

**COORDINATING COMMISSION  
FOR POSTSECONDARY EDUCATION**

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**PROPOSAL FOR NEW INSTRUCTIONAL PROGRAM**

**Form 92-40**

Institution Submitting Proposal:	<b>Southeast Community College</b>
Title of Program:	<b>Concrete Construction Technician</b>
CIP Code	<b>46.0499</b>
Organizational Unit in which Program will be located:	<b>Construction, Manufacturing, Electronics, and Technology Division</b>
Name of Contact Person in the event additional information is needed:	<b>Dr. Joel Michaelis, Vice President of Instruction</b>
Telephone:	<b>402-323-3427</b>
Degree, Diploma, or Certificate to be offered	<b>Associate of Applied Science Diploma Certificate</b>
Proposal date to initiate program:	<b>August 2022</b>
List the location(s) where this program will be offered:	<b>Milford Campus</b>
If the program has a projected ending date, please so indicate:	<b>N/A</b>
Date Approved by Governing Board:	<b>February 15, 2022</b>

Documents related to this proposal upon which the Governing Board made its decision to approve the proposal are provided in Appendix C.

Chief Executive Officer's or other Authorized Officer's signature: \_\_\_\_\_



## I. Purpose and Description of the Proposed Program

Southeast Community College (SCC) proposes to add a Concrete Construction Technician Program with three stackable awards: Certificate, Diploma, and Associate of Applied Science. This program will be offered on the Milford campus beginning August 2022.

Expanding upon a concrete and masonry course within the Building Construction Technology program, the new Concrete Construction Technician program is designed to develop and expand the skillsets specific to cement masonry and concrete finishing. The stackable credential options of a certificate, diploma, and AAS degree provides numerous opportunities for both traditional and non-traditional learners to complete and obtain a vital industry credential for employment, for current construction industry workers to expand and perfect their skills for career expansion, or for all learners to stack credentials as needed within this growing and demanding field.

The proposed program will utilize existing faculty, staff, and facilities within the Construction Technology program on the Milford campus. Courses will be offered each semester, with an annual average intake of 12-16 students every fall term with an average annual enrollment between 24 and 36 students. The minimum number of students to make the program viable is 8.

Offered face-to-face with comprehensive hands-on instruction providing real-world industry exposure, learners will work with other construction industry trades to apply and hone concrete and masonry skills. As shown in the chart below, the one semester certificate option provides focused instruction in concrete construction and application with 14 credit hours. An additional semester of advanced concrete and general education courses ladders into a diploma with an additional 12 credit hours. The AAS degree, consisting of four total semesters provides one more year of instruction with 60 total credit hours. Full syllabi will be developed by an instructor from the Building Construction Technology program reassigned to the Concrete Construction Technician program.

Course Number	Course Name	Credit Hours
<b>Certificate</b>		
CNST 1151	Concrete Construction	6.0
CNST1152	Concrete Construction Applications	4.0
MATH1020	Technical Math	3.0
ACFS1015	Student Success	1.0
Total Credit Hours – Certificate		14.0

Course Number	Course Name	Credit Hours
<b>Diploma</b>		
Completion of the Certificate courses above		14.0
CNST1161	Advanced Concrete Construction	4.0
CNST1162	Advanced Concrete Construction Applications	2.0
ENGL1010	Written Composition	3.0
ECON1200	Personal Finance	3.0
Total Credit Hours – Diploma		26.0

Course Number	Course Name	Credit Hours
Diploma		
Completion of the Certificate & Diploma courses above		26.0
CNST1326	Residential Construction Drafting	3.5
CNST1328	Residential Construction Estimating	3.5
CNST2643	Fundamentals of Structural Steel	2.0
LSCE1230	Earthworks Inspection	3.0
WELD1191	Building Construction Welding	1.5
BSAD1010	Microsoft Applications	3.0
CNST2634	Commercial Construction Drafting	2.5
CNST2636	Commercial Construction Estimating	4.0
CNST2999	Special Project	4.0
LSCE2526	Principles of Land Development	3.0
ACFS2020	Career Development	1.0
SPCH1010	Public Speaking	3.0
Total Credit Hours – AAS		60.0

## II. Review Criteria

### A. CENTRALITY TO ROLE AND MISSION

The mission of Southeast Community College is *to empower and transform the diverse learners and communities of southeast Nebraska through accessible lifelong educational opportunities. The College provides dynamic and responsive pathways to career and technical, academic transfer, and continuing education programs that contribute to personal, community, and workforce development.*

The addition of the AAS, Diploma, and Certificate in the Concrete Construction Technician program aligns with SCC's mission to provide accessible and responsive pathways to career and technical education that contribute to personal, community, and workforce development. Additionally, it conforms with Nebraska Revised Statute 85-962 by providing applied technology and continuing education to ensure economic opportunities for future employees and the stability and growth of regional businesses and industries.

Further, the Concrete Construction Technician program aligns with Nebraska's Legislative mandate and SCC's organizational structure to provide career and technical education resulting in awards that conform to the approved requirements for a certificate, diploma, and associate of applied science degree. There is also potential to use elements of the program for future use in other educational programs on the Milford campus.

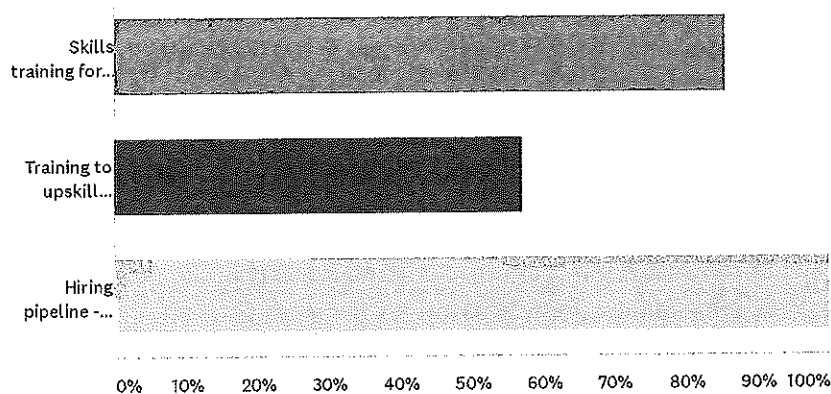
### B. EVIDENCE OF NEED AND DEMAND

According to *Emsi Q4, 2021 Data Set*, the SCC 15-county service area in southeast Nebraska is a "hotspot" for cement masons and concrete finishers. Emsi further states "an average area of this size typically has 338 jobs, while there are 937 here. This higher-than-average supply of jobs may make it easier for workers in this field to find employment in your area." Nearly 50% of cement masons and concrete finishers jobs are in the Foundation, Structure, and Building Exterior Contractors sector. Other

sectors hiring Concrete Construction Technicians are Residential and Nonresidential Building Construction and Highway, Street, and Bridge Construction.

According to the U.S. Bureau of Labor Statistics, Nebraska currently has the highest concentration of cement masons and concrete finishers jobs in the U.S. and Lincoln Nebraska is listed as the fifth highest concentration of job openings. The national median salary for individuals with these skills is approximately \$45,693 and the annual compensation in southeast Nebraska is lower at \$38,785, according to Emsi. This high demand for concrete construction technicians was confirmed during a spring 2021 Construction Trades Workforce Leadership Team meeting. Industry leaders strongly affirmed they needed access to skilled workers in the field and requested SCC respond to meet their needs by expanding instruction for cement masons and concrete finishers. A May 2021 needs assessment survey indicated an ongoing demand for full-time, entry-level concrete construction technicians and to train current construction trades employees in concrete and masonry skills. When asked the number of projected hires in a year, one responded replied "As many as we can. We have been consistently looking for help for as long as I have been at Stephens & Smith (4 years)." The figure below further demonstrates the need when employers were asked their interest in concrete construction technician courses.

Figure 1: Concrete Construction Technician Course/Program Interest Areas



### C. ADEQUACY OF RESOURCES

#### 1. **Faculty and Staff Resources**

The Concrete Construction Technician program requires one faculty member, and this individual is currently a full-time faculty member in the Building Construction Technology program. Credit hour changes within the program provided the opportunity to dedicate the faculty to the Concrete Construction Technician program and for curriculum and program development. The proposed program requires other construction and general education courses already offered at SCC.

As enrollment grows, there may be a need for additional faculty, but the College does not anticipate needing to hire another full-time faculty member in the first five years of the program. The Construction, Manufacturing, Electronics, and Technology Division will provide support staffing and administrative oversight.

**2. Physical Facilities and Instructional Equipment**

The program will be offered in the Construction Trades Center of the Eicher Technical Building so that students learn amongst other construction trades sharing equipment and lab space. There would be no immediate need for additional space or facilities in the first five years of the program. However, with anticipated growth, an additional facility and/or renovated space may be needed. Within the SCC Master Facilities Plan, there is an opportunity for a future Construction Trades Technology Center within the next ten years.

**3. Instructional Equipment and Informational Resources**

Select equipment currently used in the Building Construction Technology program will be used to support those classes common to the construction and concrete trades. The program will need approximately \$100,000 of specialized concrete and masonry equipment as the programs begins. This amount is included in the 2022-2023 projected budget. Future equipment necessary for instruction will be supported by a combination of sources including the general operating budget, SCC Foundation, and donations or industry contributions. Library and technology resources are already in place on all SCC campuses to support the programs currently being offered, including all construction trades programs. Sufficient library staff, library resources and information technology resources are in place to support the addition of the program.

**4. Budget Projections**

As stated above, the Concrete Construction Technician program will begin with one full-time faculty already on staff on the Milford campus. The tuition rates are projections based on past trends as no rates beyond the first year have been set by the SCC Board of Governors. Salary increases are projections based on past trends of a 3% total compensation increase. Projected expense and revenue estimates for a period of five (5) years are attached as Appendices A and B respectively.

Currently owned equipment will be shared by the Concrete Construction Technician and Building Construction Technology program to the extent possible. However, equipment not currently owned or available from regional businesses will need to be purchased. Of particular need is a power trowel, concrete construction workstation, and a skid steer and trailer.

**D. AVOIDANCE OF UNNECESSARY DUPLICATION**

There is no unnecessary duplication. The proposed Concrete Construction Technician program and stackable credentials will be the only one in the State of Nebraska. While there are other building construction programs within the community and tribal colleges of the state, they only offer individual courses within concrete and masonry: Northeast Community College - 3 credit hours and Metro Community College – 15.5 credit hours. Within the Midwestern Higher Education Compact, masonry and concrete specific programs can be found in Atchison KS, four in eastern and southern Missouri, and two in central and eastern Iowa. Establishing a Concrete Construction Technician program in southeast Nebraska will service not just Nebraska, but contiguous states as well.

**E. CONSISTENCY WITH THE COMPREHENSIVE STATEWIDE PLAN FOR POSTSECONDARY EDUCATION**

The proposed certificate, diploma and AAS degree in Concrete Construction Technician is consistent with Nebraska’s Comprehensive Statewide Plan for Postsecondary Education. The program will provide

education "...that prepares students for productive and fulfilling lives..." and "...enhances workforce development..." Specifically, the Comprehensive Statewide Plan directs institutions to "provide specialized certification programs in professional, technical, and vocational fields that address regional and state needs" (p. 3-3). Given the current demand for cement masons and concrete finishers detailed previously, SCC's proposed stackable credentials through the Concrete Construction Technician program is consistent with this goal.

Appendix A

**TABLE 1: PROJECTED EXPENSES - NEW INSTRUCTIONAL PROGRAM**

Personnel	(FY 2022-23)		(FY2023-24)		(FY2024-25)		(FY2025-26)		(FY2026-27)		Total	
	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost
Faculty	1	\$88,479	1	\$91,133		\$93,867	1.5	\$111,683	1.5	\$115,034	1.5	\$500,197
Professional		\$0		\$0		\$0		\$0		\$0	0	\$0
Graduate assistants		\$0		\$0		\$0		\$0		\$0	0	\$0
Support staff		\$0		\$0		\$0		\$0		\$0	0	\$0
Subtotal	1	\$88,479	1	\$91,133	0	\$93,867	1.5	\$111,683	1.5	\$115,034	1.5	\$500,197
<b>Operating</b>												
General Operating		\$12,000		\$13,500		\$15,000		\$16,500		\$18,000		\$75,000
Equipment		\$52,750		\$5,000		\$5,000		\$5,000		\$5,000		\$72,750
New or renovated space		\$0		\$0		\$0		\$0		\$0		\$0
Library/Information Resources		\$0		\$0		\$0		\$0		\$0		\$0
Other		\$0		\$0		\$0		\$0		\$0		\$0
Subtotal		\$64,750		\$18,500		\$20,000		\$21,500		\$23,000		\$147,750
<b>Total Expenses</b>	1	\$153,229.00	1	\$109,633.37	0	\$113,867.37	1.5	\$133,183.39	1.5	\$138,033.89	1.5	\$647,947.03

Appendix B

**TABLE 2: REVENUE SOURCES FOR PROJECTED EXPENSES - NEW INSTRUCTIONAL PROGRAM**

	FY(2022-23) Year 1	(FY2023-24) Year 2	(FY2024-25) Year 3	(FY2025-26) Year 4	(FY2026-27) Year 5	<b>Total</b>
Reallocation of Existing Funds						\$0
Required New Public Funds						\$0
1. State Funds & Local Tax	\$88,900	\$ 65,702.00	\$ 20,179.00	\$ 15,333.00	\$ 16,507.00	\$206,621
Tuition and Fees	\$42,840	\$50,400	\$58,320	\$66,000	\$80,640	\$298,200
Other Funding						\$0
1						\$0
2						\$0
3						\$0
<b>Total Revenue</b>	<b>\$131,740</b>	<b>\$116,102</b>	<b>\$78,499</b>	<b>\$81,333</b>	<b>\$97,147</b>	<b>\$504,821</b>



**CONCRETE CONSTRUCTION TECHNICIAN DIPLOMA  
BUILDING CONSTRUCTION TECHNOLOGY PROGRAM  
SOUTHEAST COMMUNITY COLLEGE**

**November 30, 2021**

The Building Construction program is part of the Construction, Manufacturing, Electronics, and Technology Division at Southeast Community College and is located on the Milford, NE campus. The program prepares students for an array of careers in the construction industry. Career options include concrete installers, draftsmen, estimators, framing carpenters, finish carpenters, job superintendents, specialty contractors, and masons. The program offers several certificates and an Associate of Applied Science degree. This proposal is to create a Concrete Construction Technician, Certificate, Diploma, and A.A.S.

#### Rationale

The proposed Concrete Construction Technician credentials would allow us to offer a larger offering for the rapidly growing and diversified concrete construction industry. SCC has always offered a Concrete and Masonry class however we have decided with talking to industry it would be best to offer more options specifically for the Concrete Industry. Over the years the type and number of career options has changed immensely and our current offering of the Concrete and Masonry class is not serving the industry the way we would like. These new credentials would allow us to train traditional students as well as current industry personnel that may be lacking the needed skill set to progress in their line of employment. All of the course work starting with the certificate level classes will be 100% stackable into higher Concrete Construction Technician credentials. The concrete pathway has been asked for by industry for several years and already has the support of local employers for helping with recruiting, sponsorships, and employment opportunities.

#### Target students

1. Students with interest in the Building Construction, Roadway or Concrete Construction industries.
2. Job seekers across Nebraska and the United States looking for a certificate or diploma program to give themselves an advantage in the job market
3. Concrete Construction Technician currently working without a degree looking for professional development
4. Unemployed or under employed persons looking for job training.

#### Courses required

- MATH 1020 Technical Math
- CNST 1151 Concrete Construction (New Course)
- CNST 1152 Concrete Construction Applications (New Course)
- ACFS 1015 Student Success

- ENGL 1010 Written Communications
- ECON 1200 Personal Finance
- CNST 1161 Advanced Concrete Construction (New Course)
- CNST 1162 Advanced Concrete Construction Applications (New Course)
- CNST 1326 Residential Construction Drafting
- CNST 1328 Residential Construction Estimating
- CNST 2643 Fundamentals of Structural Steel
- LSCE1230 Earthworks Inspection
- WELD 1191 Building Construction Welding
- BSAD 1010 Microsoft Applications
- CNST 2634 Commercial Construction Drafting
- CNST 2636 Commercial Construction Estimating
- CNST 2999 Special Project
- LSCE 2526 Principles of Land Development
- ACFS 2020 Career Development
- SPCH 1010 Public Speaking

#### Course justification

The courses chosen to offer and include are based on the following criteria:

1. The data received from a recent industry survey completed through the SCC-Continuing Education department in the spring/summer of 2021 assessing the needs of industry.
2. The reviewing of curriculum options available with industry support and industry certifications.
3. Evaluation of other lack of similar diploma or associates degree programs available for the concrete industry and the high need for such a program.
4. The ability to allow award stacking as the pathway grows in the next 3-5years.

## Proposed Courses for Concrete Construction Technician – Certificate

Program Director: Jason Adams

Course #	Course Title	Prerequisite(s) or Co-requisite Need a C or higher in non-competency courses below.	Credits	Quarter	Grade
<b>First Semester (August 2022)</b>					
CNST1151	Concrete Construction	None	6.0	FA22 SEM	
CNST1152	Concrete Construction Applications	Co-requisite CNST1151	4.0	FA22 SEM	
MATH1020	Technical Math	None	3.0	FA22 SEM	
ACFS1015	Student Success	None	1.0	FA22 SEM	
<b>Total Credits – 1<sup>st</sup> Semester</b>			<b>14.0</b>		
<b>Total Program Credit Hours</b>					
			<b>14.0</b>		

Semester Entered: August 2022  
2022

Semester Graduating: December

Goal: Certificate  
required for graduation

All courses listed are required, a 2.0 GPA is

## Proposed Courses for Concrete Construction Technician – Diploma

Program Director: Jason Adams

Course #	Course Title	Prerequisite(s) or Co-requisite Need a C or higher in non-competency courses below.	Credits	Quarter	Grade
<b>First Semester (August 2022)</b>					
CNST1151	Concrete Construction	None	6.0	FA22 SEM	
CNST1152	Concrete Construction Applications	Co-requisite CNST1151	4.0	FA22 SEM	
MATH1020	Technical Math	None	3.0	FA22 SEM	
ACFS1015	Student Success	None	1.0	FA22 SEM	
<b>Total Credits – 1<sup>st</sup> Semester</b>			<b>14.0</b>		
<b>Second Semester (January 2023)</b>					
CNST1161	Advanced Concrete Construction	Prerequisite CNST1151 or by permission	4.0	SP23 SEM	
CNST1162	Advanced Concrete Construction Applications	Prerequisite CNST1152 and Co-requisite CNST 1161 or by permission	2.0	SP23 SEM	
ENGL1010	Written Composition	None	3.0	SP23 SEM	
ECON1200	Personal Finance	None	3.0	SP23 SEM	
<b>Total Credits -2<sup>nd</sup> Semester</b>			<b>12.0</b>		
<b>Total Program Credit Hours</b>			<b>26.0</b>		

Semester Entered: August 2022  
2023

Semester Graduating: May

Goal: Diploma  
required for graduation

All courses listed are required, a 2.0 GPA is

# Proposed Courses for Concrete Construction Technician – A.A.S.

Program Director: Jason Adams

Semester Entered: August 2022 Semester Graduating: May 2024

Goal: Associate of Applied Science Degree All courses listed are required, a 2.0 GPA is required for graduation

Course #	Course Title	Prerequisite(s) or Co-requisite Need a C or higher in non-competency courses below.	Credits	Quarter	Grade
<b>First Semester (August 2022)</b>					
CNST1151	Concrete Construction	None	6.0	FA22 SEM	
CNST1152	Concrete Construction Applications	Co-requisite CNST1151	4.0	FA22 SEM	
MATH1020	Technical Math	None	3.0	FA22 SEM	
ACFS1015	Student Success	None	1.0	FA22 SEM	
<b>Total Credits – 1<sup>st</sup> Semester</b>			<b>14.0</b>		
<b>Second Semester (January 2023)</b>					
CNST1161	Advanced Concrete Construction	Prerequisite CNST1151 or by permission	4.0	SP23 SEM	
CNST1162	Advanced Concrete Construction Applications	Prerequisite CNST1152 and Co-requisite CNST 1161 or by permission	2.0	SP23 SEM	
ENGL1010	Written Composition	None	3.0	SP23 SEM	
ECON1200	Personal Finance	None	3.0	SP23 SEM	
<b>Total Credits -2<sup>nd</sup> Semester</b>			<b>12.0</b>		
<b>Third Semester (August 2023)</b>					
CNST1326	Residential Construction Drafting	None	3.5	FA23 SEM	
CNST1328	Residential Construction Estimating	None	3.5	FA23 SEM	
CNST2643	Fundamentals of Structural Steel	None	2.0	FA23 SEM	
LSCE1230	Earthworks Inspection	None	3.0	FA23 SEM	
WELD1191	Building Construction Welding	None	1.5	FA23 SEM	
BSAD1010	Microsoft Applications	None	3.0	FA23 SEM	
<b>Total Credits – 3rd Semester</b>			<b>16.5</b>		
<b>Fourth Semester (January 2024)</b>					
CNST2634	Commercial Construction Drafting	Prerequisite CNST1326	2.5	SP24 SEM	
CNST2636	Commercial Construction Estimating	Prerequisite CNST1328	4.0	SP24 SEM	

CNST2999	Special Project	None	4.0	SP24 SEM	
LSCE2526	Principles of Land Development	None	3.0	SP24 SEM	
ACFS2020	Career Development	None	1.0	SP24 SEM	
SPCH1010	Public Speaking	None	3.0	SP24 SEM	
Total Credits – 4th Semester			17.5		
Total Program Credit Hours			60		