### Coordinating Commission for Postsecondary Education Review of Existing Instructional Programs

Institution: Central Community College Program: Environmental Health and Safety

I certify the following:

- the information provided regarding this program is accurate
- the above named institution has in place a procedure for reviewing instructional programs
- such review took place and was presented to the institution's governing board on May 18, 2023
- the governing board's action was:

Signed:

(Chief Academic Officer or designated representative)

(Date)

### **Evidence of Demand and Efficiency**

		17-18	18-19	19-20	20-21	21-22	5 yr avg
Student Credit Hou	ırs (SCH)	30	78	99	75	135	83.4
Faculty Full-time E	quivalency (FTEF)*	.14	.36	.21	.43	.43	.31
SCH/Faculty FTE		214.29	216.67	471.43	174.42	313.95	269.03
Number of	AAS	0	0	1	0	2	.8
Degrees and Awards	Diploma	0	0	1	1	1	.8
	Certificate	0	2	2	5	1	2.5
(list degrees/ awards	Total Awards	0	2	4	6	4	4.0
separately)	# of Unduplicated Graduates	0	2	3	6	3	3.5

\*By term analysis combined to conduct an annual review. Numbers reported reflect 2 different negotiated contract periods (FA17-SU20 and FA20-SU22)

Evidence of Need (provide a detailed explanation below or attach documentation)

#### Justification if the program is below either of the CCPE thresholds—complete page 2

## Justification if the program is below CCPE thresholds—check one or more boxes <u>and</u> provide a detailed explanation or attach a document

x Program is critical to the role and mission of the institution (detailed explanation).

The Environmental Health and Safety (ENHS) Program is critical to Central Community College's mission of maximizing community and student success through preparing student for employment as front-line health and safety technicians and managers in industries throughout Nebraska. The program is designed for students instructed in careers in safety, industrial environmental regulations and compliance, hazardous materials handling and safe storage in industrial, medical and educational environments. The ENHS program at Central is relatively new beginning in Spring 2016. Central began the program with two part-time faculty members and partners with another program to assist with recruiting to the program. Health and safety are a priority for all leaders and employers in our communities and is therefore an essential component in the program of work at Central Community College. Students enrolled in the ENHS program are already in the workforce and are working full-time. These students have identified that environmental and safety related positions are an interest and also an opportunity for advancement to excel in their workplace and are enrolled at Central to improve their skillset. Because these students are working full-time, the students are able to enroll at Central on a part-time basis for 6 credit hours per semester. Central has developed a plan for students to complete the ENHS program at 6 credits per semester. Central continues to be committed to our ENHS program.

Program contains courses supporting general education or other programs (detailed explanation).

Interdisciplinary program (providing the program meets the requirements set in the existing policy for interdisciplinary programs) (explain)

Student or employer dema	ind, or demand	for intellectual pro	perty is high and
external funding would be	jeopardized by	discontinuing the	program (explain)

Program provides unique access to an underserved population or geographical area (explain).

Program meets	a unique	need in	the region,	state,	or nation	(explain).
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Program is newly approved within the last five years (no additional justification needed).

Other (detailed explanation).



### **Environmental Health and Safety**

# Coordinating Commission Seven-Year Review 2023

Information in this report reviewed and recommended to cabinet:

Central Community College Educational Services, 4/27/2023

Recommended continuation of programs without monitoring:

Central Community College College Cabinet, 05/4/2023 Central Community College Board of Governors, 05/18/2023-pending

Alison Feeney, M.A.E. – Associate Dean of Instruction, Career & Technical Sciences Brian Hoffman, M.A. – Associate Dean of Instruction, Career & Technical Sciences John McKinney, M.Div. – Associate Dean of Instruction, Career & Technical Sciences

**Nate Allen, Ed.D.** – Dean of Instruction, Career & Technical Sciences **Chris Waddle, J.D.** – Division Vice President, Career & Technical Sciences

### **Environmental Health and Safety** *Program Review Summary – Dr. Nate Allen*

The Environmental Health and Safety (ENHS) program is one of twenty programs in the Career and Technical Sciences division at Central Community College (CCC), serving the Environmental Health and Safety industry with two adjunct instructors teaching courses online. This program is designed for students interested in pursuing a career in safety, industrial environmental regulations and compliance, hazardous materials handling and safe storage in industrial, medical, and educational environments. Many of the students in the program are already in the field and enrolled part-time.

Economic Modeling Specialist International (EMSI) data suggests a steady increase in opportunity for students of Environmental Health and Safety (ENHS). As noted previously, most are already employed.

EMSI data indicates that the number of ENHS jobs is higher in the Central Community College (CCC) service area than the national average of ENHS jobs in similar sized areas. In the CCC service area, 52 unique job postings were generated, by 25 employers, for job openings for ENHS related activities. The professional skills that are most in demand were Environment Health and Safety, Occupational Safety and Health Administration (OSHA), Food Safety and Sanitation, Hazard Analysis, Safety Training, Auditing, Occupational Safety and Health Hazard Analysis and Critical Control Points (HACCP), Animal Health, and Consumer Protection. This data demonstrates a need for a continual stream of qualified ENHS workers, which the CCC ENHS program can provide.

The CCC ENHS program is retaining students at a consistent rate and employers need skilled ENHS workers, and are willing to assist them, by giving them funds for their tuition and encouraging them to complete their degrees. Because of its convenient online format, the CCC ENHS program continues to appeal especially to nontraditional students and attract students from not only the CCC service area but also students from outside of the area, and even from out of state. The ENHS program continues to provide a laddered structure of program awards with a certificate, a diploma, and an AAS degree.

Based upon the number of needed jobs, support from local industry by way of incentives for ENHS students, the convenient online class format, and its appeal to nontraditional students and students wanting to advance their careers, Career and Technical Sciences leadership recommends continuation of the program.

### I. Program: Environmental Health and Safety (ENHS)

**II. College Mission:** Central Community College maximizes student and community success.

### III. College Vision: The Best Choice -

### for students to achieve their educational goals.

- quality education
- personal service and individualized attention
- exceptional and passionate faculty and staff
- extraordinary value

### for developing a skilled workforce.

- employability and/or successful credit transfers
- graduates who advocate for CCC
- business and industry partnerships
- state-of-the-art facilities and technologies

### for advancing communities.

- educational partnerships
- strong alumni support
- foster economic development
- sustainability leaders
- **IV. Program Mission Statement:** The Environmental Health and Safety Technology Program strives to maximize student and industry success.
- V. Program Vision Statement: The Environmental Health & Safety program will prepare students for employment as front-line health & safety technicians or managers required in many industries throughout the Midwest. This program is designed for students interested in pursuing a career in safety, industrial environmental regulations and compliance, hazardous materials handling and safe storage in industrial, medical, and educational environments. The Environmental Health & Safety (ENHS) coursework is available through on-line blended delivery leading to certificate, diploma, and degree award options focused on advanced programming in industrial safety.

### EMSI Q4 2022 Data Set

EMSI data is a hybrid dataset derived from official government sources such as the US Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics. Leveraging the unique strengths of each source, our data modeling team creates an authoritative dataset that captures more than 99% of all workers in the United States. This core offering is then enriched with data from online social profiles, resumes, and job postings to give you a complete view of the workforce.

### **Report Parameters**

2 Occupations

Occupational Health and Safety Specialists (19-5011) Occupational Health and Safety Technicians (19-5012)

### **Executive Summary**

Light Job Posting Demand Over an Average Supply of Regional Jobs

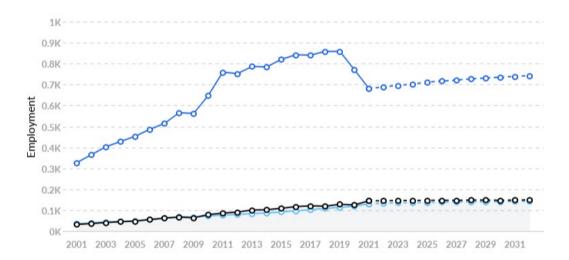


\*National average values are derived by taking the national value for your occupations and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

### Jobs

#### Regional Employment Is About Equal to the National Average

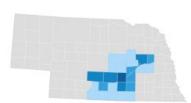
An average area of this size typically has 133\* jobs, while there are 145 here.



	Region	2022 Jobs	2027 Jobs	Change	% Change	
٠	CCC Service Area	145	147	2	1.4%	
•	National Average	133	139	5	4.0%	
•	Nebraska	689	721	32	4.7%	

\*National average values are derived by taking the national value for your occupations and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

#### **Regional Breakdown**



County	2022 Jobs
Hall County, NE	52
Buffalo County, NE	20
Platte County, NE	16
Dawson County, NE	14
Adams County, NE	11

Most Jobs are Found in the Animal Slaughtering and Processing Industry Sector

Industry	% of Occupation in Industry (2022)
<ul> <li>Animal Slaughtering and Processing</li> </ul>	23.4%
• Local Government, Excluding Education and Hospitals	13.0%
<ul> <li>Management, Scientific, and Technical Consulting Services</li> </ul>	6.5%
Federal Government, Civilian	5.7%
Basic Chemical Manufacturing	5.4%
General Freight Trucking	4.6%
• Other	41.5%

### Compensation

### Regional Compensation Is 39% Lower Than National Compensation

For your occupations, the 2021 median wage in your area is \$21.63/hr, while the national median wage is \$35.47/hr.



### **Job Posting Activity**



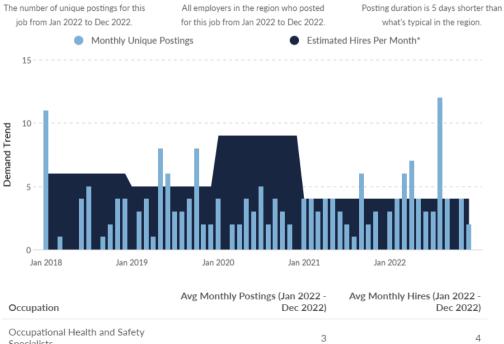
52 Unique Job Postings



25 Employers Competing



22 Day Median Duration



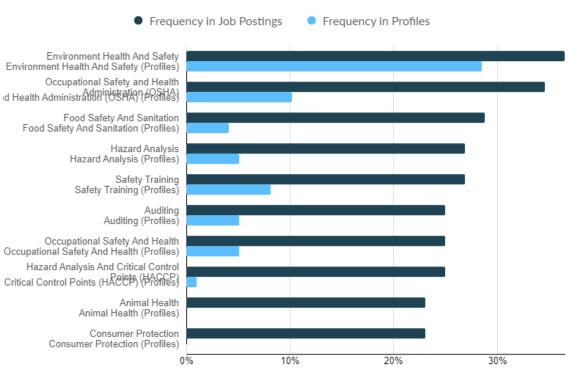
Specialists		
Occupational Health and Safety Technicians	1	0

\*A hire is reported by the Quarterly Workforce Indicators when an individual's Social Security Number appears on a company's payroll and was not there the quarter before. Lightcast hires are calculated using a combination of Lightcast jobs data, information on separation rates from the Bureau of Labor Statistics (BLS), and industry-based hires data from the Census Bureau.

Top Companies	Unique Postings	Top Job Titles	Unique Postings
Food Safety And Inspection	9	Consumer Safety Insp	ector 13
State of Nebraska	4	Safety Specialists	7
PSSI International	3	Environmental Health	and : 4
Chief Industries	2	Environmental Health	and £ 4
Farm Service Agency	2	Safety Program Manag	gers 4
Green Plains	2	Field Safety Managers	3
Valero Energy	2	Safety Directors	3
Vishay Intertechnology	2	Health and Safety Coc	ordina 2 🗖
Associated Staffing	1 🔳	Safety Coordinators	2
BD	1 🔳	Safety Managers	2

### **Top Specialized Skills**

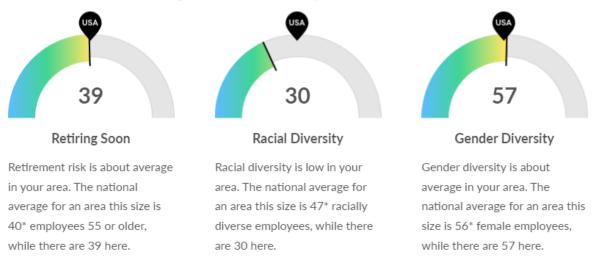
#### **Top Specialized Skills**



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Environment Health And Safety	19	37%	28	29%
Occupational Safety and Health Administration (OSHA)	18	35%	10	10%
Food Safety And Sanitation	15	29%	4	4%
Hazard Analysis	14	27%	5	5%
Safety Training	14	27%	8	8%
Auditing	13	25%	5	5%
Occupational Safety And Health	13	25%	5	5%
Hazard Analysis And Critical Control Points (HACCP)	13	25%	1	1%
Animal Health	12	23%	0	0%
Consumer Protection	12	23%	0	0%

### Demographics

Retirement Risk Is About Average, While Overall Diversity Is Low



\*National average values are derived by taking the national value for your occupations and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.



#### Occupation Age Breakdown

Occupation Race/Ethnicity Breakdown

	% of Jobs	Jobs
<ul> <li>White</li> </ul>	79.1%	114
Hispanic or Latino	12.5%	18
Black or African American	4.5%	7
Two or More Races	1.6%	2
e Asian	1.2%	2
American Indian or Alaska Native	1.1%	2
<ul> <li>Native Hawaiian or Other Pacific Islander</li> </ul>	0.0%	0

#### Occupation Gender Breakdown

	% of Jobs	Jobs
Males	60.2%	87
Females	39.8%	57

### **Graduate Pipeline**



1 Program

Of the programs that can train for this job, 1 has produced completions in the last 5 years.



6 Completions (2021)

The completions from all regional institutions for all degree types.



11 Openings (2021)

The average number of openings for an occupation in the region is 27.

CIP Code	Top Programs	Completions (2021)
15.0701	Occupational Safety and Health Technology/Technician	6
Top Schools		Completions (2021)
Central Comm	nunity College	6

### 2023 Summary of EMSI Q4 2022 Data Set:

There has been a slight increase of jobs in our area, the job growth rate is higher in the CCC Service area of +1.4% annually versus the National Average of +4.0% and Nebraska's Average of +4.7%. The average hourly rate of \$21.63/hr. is lower in the CCC service area versus National Average of \$35.47/hr. due to a higher concentration of lower pay in the service area. In the service area, 52 unique job postings were generated, by 25 employers, for job openings for ENHS related activities. The sectors that are most in demand were Environment Health and Safety, Occupational Safety and Health Administration (OSHA), Food Safety and Sanitation, Hazard Analysis, Safety Training, Auditing, Occupational Safety and Health Hazard Analysis and Critical Control Points (HACCP), Animal Health, and Consumer Protection. The report indicates that Racial Diversity is low, 30% versus the National Average of 57%. Also, Gender Diversity compares closely to the National Average. Graduates of CCC represent all completers in the Service Area. ENHS Degree graduates in Service Area represent .5% (6/1098) of all Programs.

Degree/ Credential Awarded	17-18	18-19	19-20	20-21	21-22	5-yr avg
AAS	0	-	1	-	2	0.8
Diploma	0	-	1	1	1	0.8
Certificate	0	2	2	5	1	2.5
Total Awards	0	2	4	6	4	4.0
# Of Unduplicated Graduates	0	2	3	6	3	3.5

### B. Supporting Data

a. Awards

#### 2023 Summary of Awards (2021-22 data):

A total of 2 AAS awards given out in 2021-22 which is above the 5-yr avg of 0.8. In addition to this, 1 diploma and 1 certificate were also awarded for a total of 4 awards for 2021-22.

### b. Student Credit Hours Produced per Faculty FTE

	17-18	18-19	19-20	20-21	22-22	5 yr avg*
Student Credit Hours (SCH)	30	78	99	75	135	83.4
Faculty Full-time Equivalency (FTE)	.14	.36	.21	.43	.43	.31
SCH/Faculty FTE	214.29	216.6	471.43	174.42	313.95	269.03

Source: Program Stats by Alpha and Instructor-Student FTE reports.

\*By term analysis combined to conduct an annual review. Numbers reported reflect 2 different negotiated contract periods (FA17-SU20 and FA20-SU22)

### 2023 Summary of the Student Credit Hours per Faculty FTE (2021-22 data):

The number of student credit hours in the ENHS program grew from a total of 75 in 2020-2021 to a total of 135 in 2021-2022, this resulted in an increase over the 5-year average of 83.4 credit hours. The ratio then for student contact hours verses faculty full-time hours increased as well.

#### 2023 Summary Statement:

The ENHS technology program has three primary needs. First, to continue updates in the curriculum so that student resource materials stay current, as well as promotional items for trade shows. Second, professional development of faculty have potential positive impacts in all current goals from recruitment, student success, and curriculum relevancy. And third, increase program enrollments, graduations rates, and awards.