

# College of Science, Technology, Engineering, and Mathematics

## Natural Science Education-Middle Level Endorsement BAE

(68 credits)

### Why study the BAE in Natural Science- Secd Ed Core?

The BAE Program in Biology education prepares the pre-service teacher to earn certification to teach biology in grades 5-12 in the state of Washington. Graduates are very competitive in the job market. The program provides students with a rigorous foundation in biological and chemistry concepts as well as supporting courses in education, including science teaching method courses. Completion of the program requires passing external certification exams and leads to a Secondary Teaching Certification in Washington State with an endorsement in Biology.

### Other Degree Options

Minor in Natural Science Elementary

### Career Opportunities

Science Teacher, Biology Teacher



### Department Chair

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<http://www.ewu.edu/cstem>

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

First Year

Fall 1

BACR (5 cr.)  
GEOG 115 (GEGR) or GEOL 1  
ENGL 101 (5 cr.)

Q2

BACR (5 cr.)  
General Elective (3 cr.)  
General Elective (3 cr.)  
MATH 141 (5 cr.)

Q3

Diversity (5 cr.)  
General Elective (2 cr.)  
General Elective (5 cr.)  
Global (upper-division) (5 cr.)

Second Year

Q5

GEOG 204 (GEGR) or 314 (5 c  
CHEM 161 (5 cr.)  
MATH 142 (5 cr.)

Q6

General Elective (4 cr.)  
BIOL 115 (5 cr.)  
PHYS 131 (4 cr.)  
PHYS 161 (1 cr.)

Q7

ENGL 201 (5 cr.)  
PHYS 115 (5 cr.)  
PHYS 121 (5 cr.)

Third Year

Q9

BACR (5 cr.)  
General Elective (Upper Div)  
BIOL 171 (5 cr.)  
EDUC 201 (3 cr.)

Q10

BIOL 172 (5 cr.)  
EDUC 417 (3 cr.)  
GEOL 121 (5 cr.)

Q11

Upper Div Elective (4 cr.)  
Upper Div Elective (5 cr.)  
SCED 390 (2 cr.)  
SCED 391 (3 cr.)

Fourth Year

Q13

EDUC 413 (3 cr.)  
EDUC 303 (3 cr.)  
EDUC 309 (3 cr.)  
EDUC 341 (4 cr.)  
EDUC 386 (3 cr.)

Q14

BACR (5 cr.)  
EDUC 386 (3 cr.)  
EDUC 427 (3 cr.)  
SCED 490 (5 cr.)

Q15

EDUC 426 (12 cr.)

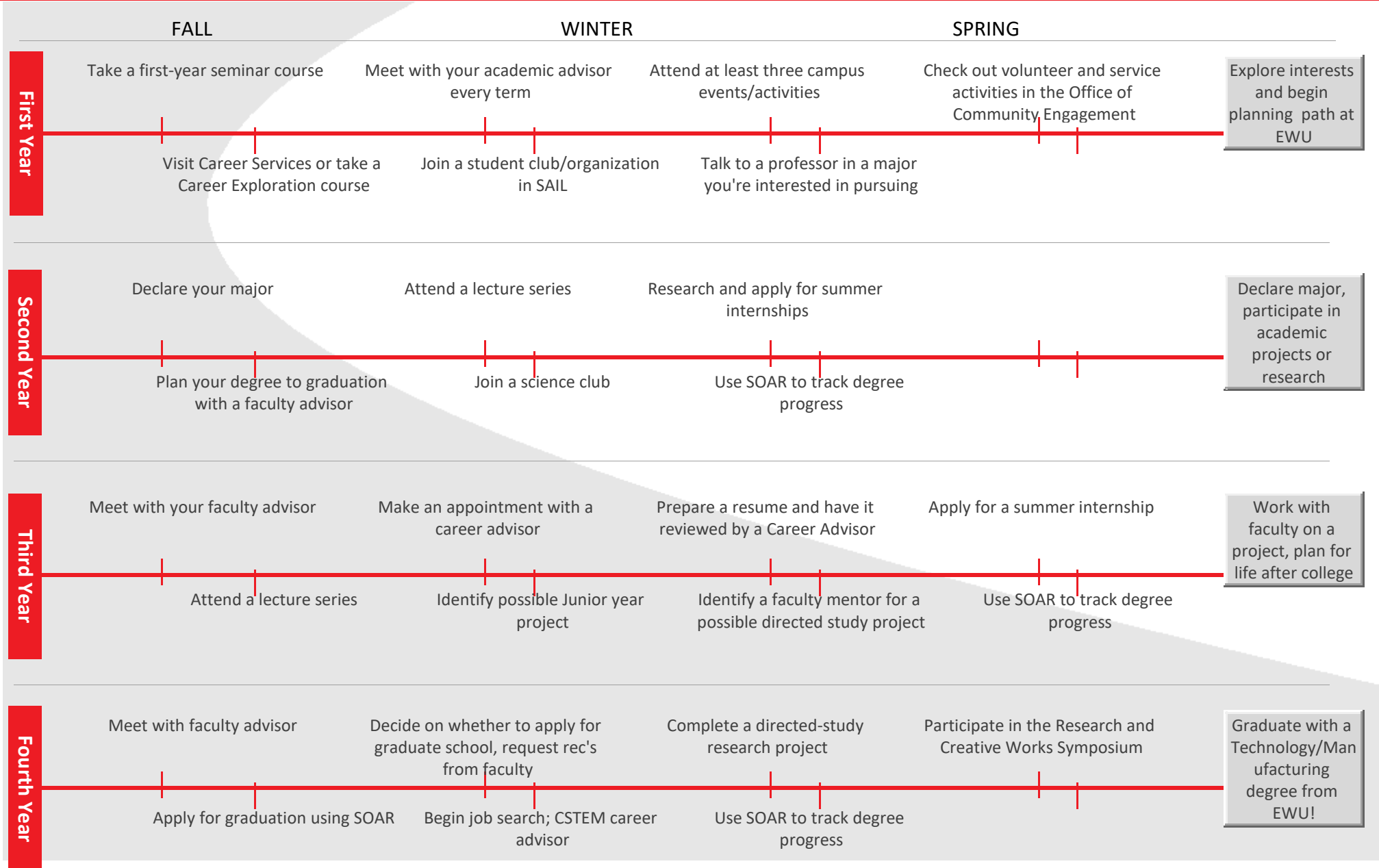
Listed is a Sample Four Year Plan. Individual plans will vary based on placement test scores and course availability.



# Flight Plan to Success

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

## Natural Science Education-Middle Level Endorsement, BAE College of Science, Technology, Engineering, and Mathematics



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



Student's name: \_\_\_\_\_ EWU ID: \_\_\_\_\_

College of Science, Technology, Engineering, and Mathematics

SOAR Department: Natural Sc | SOAR Major: EDNS

Bachelor of Arts in Education in Natural Science Education-Middle Level Endorsement  
 Secondary Education Core  
 2019-2020 Catalog Year

Major Declaration Form: Natural Science Education - Secondary/Middle Level, BAE-NATSC, ELMI  
 Math proficiency needed: MATH 141

First year courses and prerequisites	Notes	Previously offered **
Q1 BACR (5 cr.)		
Q1 GEOG 115 (GECR) or GEOL 115 (GECR) (5 cr.)		
Q1 ENGL 101 COLL COMP: EXPOSITN & ARGUMNT (5 cr.) Prerequisite: Writing Placement Test or General Advising.□		F18, W19, S19
Q2 BACR (5 cr.)		
Q2 General Elective (3 cr.)		
Q2 General Elective (3 cr.)		
Q2 MATH 141 PRECALCULUS I (5 cr.) Prerequisite: a grade ?C in MATH 114 or equivalent course or a satisfactory score on the mathematics placement assessment (MPA).		F18, W19, S19
Q3 Diversity (5 cr.)		
Q3 General Elective (2 cr.)		
Q3 General Elective (5 cr.)		
Q3 Global (upper-division) (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.

To follow this MAP, you should place into MATH 141. If you place lower, your custom MAP may change.

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Second year courses and prerequisites	Notes	Previously offered **
Q5 GEOG 204 (GECR) or 314 (5 cr.)		
Q5 CHEM 161 GEN CHEM FOR HEALTH SCIENCES (5 cr.) Prerequisite: Concurrent enrollment in or completion of MTHD 104 or ALEKS score of ≥41. A high school chemistry course or CHEM 100 is highly recommended.	Note: quantitative and qualitative laboratory work is included.□□	F18, W19, S19
Q5 MATH 142 PRECALCULUS MATH II (5 cr.) Prerequisite: MATH 141 or equivalent.		F18, W19, S19
Q6 General Elective (4 cr.)		
Q6 BIOL 115 LIFE SCIENCE FOR TEACHERS (5 cr.) Note: lecture with lab.		F18, W19
Q6 PHYS 131 INTRODUCTORY PHYSICS I (4 cr.) Prerequisite: MATH 142.	Note: concurrent enrollment in PHYS 161 is recommended.□ □	F18
Q6 PHYS 161 MECHANICS LABORATORY (1 cr.) Prerequisite: MATH 142.		F18, W19
Q7 ENGL 201 COLL COMP: ANALYSIS/RES/DOCMNT (5 cr.) Prerequisite: ENGL 101, Writing Placement Test or general advising.		F18, W19, S19
Q7 PHYS 115 INVESTIGATING PHYSICAL SCIENCE (5 cr.) Prerequisite: MATH 208 or equivalent.	Note: laboratory work related to the covered topics is included nearly every day.□□	S19
Q7 PHYS 121 DESCRIPTIVE ASTRONOMY (5 cr.) Prerequisite: pre-university basic skills in mathematics.	Note: Laboratory work related to the covered topics is included. May include planetarium sessions.□□	S19

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Third year courses and prerequisites	Notes	Previously offered **
Q9 BACR (5 cr.)		
Q9 General Elective (Upper Div) (4 cr.)		
Q9 BIOL 171 BIOLOGY I (5 cr.) Prerequisite: concurrent enrollment in MATH 141 or completion of MATH 141 with ?C; students must receive ?C- to enroll in BIOL 172 and ?C to enroll in BIOL 270.	Note: course fee. □ □	F18, W19, S19
Q9 EDUC 201 INTRO TO EDUCATION (3 cr.)		F18, W19, S19
Q10 BIOL 172 BIOLOGY II (5 cr.) Prerequisite: ?C- in BIOL 171 and ?C in MATH 141.	Note: course fee. □ □	F18, W19, S19
Q10 EDUC 417 CULTURE OF MIDDLE SCHOOL (3 cr.) Prerequisites: EDUC 201.		W19
Q10 GEOL 121 PHYS GEOL - SURFICIAL PROCESS (5 cr.) Note: weekly laboratories are required and one field trip may be required.		W19, S19
Q11 Upper Div Elective (4 cr.)		
Q11 Upper Div Elective (5 cr.)		
Q11 SCED 390 SCIENCE TEACHING METHODS (2 cr.) Prerequisite: EDUC 303 or by permission of the instructor plus upper level major courses.	Note: designed for BAE Biology, Chemistry, Earth Science, Physics majors and minors as well as those seeking middle level science endorsement. □ □	F18
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. □ □	F18
Q13 EDUC 413 MGT/ASSESS CONTENT LTCY SEC (3 cr.) Prerequisite: concurrent enrollment with EDUC 309.	Note: Washington State Patrol/FBI fingerprinting clearance. Departmental Clearance required prior to registration. □ □	F18, W19, S19

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Fourth year courses and prerequisites	Notes	Previously offered **
<b>Q13</b> 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	F18, S19
<b>Q13</b> EDUC 309 FOUNDATIONS SEC CLASSROOM MGMT (3 cr.) Prerequisite: Grades ?B- in each of these coursePrerequisite: ENGL 201, MATH proficiency course, CMST 200, EDUC 201, PSYC 304, SPED 363, or proof of equivalence. Concurrent enrollment with EDUC 413.	Note: Acceptance into the Teacher Education Program required. Department authorization and application required for admission. Passing the Washington Education Skill Test-Basic (WEST B) or satisfactory SAT or ACT scores; a minimum cumulative GPA ?2.8.□	F18, S19
<b>Q13</b> EDUC 341 SEC STRATEGIES, MGMT, ASSESSMT (4 cr.) Prerequisite: Departmental clearance prior to registration. Concurrent enrollment with EDUC 413.	Note: Washington State Patrol/FBI fingerprinting clearance.□ □	F18, W19, S19
<b>Q13</b> EDUC 386 FIELD EXPERIENCE AND PRACTICUM (3 cr.)	1-5 credits	W19, S19
<b>Q14</b> BACR (5 cr.)		
<b>Q14</b> EDUC 386 FIELD EXPERIENCE AND PRACTICUM (3 cr.)	1- 5 credits	W19, S19
<b>Q14</b> EDUC 427 GENERAL STUDENT TEACHING K-12 (3 cr.) Prerequisite: EDUC 386B, may be concurrent enrollment, or EDUC 386E.	Note: graded Pass/Fail.□ □ □	F18, W19, S19
<b>Q14</b> SCED 490 SCIENCE TEACHING CAPSTONE (5 cr.) Prerequisite: EDUC 341 and SCED 390.	Note: This is a professional development course for students planning to be middle level and secondary science teachers and is offered each winter quarter when students are in classrooms 18hrs/week. It is a requirement for the BAE in Middle Level Science	
<b>Q15</b> EDUC 426 SEC STUDENT TEACHING 7-12 (12 cr.) Prerequisite: EDUC 386B 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 followingNote: major(s), minor(s) and Professional Education Program. All course grades in the student?s m	F18, W19, S19

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