M] or 472 [CAPS] [M][8]~~	~~3~~	
ANIM SCI 464 [CAPS] [M], 466 [CAPS] [M], 472 [CAPS] [M], or 474 [CAPS] [M][8]	3	
ANIM SCI Group 2 Electives [9]	6	
Electives[10]	3	
Second Term	*Credits*	
ANIM SCI Group 2 Electives [9]	6	
Electives[10]	11	

Footnotes

[1] MATH requirement may be satisfied by completing MATH 106 and 108, 140 [QUAN], 171 [QUAN], or 202 [QUAN].

[2] Lab Management Requirement courses (One course) include ANIM SCI 166, 172, 174 (Fall-only), 178, 280 (Spring only).

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

[4] Students who have not yet completed a [QUAN] course should select STAT 212 or PSYCH 311.

[5] ANIM SCI Group 1 Electives (Two courses) include ANIM SCI 205, 260, 266, 267, 274, 285, 314, 315, 345, 346, 360, and other courses as approved by advisor.

[6] Business and Economics Electives (Two courses) include ACCTG 230; B LAW 210; ECONS 330, 335, 350, 351, 352, 450, and other courses as approved by advisor.

[7] Ag Sciences Electives: Any level AFS, AGTM, CROP SCI, ENTOM, FS, HORT, SOE, and SOIL SCI course. To meet University requirements for upper division coursework, students may need to select a 300-400 level course.

[8] ANIM SCI 474 [CAPS][M] may be taken as an alternative in Spring semester.

[9] ANIM SCI Group 2 Electives (Four courses) must include one [M] course. Students may choose any of the following courses that have not been used to fulfill other requirements: ANIM SCI 314, 345, 346, 360, 378, 408 [M], 440 [M], 451 [M], 454, 460, 464 [CAPS] [M], 466 [CAPS] [M], 468 [M], 472 [CAPS] [M], 473 [M], 474 [CAPS] [M], 478 [M], 481, 485 [M], 488 [M], and other courses as approved by advisor.

[10] Elective courses should include sufficient credits and 300-400-level coursework to meet the University requirement of 120 credits and 40 credits of upper-division coursework.

{S} Animal Sciences Revise requirements for BS in Animal Sciences - Pre-Veterinary Medicine/Science Option	**Animal Sciences – Pre-Veterinary Medicine/Science Option (120 Credits)** Newly matriculated students may be admitted to the animal sciences major upon making their intention known to the department. Current students seeking admission to the major must have a cumulative GPA of 2.0 or better and be in good academic standing with the University.	8-26
	First Year	
	First Term *Credits*	

ANIM SCI 101	3	
ANIM SCI 180	1	
CHEM 105 [PSCI]	4	
HISTORY 105 [ROOT]	3	
MATH Requirement[1]	3 or 4	
Second Term	**Credits**	
BIOLOGY 106 [BSCI]	4	
CHEM 106	4	
ENGLISH 101 [WRTG]	3	
MATH Requirement, and/or Electives[1]	5	
Second Year		
First Term	**Credits**	
BIOLOGY 107	4	
CHEM 345	4	
~~H D 205 [COMM] (recommended) or Communication [COMM]/[WRTG]~~	~~3 or 4~~	
<u>H D 205 [COMM] or COM 102 [COMM]</u>	<u>3 or 4</u>	
Lab Management Requirement [2]	1	
UCORE Inquiry[3]	3	
Second Term	**Credits**	
ANIM SCI 240	3	
~~CHEM 370 or MBIOS 303~~	~~3 or 4~~	
<u>MBIOS 303</u>	<u>4</u>	
STAT 212 [QUAN], 412, or PSYCH 311 [QUAN][4]	3 or 4	
UCORE Inquiry[3]	3	
<u>VET PH 308</u>	<u>3</u>	
Electives	3	
Complete Writing Portfolio		
Third Year		
First Term	**Credits**	
ANIM SCI 313	4	
ANIM SCI 330	3	
ANIM SCI 380	1	
MBIOS 301	4	
200-300-level ANIM SCI Electives[5]	2 or 3	
Second Term	**Credits**	

ANIM SCI 350	3	
ANIM SCI 351	1	
ECONS 101 [SSCI] or ECONS 102 [SSCI] or ECONS 198	3	
PHYSICS 101	3	
PHYSICS 111	1	
UCORE Inquiry[3]	3	
200-300-level ANIM SCI Electives[5]	2 or 3	
Fourth Year		
First Term	*Credits*	
~~ANIM SCI 464 [CAPS] [M] or 472 [CAPS] [M]~~[6]	~~3~~	
<u>ANIM SCI 464 [CAPS] [M], 466 [CAPS] [M], 472 [CAPS] [M], or 474[CAPS] [M]</u>[6]	<u>3</u>	
400-level ANIM SCI Electives[7]	5 or 6	
Electives[8]	7	
Second Term	*Credits*	
~~BIOLOGY 324, VET CLIN 361, or VET PH 308~~	~~3 or 4~~	
400-level ANIM SCI Electives [M][7]	3	
Electives[8]	~~9~~ <u>12</u>	

Footnotes

[1] MATH requirement may be satisfied by completing MATH 106 and 108, 140 [QUAN], or 171 [QUAN].

[2] Lab Management Requirement courses (One course) include ANIM SCI 166, 172, 174 (Fall-only), 178, 280 (Spring only).

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

[4] Students who have not yet completed a [QUAN] course should select STAT 212 or PSYCH 311.

[5] 200-300-level ANIM SCI Electives: Select two courses from: ANIM SCI 205, 260, 266, 267, 274, 285, 314, <u>315,</u> 345, ~~346,~~ 360, or as approved by advisor.

[6] Students may substitute ANIM SCI 474 [CAPS] [M] in the spring.

[7] 400-level ANIM SCI Electives: Select three courses from ANIM SCI 408 [M], 440 [M], 451 [M], 454, 460, 464 [M], <u>466 [M], 468,</u> 472 [M], ~~473 [M],~~ 474 [M], ~~478 [M],~~ 481, 485 [M], or 488 [M] not used to fulfill a major requirement, or as approved by advisor. Students are required to complete two [M] courses to meet University requirements.

[8] Elective courses should include sufficient credits and 300-400-level coursework to meet the University requirement of 120 credits and 40 credits of upper-division coursework.

Chemical Engineering and Bioengineering Revise requirements for BS in Bioengineering - Biomedical Systems Option	**Bioengineering - Biomedical Systems Option (120 Credits)** 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	8-26

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)~~ <u>a cumulative GPA of at least 2.5 and a semester GPA of at least 2.0</u>.

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,~~ <u>a</u>~~A~~ll listed BIO ENG courses, required electives, and the prerequisites to these courses must be completed with a grade of C or better, <u>with the exception of BIO ENG 140, 488, 495, 499, and ENGR 489</u>.

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
Second Year	
First Term	*Credits*
<u>BIO ENG 201</u>	<u>3</u>
~~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
MATH 315	3

MBIOS 303	4	
PHYSICS 202 and 212, or 206	4 or 5	
UCORE Inquiry[2]	3	
Complete Writing Portfolio		
Third Year		
First Term	*Credits*	
BIO ENG 305	3	
BIO ENG 310	3	
BIO ENG 315	3	
~~BIO ENG 325 [M]~~	2	
C E 211	3	
STAT 370 or 423	3	
Second Term	*Credits*	
~~BIO ENG 305~~	3	
BIO ENG 325 [M]	2	
BIO ENG 350	3	
BIO ENG 360[3]	3	
Communication [COMM] or Written Communication [WRTG]	3	
E E 261	3	
Fourth Year		
First Term	*Credits*	
BIO ENG 410 [M]	3	
BIO ENG 420[4]	3	
BIO ENG 430	3	
ECONS 101 [SSCI], 102 [SSCI], or 198	3	
UCORE Inquiry[2]	3	
Second Term	*Credits*	
BIO ENG 411 [CAPS]	3	
BIO ENG 440	3	
Bioengineering Electives[3]	3	
Technical Electives[4]	3	
UCORE Inquiry[2]	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]Must complete 3 of these 4 UCORE designations: ARTS, DIVR, EQJS, HUM. [3]Bioengineering Electives (3 credits): <u>ENGR 489 or A</u>~~a~~ny 400-level BIO ENG course not used to fulfill major requirements. A maximum of 3 credits is allowed in <u>ENGR 489 and </u>BIO ENG 488, 495, and 499 combined. [4]Technical Electives (3 credits): Approved courses include BIOLOGY 106, 251, CPT S 121, E E 214, 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 as approved, or other courses as approved by advisor.	
Crop and Soil Sciences Revise requirements for minor in Geospatial Analysis	**Geospatial Analysis** The minor requires a minimum of 16 semester credits including the following core: SOIL SCI 368, 374, and SOIL SCI 468/568; and 6 credits from the following: AGTM 305, 405, CPT S 111, ~~MIS 250~~ <u>DATA 115</u>, <u>NEP 462/562*,</u> SOE 446, 464, 486, with a minimum GPA of at least 2.0 in the required courses. Exceptional students may take graduate-level courses with instructor permission. Courses used for the minor in geospatial analysis may not be used for the minor in soil science. At least 9 credits must be 300-400-level work earned in WSU courses or through WSU-approved education abroad or educational exchange courses. <u>*Indicates Global Campus course.</u>	**8-26**
Digital Technology and Culture Revise requirements for minor in Digital Technology and Culture	**Digital Technology and Culture** A minor in DTC requires 18 credits ~~including~~ <u>from</u> DTC 101, 201, ~~336, 355, and 375, plus one more 3-hour course from the following: DTC 335, 356, 435, 477, 478, ART 331, 332, 333, 363, 434, or 435. 9 credits of upper-division work must be earned in WSU courses or through~~ <u>and four (3 credit) upper division DTC courses including </u>WSU-approved education abroad or educational exchange courses. <u>ART 331 and 332 may be used by WSU Tri Cities students to satisfy two of the four upper division courses. DTC 496 and 497 are not allowed to be taken by students pursuing the DTC minor.</u>	**8-26**
Electrical Engineering and Computer Science Revise requirements for BS in Software Engineering	**Software Engineering (~~124~~<u>122</u> 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. 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	**8-26**

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).

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 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*
Biological Sciences [BSCI]	3
CPT S 122 or CPT S 132[1]	4
HISTORY 105 [ROOT]	3
MATH 172	4
MATH 216	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_**	
CPT S 327	3	
CPT S 350	3	
CPT S 487	3	
MATH/CPT S 453 or STAT 419	3	
STAT 360	3	
Fourth Year		
First Term	**_Credits_**	
CPT S 421	3	
CPT S 422 [M]	3	
CPT S 428 or 481	3	
CPT S 484	3	
Software Engineering Option Course[4]	3	
Second Term	**_Credits_**	
CPT S 423 [CAPS]	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 3 of these 4 UCORE designations: ARTS, DIVR, EQJS, HUM.

[4] Software Engineering Option Courses (9 credits required): Any 400-level course in CPT S, E E, or MATH not used to fulfill major requirements, or ENGR 320. Upper-division courses in other disciplines may be used with prior approval by advisor. Software Engineering Option Courses may include a maximum of 3 credits CPT S 499, or a combined 3 credits of CPT S 488 and ENGR 489.

[5] Data and Information Management Elective (3 credits required): Choose at least one from CPT S 315, 415, 451, 471, 475.

{S} Electrical Engineering and Computer Science Extend undergraduate certificate CySER CAE-CO Fundamentals to	**CySER CAE-CO Fundamentals**	8-26

Everett and Tri Cities campuses		
Human Development Revise requirements for minor in Leadership	**Leadership**	**8-26**

Leadership

The interdisciplinary Leadership Minor, offered through the Center for Transformational Learning & Leadership, is open to all students interested in developing high-demand applicable leadership skills. Students will learn leadership theories, examine the ethics and social responsibility of leadership, consider the centrality of ~~diversity, equity, and inclusion~~ <u>access and belonging</u> to leadership, and develop leadership skills through engagement in service-learning and self-selected leadership experiences. Students can explore discipline specific leadership development through elective courses. All students will take three leadership core classes including H D 205 or H D 305; H D 315; and H D 415 or H D 416. Students will take one class in each of three categories (ethics; ~~diversity, equity, & inclusion~~ <u>access & belonging</u>; and leadership electives). In addition to the above courses, students will participate in an approved self-selected leadership experience where they will explore leadership theories and develop leadership skills through hands-on experiential learning, culminating in a required leadership portfolio completed through a one-credit HD 499 course. The minor requires a minimum of 19 credits. At least 9 credits must be upper-division earned in WSU courses or through WSU-approved education abroad or educational exchange courses. A minimum cumulative GPA of 2.6 is required in courses applied to the minor.

Leadership Core (3 courses required): H D 205 or 305; 315; 415 or 416

Ethics Elective (1 course required): ASIA 320; B A ~~211~~ <u>201, 202, and 203</u>; COM 440; CRM J 450; CST M 467; MGMT 487; NAV SCI 402; NURS 309; PHIL 103, 360, 365, 370, 450; SPMGT 365; WGSS 462/PHIL 462

~~Diversity, Equity, & Inclusion~~ <u>Access & Belonging</u> (1 course required): ANTH 220, 316; CES 101, 291, 440, 462, 464, 489; COM 321; CRM J 205; H D 350, 403; HISTORY/WGSS 399; NURS 455; PSYCH 309; SOC 340; WGSS 120; WGSS/ENGLISH/SOC 300/310/300; WGSS/SOC 385

Leadership Electives (1 course required): AERO 311; <u>AFS 435;</u> ~~AMDT 440;~~ HBM 381; H D 334; I BUS 280, 480; ~~KINES 315~~; MGMT 301, 401; MIL SCI 301; NAV SCI 206; NURS 405, 408; POL S 442; PSYCH 308; SOC 341; UNIV 295, 497

Leadership Experience (1 credit H D 499): Leadership Minor students must complete at least one applied leadership experience lasting one semester or more (Fall, Spring, or Summer Session). Not all leadership experience requires an official title or leadership position. Students must confirm leadership experience by the start of the semester in which it will be completed by emailing the Leadership Minor faculty advisor (~~ctll.leader@wsu.edu~~ <u>whitehall@wsu.edu</u>) and enrolling in one (1) credit of H D 499, which will be taken during the approved leadership experience. At the conclusion of H D 499, students will produce a leadership portfolio that will highlight their experience, career goals, and leadership development. Students must complete H D 315 prior to the leadership experience.

Journalism and Media Production Under BA in Journalism and Media Production, add new Additional Major on the Pullman campus: Sports Media	**Additional Major – Sports Media** The Murrow College of Communication offers an additional major in Sports Media through the Department of Journalism and Media Production. The Sports Media major is intended to add a major focus area in addition to a primary major in Broadcast News, Broadcast Production, Multimedia Journalism, and Media Innovation. The additional major of Sports Media will build naturally on the strengths our primary Journalism and Media Production majors offer, such as reporting, producing, and digital publishing, while providing focused application within the dynamic sports ecosystem. Required courses: COM 225; COMJOUR 280; COMJOUR 302 or 340; COMJOUR 433 or COM 388; COMJOUR 487. No course may count for both the primary major and the additional major.	**8-26**
Music Revise requirements for minor in Jazz Studies	**Jazz Studies** Required courses: MUS <u>151 or 251,</u> 257, 258, 362, 457, 458, and one 3-credit MUS course; four credits from 438<s>, 439,</s> <u>or</u> 440. ~~Credits hours for t~~ The minor must include 9 <s>hours</s> <u>credits</u> of upper-division work earned in WSU courses or through WSU-approved education abroad or educational exchange courses. <u>Students may test out of MUS 251 through approved transfer credit or the AP Theory Exam according to School of Music policy. If a student tests out of 251, they will be required to take one additional credit of a 300- or 400-level MUS elective.</u>	**8-26**
Nutrition and Exercise Physiology Add new minor on the Everett, Pullman, Spokane, Tri Cities, and Vancouver campuses: Human Nutrition	**Human Nutrition** The Human Nutrition minor is designed for students in any major who are interested in obtaining knowledge and experience in nutritional sciences. NEP courses will generally be taught from the Health Sciences campus and available to other campus' classrooms via videoconferencing. To be admitted into the Human Nutrition minor, students must have a cumulative GPA of 2.7 and meet with a NEP advisor to declare their interest. Students must ensure that they meet all prerequisites before enrolling in any course. A minor in Human Nutrition requires at least 18 credits, including BIOLOGY 140 or BIOLOGY 333, NEP 200, NEP 330, and NEP 400 (12 credits total). Additional credits (6 credits minimum) may be obtained from the following courses: NEP 402, NEP 430, NEP 431, NEP 435, NEP 458, NEP 462, NEP 477, and NEP 481. Completion of the Human Nutrition minor requires a grade of C or higher in each associated course and a minimum cumulative GPA of 2.5 for the minor courses.	**8-26**
Strategic Communication Under BA in Strategic Communication, add new	**Additional Major – Sports Promotion** The Murrow College of Communication offers an additional major in Sports Promotion through the Department of Strategic Communication.	**8-26**

Additional Major on the Pullman campus: Sports Promotion	The Sports Promotion major is intended to add a major focus area in addition to a primary major in Advertising, Public Relations, or Risk and Crisis Communication. The additional major of Sports Promotion will build naturally on the strengths our primary strategic communication majors offer, such as audience analysis, media relations, and campaign planning—while offering a focused, high-energy application that resonates deeply with today's students. Required courses: COM 225 and COM 340 or 388; COMSTRAT 270, 478, 482. No course may count for both the primary major and the additional major.	
Teaching and Learning Revise requirements for BA in Education - Elementary Education Teacher Certificate	**Elementary Education Teacher Certificate (128 Credits)** Candidates for the undergraduate elementary education teacher certificate program will satisfy degree requirements of the Department of Teaching and Learning. The degree will be the Bachelor of Arts. The student should include the following course work within UCORE selections to satisfy prerequisite, degree, and admission to teacher preparation requirements. This course schedule does not include an add-on endorsement.	**8-26**

First Year

First Term	Credits
ENGLISH 101 [WRTG]	3
H D 101 [SSCI]	3
MATH 251	3
MUS 153 [ARTS] or Arts [ARTS]	3
Science Requirement[1]	4

Second Term	Credits
Endorsement Course[2]	3
HISTORY 105 [ROOT]	3
HISTORY 110 [HUM] or 111 [HUM]	3
MATH 252 [QUAN]	3
Science Requirement[1]	4

Second Year

First Term	Credits
Endorsement Course[2]	3
ENGLISH 201 [WRTG], 301 [WRTG], or 402 [WRTG]	3
POL S 101, ECONS 101, or ECONS 102	3
Science Requirement[1]	4
TCH LRN 301	3

Second Term	Credits
Endorsement Courses[2]	6
HISTORY 120 [DIVR]	3

Science Requirement[1]	4	
TCH LRN 307	3	
Apply for admission to the major		
Complete Writing Portfolio		
Third Year		
First Term	*Credits*	
ED PSYCH 401	3	
TCH LRN 320 or 321	3	
TCH LRN 352	3	
TCH LRN 402	1	
TCH LRN 445	2	
TCH LRN 483[3]	3	
Second Term	*Credits*	
Endorsement Course[2]	3	
SPEC ED 420	3	
TCH LRN 306 [M] or 322 [M]	3	
TCH LRN 310 [M]	2	
TCH LRN 371	3	
TCH LRN 405	1	
Fourth Year		
First Term	*Credits*	
Endorsement Course[2]	3	
TCH LRN 330	3	
TCH LRN 385	3	
TCH LRN 390	3	
~~TCH LRN 413~~	~~3~~	
<u>TCH LRN 414</u>	<u>3</u>	
TCH LRN 490 [CAPS]	3	
Second Term	*Credits*	
TCH LRN 415	16	

Footnotes

[1] Science Requirement – choose one of two options: Option 1) SCIENCE 101 [PSCI] and 102 [BSCI], plus two from: ASTRONOM 135 [PSCI], or 138 [PSCI], BIOLOGY 102 [BSCI] or 106 [BSCI], CHEM 101 [PSCI], 103, or 105 [PSCI], PHYSICS 101 [PSCI], or 150 [PSCI], SOE 101 [PSCI], 110 [BSCI], 210 [PSCI], 230 [PSCI], or 280 [PSCI]; Option 2) SOE 101 [PSCI], and BIOLOGY 102 [BSCI] or 106 [BSCI], plus two from: ASTRONOM 135 [PSCI] or 138 [PSCI], CHEM 101 [PSCI], 103, or 105 [PSCI], PHYSICS 101 [PSCI] or 150 [PSCI], SCIENCE 101 [PSCI], SCIENCE 102 [BSCI], or SOE 110 [BSCI], 210 [PSCI], 230 [PSCI] or 280 [PSCI].

[2]Endorsement Courses: Students seeking a BA in Elementary Education must complete at least 20 semester credits in an endorsable area. Some required coursework may be applied to the endorsement area. See Specific Subject area requirements.

[3]TCH LRN 483 must be completed prior to the Fourth Year.