

College of Science, Technology, Engineering, and Mathematics

Earth And Space Science BAE

(67-68 credits)

Why major in Earth & Space Science/Secondary Education

The Earth and Space Science BAE is for students interested in teaching this science concentration in middle and high school. This is particularly suited for students who wish to expedite a path to teaching a subject that is exciting to kids. As a science teacher, you will play a key role in providing education for future jobs in science and technology.

Other Degree Options

A minor is not required but students can add a minor and become endorsed in other science concentrations like biology, chemistry and physics or disciplines such as art, English, English as a second language, French, German, history or theatre.

Career Opportunities

There is currently a shortage of STEM teachers within Washington State and the nation. Qualified applicants will not have trouble finding a position almost anywhere in the country. Washington licensure is transferrable to many states.



Department Chair

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This is an example of a four year class schedule. Academic Advisors are there to help create individualized plans.

First Year	Q1	Q2	Q3
	BACR (5 cr.)	General Elective (5 cr.)	BACR (5 cr.)
	BACR (5 cr.)	General Elective (5 cr.)	General Elective (5 cr.)
	ENGL 101 (5 cr.)	ENGL 201 (5 cr.)	Global (5 cr.)
Second Year	Q5	Q6	Q7
	EDUC 201 (3 cr.)	CHEM 151 (5 cr.)	GEOL 122 (5 cr.)
	GEOL 120 (5 cr.)	GEOL 121 (5 cr.)	PHYS 121 (5 cr.)
	MATH 142 (5 cr.)	PSYC 304 (5 cr.)	SPED 363 (4 cr.)
	PHYS 131 (4 cr.)		
	PHYS 161 (1 cr.)		
Third Year	Q9	Q10	Q11
	Diversity (5 cr.)	CMST 200 or CMST 201 or a	GEOL 320 or 360 (4 cr.)
	General Elective (1 cr.)	GEOG 305 (5 cr.)	GEOL 490A (4 cr.)
	GEOG 410 (5 cr.)	GEOG 314 (5 cr.)	SCED 390 (2 cr.)
	GEOL 311 (4 cr.)	SCED 391 (3 cr.)	
Fourth Year	Q13	Q14	Q15
	EDUC 303 (3 cr.)	Field-oriented course (GEOG	EDUC 426 (12 cr.)
	EDUC 309 (3 cr.)	General Elective (5 cr.)	
	EDUC 341 (4 cr.)	EDUC 386 (3 cr.)	
	EDUC 386 (3 cr.)	EDUC 427 (3 cr.)	
	EDUC 413 (4 cr.)		
	EDUC 420 (1 cr.)		

Listed is a Sample Four Year Plan. Individual plans will vary based on placement test scores and class availability.

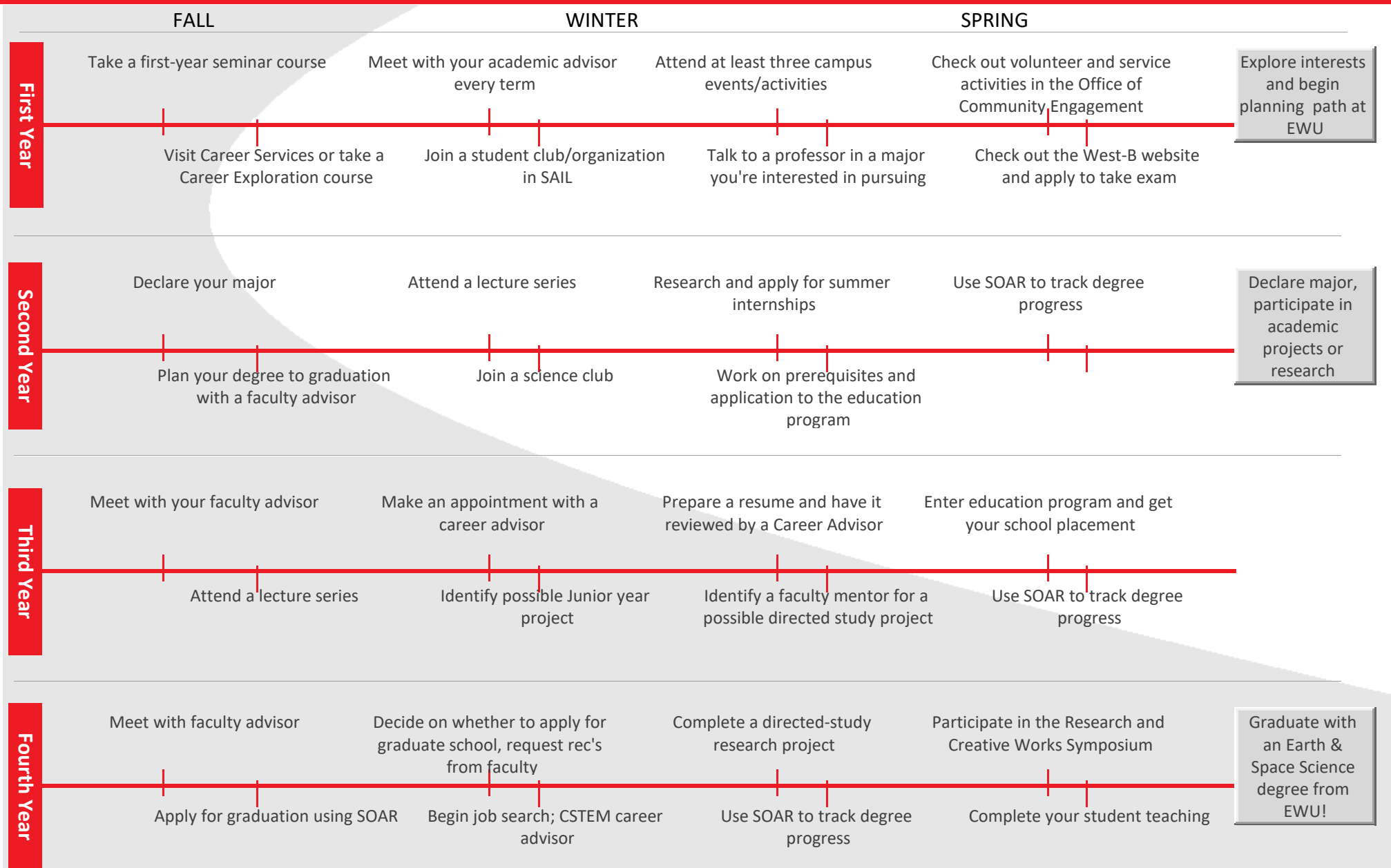


Flight Plan to Success

The following milestones will help you succeed and improve your experience at EWU.

Earth And Space Science, BAE

College of Science, Technology, Engineering, and Mathematics
Geology



All recommended activities can occur at any time during a student's time at EWU



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Student's name: _____ EWU ID: _____

Bachelor of Arts in Education in Earth And Space Science
 Secondary Education
 2018-2019 Catalog Year

College of Science, Technology, Engineering, and Mathematics
 SOAR Department: Earth Sci | SOAR Major: EDEA
 Major Declaration Form: Earth & Space Science Secondar, BAE-EARTHSCI
 Math proficiency needed: MATH 142

First year courses and prerequisites	Notes	Previously offered **
Q1 BACR (5 cr.)		
Q1 BACR (5 cr.)		
Q1 ENGL 101 COLL COMP: EXPOSITN & ARGUMNT (5 cr.) Prerequisite: Writing Placement Test or General Advising.	Satisfies: university competencies, writing.	F17, W18, Sp18, Su18
Q2 General Elective (5 cr.)		
Q2 General Elective (5 cr.)		
Q2 ENGL 201 COLL COMP: ANALYSIS/RES/DOCMNT (5 cr.) Prerequisite: ENGL 101, Writing Placement Test or general advising.	Satisfies: university proficiencies, writing.	F17, W18, Sp18, Su18
Q3 BACR (5 cr.)		
Q3 General Elective (5 cr.)		
Q3 Global (5 cr.)		

I have discussed this academic plan with the student listed above. Advisor name: _____ Advisor signature: _____

* See the catalog for prerequisites and other details.

** Future course offerings may differ from the past. Check the course schedule for future courses.

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Second year courses and prerequisites	Notes	Previously offered **
Q5 EDUC 201 INTRO TO EDUCATION (3 cr.)		F17, W18, Sp18, Su18
Q5 GEOL 120 PHYS GEOL - THE SOLID EARTH (5 cr.) Prerequisites: MTHD 104 or equivalent.	Satisfies: the completion of GEOL 120 counts as one course for the BACR in natural science; the completion of GEOL 120 and GEOL 121 counts as two courses for the BACR for natural science. Note: weekly laboratories and one field trip are required.	F17, W18, Su18
Q5 MATH 142 PRECALCULUS MATH II (5 cr.) Prerequisite: MATH 141 or equivalent.	Satisfies: completion of this course with a grade \geq C satisfies the university proficiencies in mathematics.	F17, W18, Sp18, Su18
Q5 PHYS 131 INTRODUCTORY PHYSICS I (4 cr.) Prerequisites: MATH 142, concurrent enrollment in PHYS 161 is recommended.	Satisfies: The completion of PHYS 131, PHYS 161 satisfies the BACR for natural sciences, counts as one course. The completion of PHYS 131, PHYS 132, PHYS 161, plus any one of the following: PHYS 162, PHYS 163, PHYS 263 satisfies the BACR for natural scien Note: PHYS 161, the associated laboratory course, is usually required by any program also requiring PHYS 131, but requires separate enrollment.	F17
Q5 PHYS 161 MECHANICS LABORATORY (1 cr.) Prerequisite: MATH 142.		F17, W18
Q6 CHEM 151 GENERAL CHEMISTRY (5 cr.) Prerequisites: \geq C in MATH 141 or concurrent enrollment; \geq C in CHEM 100 or \geq C in CHEM 161 or one year of high school chemistry.	Satisfies: a BACR for natural sciences. Note: quantitative and qualitative laboratory work is included.	F17, W18, Sp18
Q6 GEOL 121 PHYS GEOL - SURFICIAL PROCESS (5 cr.) Prerequisites: MTHD 104 or equivalent.	Satisfies: the completion of GEOL 121 counts as one course for the BACR in natural science; the completion of GEOL 120 and GEOL 121 counts as two courses for the BACR for natural science. Note: weekly laboratories and one field trip are required.	W18, Sp18
Q6 PSYC 304 EDUCATIONAL PSYCHOLOGY (5 cr.) Prerequisites: PSYC 201 recommended.		F17, W18, Sp18, Su18
Q7 GEOL 122 HISTORICAL GEOLOGY (5 cr.) Prerequisite: GEOL 121.		W18, Sp18

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Q7

PHYS 121 DESCRIPTIVE ASTRONOMY (5 cr.)
Prerequisite: pre-university basic skills in mathematics.

Satisfies: a BACR for natural sciences.
Note: Laboratory work related to the covered topics is included. May include planetarium sessions.

F17, Sp18, Su18

Q7

SPED 363 INTRO TO SPECIAL EDUCATION (4 cr.)

F17, W18, Sp18, Su18

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Third year courses and prerequisites

Notes

Previously offered **

Q9	Diversity (5 cr.)		
Q9	General Elective (1 cr.)		
Q9	GEOG 410 GEOMORPHOLOGY (5 cr.) Prerequisite: GEOG 100 or GEOL 121 or permission of the instructor.		W18
Q9	GEOL 311 EARTH MATERIALS (4 cr.) Prerequisites: GEOL 120 and CHEM 151.		F17
Q10	CMST 200 or CMST 201 or an approved equivalent (4 cr.)		
Q10	GEOG 305 INTRO TO OCEANOGRAPHY (5 cr.) Prerequisite: mathematics clearance.		
Q10	GEOG 314 WEATHER AND CLIMATE (5 cr.) Prerequisite: GEOG 204 or 10 credits of upper division science or permission of the instructor.		W18
Q11	GEOL 320 or 360 (4 cr.)		
Q11	GEOL 490A WATER AND THE WEST (4 cr.) Prerequisites: junior or senior standing.	Satisfies: senior capstone university graduation requirement.	Sp18
Q11	SCED 390 SCIENCE TEACHING METHODS (2 cr.) Prerequisite: EDUC 303 or by permission of the instructor plus upper level major courses. Students study types of science programs, organization of lesson materials, techniques, laboratory safety and evaluation.	Note: designed for BAE Biology, Chemistry, Earth Science, Physics majors and minors as well as those seeking middle level science endorsement.	F17
Q11	SCED 391 MIDDLE LEVEL AND EARTH AND SPA (3 cr.) Prerequisite: SCED 390 or concurrent enrollment.	Note: This course is designed for students seeking an endorsement to teach middle school science and/or secondary earth and space science. Students must complete >= 70% of program to enroll in this course.	F17

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Fourth year courses and prerequisites	Notes	Previously offered **
Q13 EDUC 303 FOUNDATIONS OF ASSESSMENT (3 cr.) Prerequisites: ENGL 201; MATH 107 or MATH 208; CMST 200 or proof of equivalence; passing the Washington Education Skill Test-Basic (WEST-B).	Concurrent with EDUC 309	F17, W18, Sp18, Su18
Q13 EDUC 309 FOUNDATIONS SEC CLASSROOM MGMT (3 cr.) Prerequisites: ENGL 201; MATH 107 or MATH 208, CMST 200 or proof of equivalence; passing the Washington Education Skill Test-Basic (WEST-B).	Concurrent with EDUC 303	F17, W18, Sp18, Su18
Q13 EDUC 341 SEC STRATEGIES, MGMT, ASSESSMT (4 cr.) Prerequisites: EDUC 413.	Note: Washington State Patrol/FBI fingerprinting clearance.	F17, W18, Sp18
Q13 EDUC 386 FIELD EXPERIENCE AND PRACTICUM (3 cr.) Prerequisite: admission to the Education program.	Note: Washington State Patrol Clearance / FBI Fingerprint Clearance required. A weekly seminar is required. Your schedule must be arranged so time can be spent in a public school classroom during the day.	
Q13 EDUC 413 MGT/ASSESS CONTENT LTCY SEC (4 cr.) Prerequisites: EDUC 303 and EDUC 309.	Note: Washington State Patrol/FBI fingerprinting clearance.	F17, W18, Sp18, Su18
Q13 EDUC 420 ADM TO PROFESSIONAL CANDIDACY (1 cr.) Prerequisites: P-3: concurrent with EDUC 439 and EDUC 495, Elementary: EDUC 338. Secondary: EDUC 341. Washington State Patrol/FBI clearance required.	Note: graded Pass/Fail.	F17, W18, Sp18
Q14 Field-oriented course (GEOG/GEOL elective) (see catalog) (5 cr.)		
Q14 General Elective (5 cr.)		
Q14 EDUC 386 FIELD EXPERIENCE AND PRACTICUM (3 cr.) Prerequisite: admission to the Education program.	Note: Washington State Patrol Clearance / FBI Fingerprint Clearance required. A weekly seminar is required. Your schedule must be arranged so time can be spent in a public school classroom during the day.	
Q14 EDUC 427 GENERAL STUDENT TEACHING K-12 (3 cr.) Prerequisite: EDUC 420.	Note: graded Pass/Fail.	F17, W18, Sp18

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Q15

EDUC 426 SEC STUDENT TEACHING 7-12 (12 cr.)

Prerequisite: EDUC 420 and departmental clearance required prior to registration.

Note: Graded Pass/Fail. Washington State Patrol and FBI clearance must be current. All students must have a minimum overall GPA ≥ 2.8 in each of the following: major(s), minor(s) and Professional Education Program. All course grades in the student's major

F17, W18, Sp18

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