

Central Community College

Information Technology & Systems

Coordinating Commission Seven-Year Review 2021

Recommended continuation of programs without monitoring:

Central Community College College Cabinet, April 29, 2021
Central Community College Board of Governors, **pending**

Information in this report approved by:

Central Community College Educational Services, April 22, 2021

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I. Program: **Information Technology & Systems (INFO)**

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 and Purpose Statement:

The Information Technology & Systems (IT&S) program provides an educational environment where fundamental knowledge and professional experience needed in the information technology profession is gained. Students are exposed to IT&S careers and technology through practical classroom experiences and lab activities. Students graduating from this program will be prepared to enter technology fields such as software development, helpdesk technical support or computer network design and support. Information technology skills are needed in nearly every industry.

Information Technology & Systems specialization areas include:

- Information Technology & Systems Networking (*all campuses and online*)
- Information Technology & Systems Technical Support (*all campuses and online*)
- Information Technology & Systems Developer (*all campuses and online*)

V. Program Vision Statement:

The Information Technology program will be the first choice for students seeking a quality learning environment, state of the art technology, and easy transferability of courses. The program will provide a first-rate educational environment for students through strong relationships with business and industry that will provide excellent post-graduate career opportunities. This will be accomplished by:

- Maintaining modern and well-equipped instructional centers in Columbus, Grand Island, and Hastings that include up-to-date equipment in attractive and well-maintained instructional labs.
- Maintaining professional development goals and certification of faculty and staff.
- Preparing students for industry certification in information technology areas (e.g., IT Essentials, A+, Network+, Cisco, VMware, Microsoft, Security+, etc.).
- Providing quality scenario-based learning experiences regardless of delivery mode or location.
- Using continuous quality improvement principles and effective assessment of student learning to produce graduates ready for IT-related employment.
- Providing students, the flexibility of earning their A.A.S. Information Technology & Systems degree online
- Maintaining and expanding transfer agreements with four-year institutions.
- Building relationships with high schools, community colleges, regional consortiums, and senior institutions.

VI. Program/Discipline Environmental Scan (Program Need):

A. Industry or college need

EMSI Q4 2020 Data Set

Report Parameters

6 Occupations

15-1299 Computer Occupations, All Other

11-3021 Computer and Information Systems

15-1211 Computer Systems Analysts

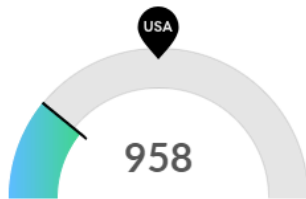
15-1231 Computer Network Support Speciali

15-1232 Computer User Support Specialists

43-4199 Information and Record Clerks, All Other

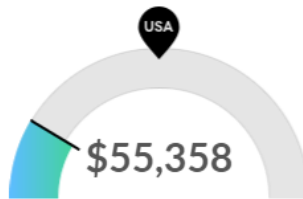
Executive Summary

Light Job Posting Demand Over a Thin Supply of Regional Jobs



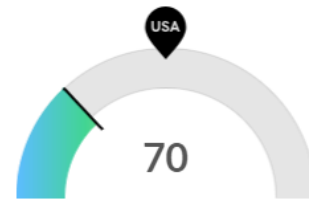
Jobs (2020)

Your area is not a hotspot for this kind of job. The national average for an area this size is 2,701* employees, while there are 958 here.



Compensation

Earnings are low in your area. The national median salary for your occupations is \$76,318, compared to \$55,358 here.



Job Posting Demand

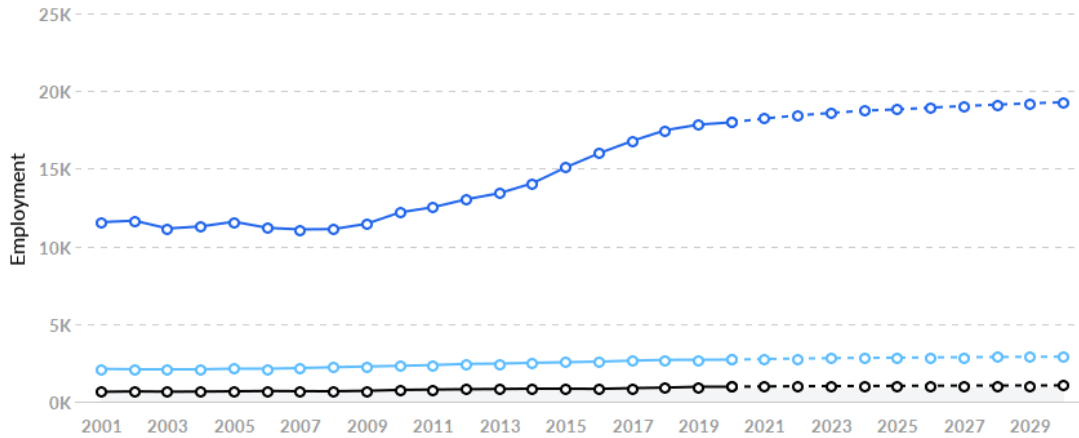
Job posting activity is low in your area. The national average for an area this size is 161* job postings/mo, while there are 70 here.

*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 Lower Than the National Average

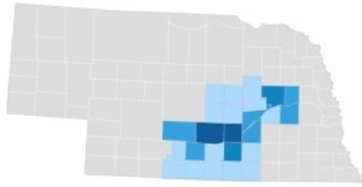
An average area of this size typically has 2,701* jobs, while there are 958 here. This lower than average supply of jobs may make it more difficult for workers in this field to find employment in your area.



Region	2020 Jobs	2030 Jobs	Change	% Change
● CCC Service Area	958	1,043	85	8.8%
● National Average	2,701	2,893	192	7.1%
● State of Nebraska	17,985	19,277	1,292	7.2%

*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	2020 Jobs
Hall County, NE	250
Buffalo County, NE	215
Platte County, NE	131
Adams County, NE	96
Dawson County, NE	45

Most Jobs are Found in the Local Government, Excluding Education and Hospitals Industry Sector

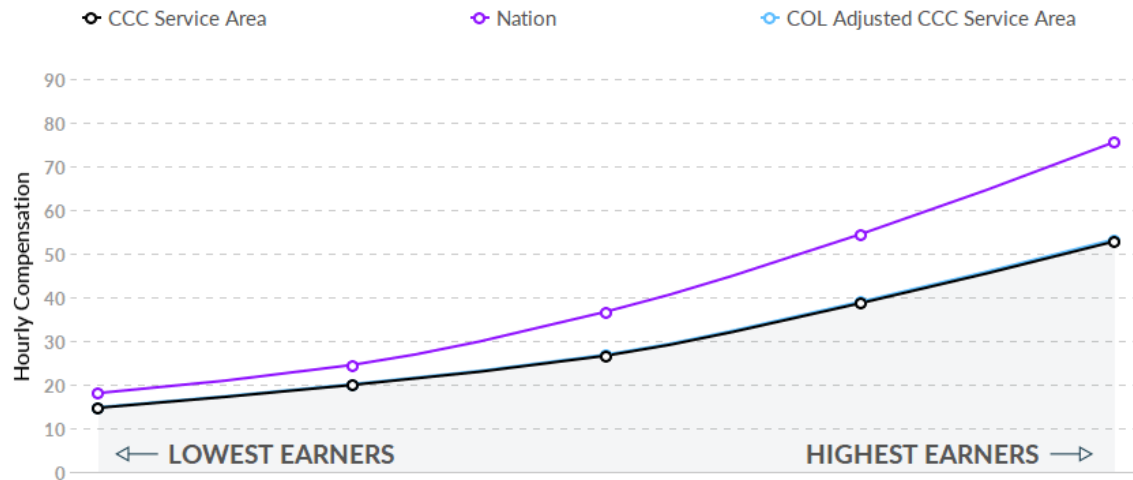


Industry	% of Occupation in Industry (2020)
Local Government, Excluding Education and Hospitals	9.6%
Education and Hospitals (Local Government)	9.5%
Computer Systems Design and Related Services	8.3%
Management of Companies and Enterprises	8.1%
Education and Hospitals (State Government)	7.2%
Federal Government, Civilian	5.9%
Other	51.3%

Compensation

Regional Compensation Is 27% Lower Than National Compensation

For your occupations, the 2019 median wage in your area is \$26.61/hr, while the national median wage is \$36.69/hr.



Job Posting Activity



841 Unique Job Postings

The number of unique postings for this job from Jan 2020 to Dec 2020.



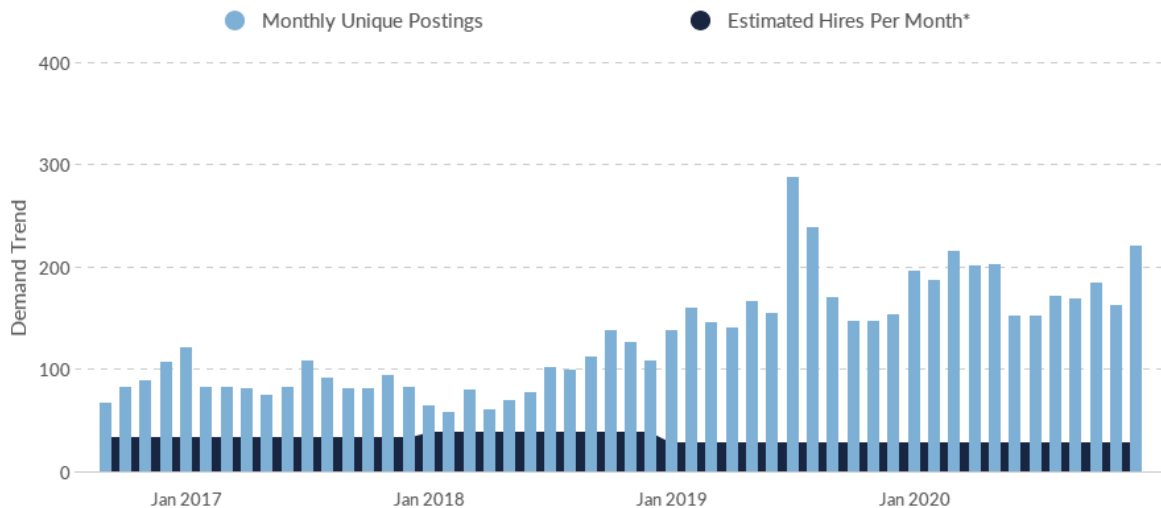
300 Employers Competing

All employers in the region who posted for this job from Jan 2020 to Dec 2020.



35 Day Median Duration

Posting duration is 3 days longer than what's typical in the region.



Occupation	Avg Monthly Postings (Jan 2020 - Dec 2020)	Avg Monthly Hires (Jan 2020 - Dec 2020)
Computer User Support Specialists	98	9
Computer Occupations, All Other	42	5
Computer Systems Analysts	29	4
Computer and Information Systems Managers	14	4
Computer Network Support Specialists	1	3
Information and Record Clerks, All Other	0	4

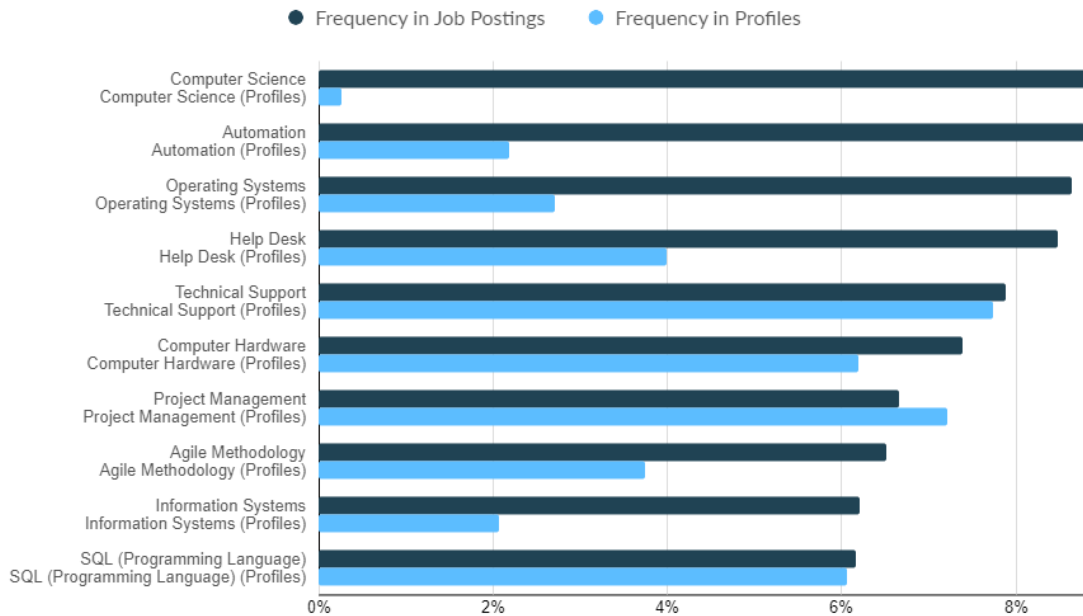
*A hire is reported by the Quarterly Workforce Indicators when an individual's Social Security Number appears on a company's payroll and was not there the quarter before. Emsi hires are calculated using a combination of Emsi jobs data, information on separation rates from the Bureau of Labor Statistics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

Top Companies	Unique Postings
Army National Guard	48
Honeywell International Inc.	32
Nebraska Public Power District	27
The Buckle Inc	23
United States Department of Homeland Security	21
Jobot LLC	18
Staffing Technical Services Inc	18
Medicorp Inc	15
Bayer Corporation	13
Becton, Dickinson and Company	13

Top Job Titles	Unique Postings
IT Specialists	33
Content Marketing Specialists	24
Signal Support Systems Specialists	22
IT Technicians	17
Systems Analysts	13
Technical Support Specialists	13
Project Managers	12
Desktop Support Technicians	11
IT Project Managers	11
Business Systems Analysts	10

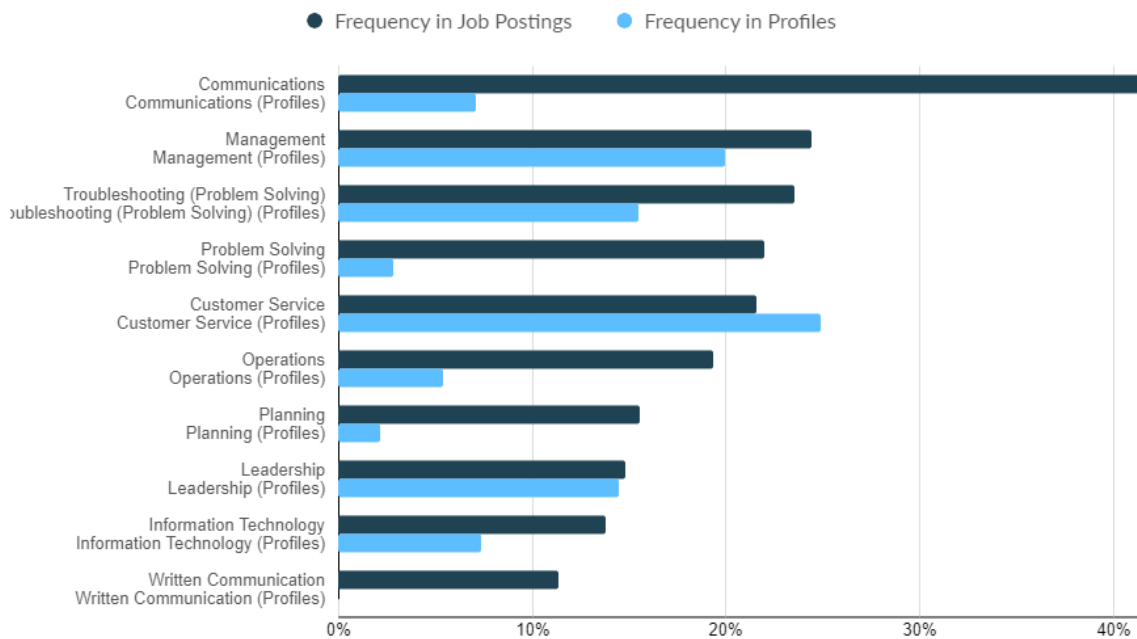
Top Hard Skills

Top Hard Skills



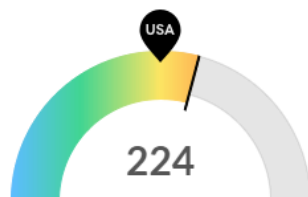
Top Common Skills

Top Common Skills



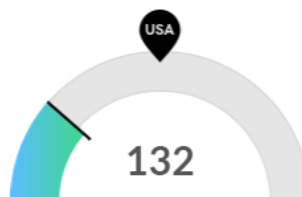
Demographics

Retirement Risk Is High, While Overall Diversity Is Low



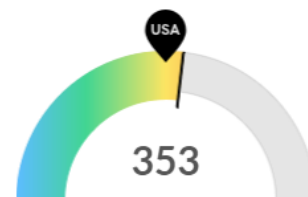
Retiring Soon

Retirement risk is high in your area. The national average for an area this size is 177* employees 55 or older, while there are 224 here.



Racial Diversity

Racial diversity is low in your area. The national average for an area this size is 352* racially diverse employees, while there are 132 here.

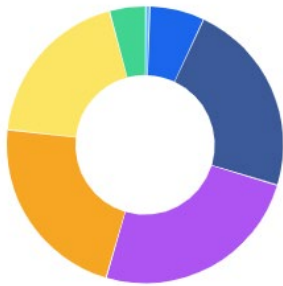


Gender Diversity

Gender diversity is high in your area. The national average for an area this size is 318* female employees, while there are 353 here.

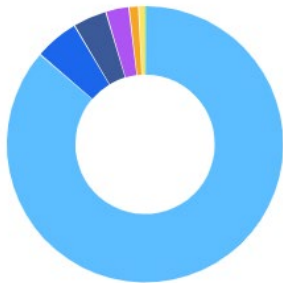
*National average values are derived by taking the national value for your occupations and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

Occupation Age Breakdown



	% of Jobs	Jobs
14-18	0.5%	5
19-24	6.4%	61
25-34	22.7%	218
35-44	24.8%	238
45-54	22.2%	213
55-64	19.1%	183
65+	4.2%	40

Occupation Race/Ethnicity Breakdown



	% of Jobs	Jobs
White	86.2%	826
Hispanic or Latino	5.2%	50
Asian	3.9%	38
Black or African American	2.7%	26
Two or More Races	1.1%	11
American Indian or Alaska Native	0.8%	8
Native Hawaiian or Other Pacific Islander	0.0%	0

Occupation Gender Breakdown



	% of Jobs	Jobs
Males	63.2%	605
Females	36.8%	353

Graduate Pipeline



3 Programs

Of the programs that can train for this job, 3 have produced completions in the last 5 years.



173 Completions (2019)

The completions from all regional institutions for all degree types.



89 Openings (2019)

The average number of openings for an occupation in the region is 28.

CIP Code	Top Programs	Completions (2019)
11.0101	Computer and Information Sciences, General	114 <div></div>
52.0205	Operations Management and Supervision	57 <div></div>
11.0701	Computer Science	2 <div></div>

Top Schools	Completions (2019)
Central Community College	100 <div></div>
University of Nebraska at Kearney	71 <div></div>
Hastings College	2 <div></div>

2021 Summary of EMSI Data:

According to the Bureau of Labor Statistics, computer and information technology occupations is projected to grow 11 percent from 2019 to 2029, much faster than the average for all occupations. These occupations are projected to add about 531,200 new jobs. Demand for these workers will stem from greater emphasis on cloud computing, the collection and storage of big data, and information security.

The median annual wage for computer and information technology occupations was \$88,240 in May 2019, which was higher than the median annual wage for all occupations of \$39,810. (*Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook*)

Although, the growth for occupations in our field may be lower regionally than the growth in our field nationally – the overall growth is still higher than other occupations in our area and the average pay is better in our field as well.

B. Supporting Data

a. Awards

Degree/ Credential Awarded	15-16	16-17	17-18	18-19	19-20	5-yr avg
AAS	18	16	19	19	21	18.6
Diploma	23	27	21	27	32	26
Certificate	38	30	44	55	38	41
Total Awards	79	73	84	101	91	85.6
# of Graduates	61	54	64	81	69	65.8

2021 Summary of Awards:

The number of AAS degrees we have awarded has seen a steady increase – as we work to better fit the needs of students in the sequencing of classes to allow students to ladder certificate to diploma to degree. We have worked to create more high value certificates like the Cybersecurity Certificate. As we continue to refine this, we expect to see growth in the future.

b. Student Credit Hours Produced per Faculty FTE

	15-16	16-17	17-18	18-19	19-20	5 yr avg
Student Credit Hours (SCH)	4,431	4,806	4,569	4,464	3,945	4,443
Faculty Full-time Equivalency (FTE)	8.66	9.32	9.79	8.00	9.02	8.96
SCH/Faculty FTE	512.01	515.67	466.70	558.00	437.22	497.92

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

2021 Summary of the Student Credit Hours per Faculty FTE:

The SCH per faculty FTE has stayed mostly consistent; however, the most recent year showed the largest deviation from the average. This shows that we have an opportunity to find areas for improvement. The second semester of the 19-20 year was impacted by the COVID-19 pandemic.

Summary and Recommendation:

Based on the strong industry need in our 25 county area, the number of continued awards earned (completers) as well as the diversity and specialties of awards offered within this program, we recommend continuation of the program. Local business partners and advisory committee members continue to demonstrate a need for information technology employees who possess critical technical and specialized skills offered and earned here at Central Community College.