

$\Box$ PUBLIC

Name/Title of Institutional Officer

NEW PROGRAM PROPOSAL FOR ROUTINE REVIEW
When finished, please save and email to: he.academicprogramactions@dhe.mo.gov
Sponsoring Institution: Missouri University of Science and Technology
Program Title: Environmental Science
Degree/Certificate: BS-Bachelor of Science
If other, please list: Click here to enter text
Options: Environmental Biology; Environmental Geology; Environmental Economics; Environment & Society
Delivery Site: Missouri University of Science and Technology
CIP Classification: 03.0104
Implementation Date: 8/1/2022
Is this a new off-site location? $\square$ Yes $\boxtimes$ No
If yes, is the new location within your institution's current CBHE-approved service region?  *If no, public institutions should consult the comprehensive review process
Is this a collaborative program? □Yes ⊠No *If yes, please complete the collaborative programs form on last page.
Please list similar or comparable programs at Missouri public institutions of higher education.  *For public institutions only
University of Missouri – Columbia; University of Missouri – Kansas City
CERTIFICATIONS:  ☑ The program is within the institution's CBHE approved mission. (public only)
☑ The program will be offered within the institution's CBHE approved service region. (public only)
☐ The program builds upon existing programs and faculty expertise
☑ The program does not unnecessarily duplicate an existing program in the geographically-applicable area.
☑ The program can be launched with minimal expense and falls within the institution's current operating budget. (public only)
AUTHORIZATION

Date

Signature

#### PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below.

Quantification of performance goals should be included wherever possible.

## 1. Student Preparation

- Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.
   Students entering this program should have earned a high school diploma and meet all the standards for admission into Missouri University of Science and Technology. No admissions requirements that exceed university admissions standards will be imposed.
- Characteristics of a specific population to be served, if applicable.

  This program is targeted at existing Missouri S&T students that would typically not be retained.

#### 2. Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate. N/A
- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.
   80%
- Expectations for professional activities, special student contact, teaching/learning innovation.

  The director will be expected to attend at least three professional networking evets or conferences per year and maintain industry and agency contacts.

## 3. Enrollment Projections

- Student FTE majoring in program by the end of five years.
   138
- Percent of full time and part time enrollment by the end of five years. Full time: 100%

#### STUDENT ENROLLMENT PROJECTIONS

YEAR	1	2	3	4	5
Full Time	17	51	85	119	138
Part Time	0	0	0	0	0
Total	17	51	85	119	138

# **4. Student and Program Outcomes**

Number of graduates per annum at three and five years after implementation.
 Year 3: 0; Year 5: 34

1041 0. 0, 1041 0. 01

 Special skills specific to the program. N/A

- Proportion of students who will achieve licensing, certification, or registration.
   N/A
- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.

Click here to enter text

- Placement rates in related fields, in other fields, unemployed. Goal is 100% career placement within 5 years of graduation
- Transfer rates, continuous study.
   Click here to enter text

## 5. Program Accreditation

• Institutional plans for accreditation, if applicable, including accrediting agency and timeline. If there are no plans to seek specialized accreditation, please provide rationale.

There is no formal accreditation or licensure process for environmental scientists. Certification programs are available through the Ecological Society of America and other professional organizations. In conjunction with the minimum number of required years of experience, our curriculum meets the requirements for these certifications.

## 6. Program Structure

A. Total credits required for graduation: 120

B. Residency requirements, if any:

N/A

C. General education: Total credits:

29

Courses (specific courses OR distribution area and credits)

Course Number	Credits	Course Title
See attachment.		

D. Major requirements: Total credits: Click here to enter text

Course Number Cr	ts   Course Title
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E. Free elective credits: Click here to enter text (sum of C, D, and E should equal A)

F. Requirements for thesis, internship or other capstone experience: Click here to enter text

G. Any unique features such as interdepartmental cooperation:

Click here to enter text

## 7. Need/Demand

**⊠**Student demand

⊠Market demand

Societal demand

⊠I hereby certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful.

On July 1, 2011, the Coordinating Board for Higher Education began provisionally approving all new programs with a subsequent review and consideration for full approval after five years.

#### **COLLABORATIVE PROGRAMS**

•	<b>Sponsoring</b>	<b>Institution One:</b>	Choose	an institution
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• Sponsoring Institution Two: Choose an institution

Other Collaborative Institutions: Click here to enter text

• Length of Agreement: Click here to enter text

• Which institution(s) will have degree-granting authority? Click here to enter text

• Which institution(s) will have the authority for faculty hiring, course assignment, evaluation and reappointment decisions? Click here to enter text

 What agreements exist to ensure that faculty from all participating institutions will be involved in decisions about the curriculum, admissions standards, exit requirements?

Which institution(s) will be responsible for academic and student-support services, e.g., registration, advising, library, academic assistance, financial aid, etc.?
 Click here to enter text

• What agreements exist to ensure that the academic calendars of the participating institutions have been aligned as needed?

Click here to enter text

Please save and email this form to: he.academicprogramactions@dhe.mo.gov

- 1. Total Credits Required for Graduation: 120
- 2. Residence requirements, if any: none
- 3. General education
  - a. Total general education credits: 29

Course	Hrs
ENGL 1120	3
HUM/FINE ART	3
ECON 1100	3
ECON 1200	3
HIST 1200, 1300 or	3
1310	

Course	Hrs
ENGL 1160	3
CHEM 1100	1
PHYSICS 1145	4
POL SCI 1200	3
PHILOS 1130	3

# 4. Major Requirements

a. Total credits specific to degree: 86

Course	Hrs	Course
ENV SCI 1000	1	ENV E
ENV SCI 4000	3	ENV E
BIO SCI 1173	3	ENV E
BIO SCI 1223	3	ENV E
BIO SCI 1229	1	GEO 1 ENG 1
BIO SCI 2223	3	GEO 2 GEO 2
BIO SCI 22363	3	GEO E
BIO SCI 4313	3	GEO E or STA
CHEM 1310	4	GEO 4
CHEM 1319	1	GEO E
CHEM 1320 or GEO	3	2000 + 1
3410		BIO, E
		CHEM
		ENG, I
		or ENV
		coursev
		approve
		advisor

Course	Hrs
ENV ENG 2601	3
ENV ENG 2602	3
ENV ENG 5640	3
or CIV ENG 5640	
ENV ENG 5642	3
GEO 1110/GEO	3
ENG 1150	
GEO 2610 or	4/3
GEO 2611	
GEO ENG 3148	3
GEO ENG 4115	3/4
or STAT 3425	
GEO 4310	3
GEO ENG 5331	3
2000+ level GEO,	18
BIO, ECON,	
CHEM, GEO	
ENG, ENV ENG	
or ENV SCI	
coursework as	
approved by	
advisor	

Course	Hrs
HIST 2510, 3510,	3
3530, or 4470	
PHILS 4350, 4545	3
or 3323	
MAT 1208, 1212,	4
1214 or 1221	

### 5. Free elective credits

a. Total free elective credits: a minimum of 3, but up to 5 to reach 120 hours due to variable credit totals for required course options

# 6. Requirement for thesis, internship or other capstone experience:

Environmental Science 4000: Environmental Science Capstone (3.0 LEC course)

# 7. Any unique features such as interdepartmental cooperation:

This degree is a cooperative interdepartmental degree administered by the Department of Biological Sciences, but created as an interdisciplinary degree by the Departments of Civil and Environmental Engineering; Geology, Geological and Petroleum Engineering; Economics; History and Political Science; and Biological Sciences.