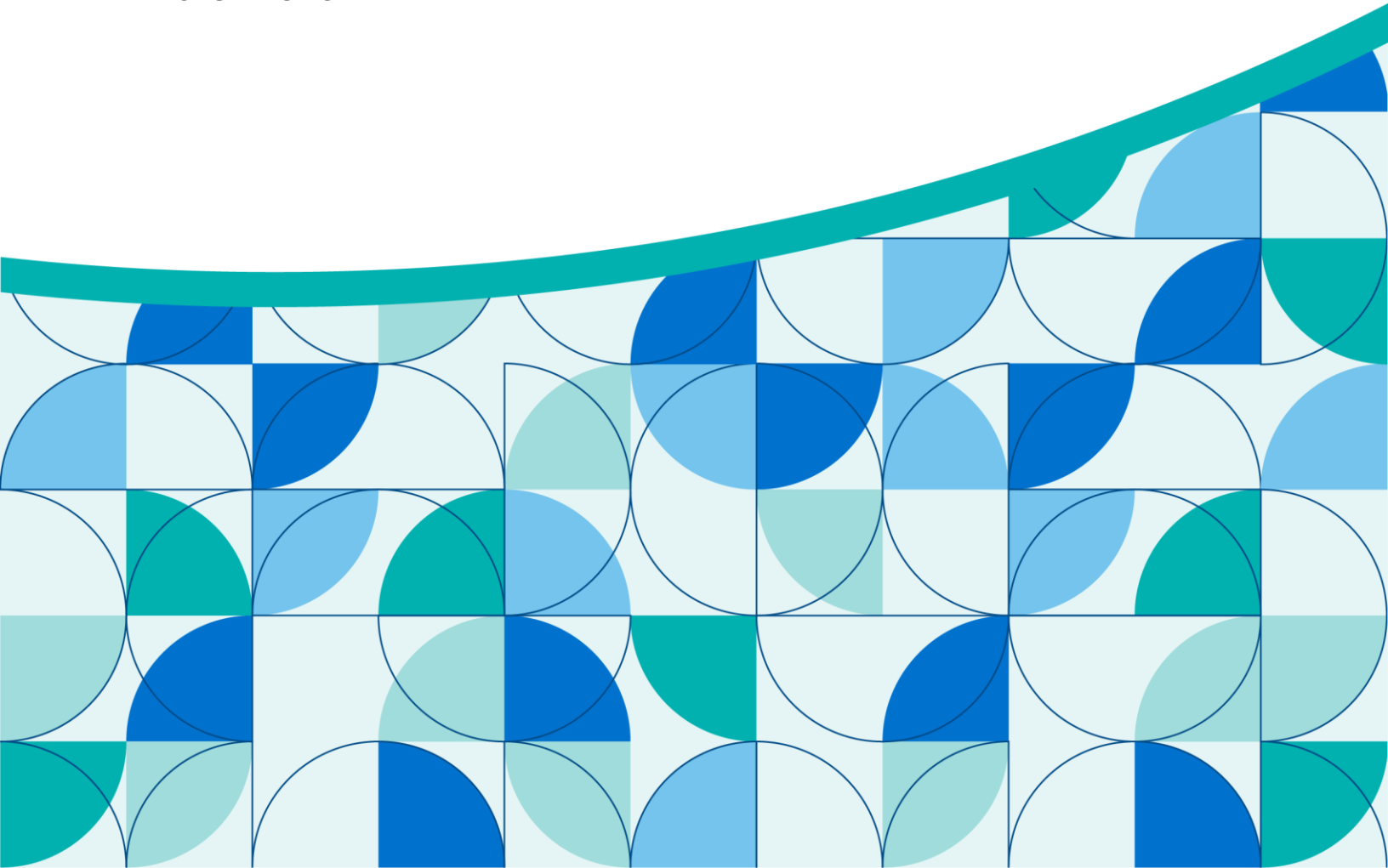




DEANS ADVISORY SERVICES

Deans Undergraduate Portfolio Health Check

Completed for EAB University
College of Engineering and Computer Science
March 2026



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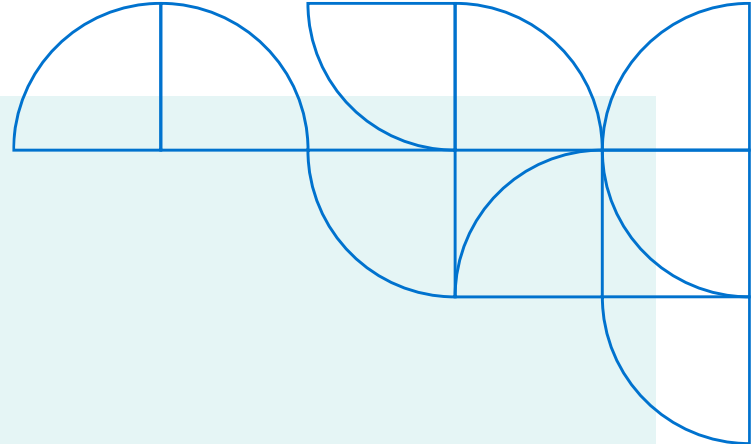


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Introduction and Methodology

EAB recommends evaluating the undergraduate portfolio holistically. Across your portfolio, how do programs fit together? Where is there outsized growth? Where are student outcomes weakest? Where is your institution not serving the labor market to the best of your ability?

This report presents an analysis of external data related to your undergraduate portfolio to help you incorporate the broader landscape into your internally led portfolio review. The sections outlined below present data, analyses, and recommended next steps to help you make informed decisions and prioritize changes within your undergraduate portfolio.



Compare Your Portfolio's Performance to the Comparators

Reviewing each program's growth over time is helpful but does not tell the full story. This section compares your programs' growth to the broader market, revealing which fields are underperforming or overperforming compared to comparator institutions. Additionally, you will learn which of your programs lead the market and what gaps exist within your portfolio. *All analyses are conducted at 4-digit Classification of Instructional Programs (CIP) level.*

Institutional Comparison Cohort: [List of peer institutions]



Optimize Your Portfolio's Student Return on Investment

Recent policy changes now tie federal loan eligibility directly to graduates' earnings. Specifically, if graduates of a particular academic program earn less than the median earnings of a high school graduate in your state for two out of three consecutive years, the program will lose access to federal student loans. In this section, you will learn which of your programs may be at risk for falling under this threshold, helping you identify areas that will require proactive steps to ensure program viability.

State: [State]



Align Your Portfolio with Labor Market Demand

Many institutions struggle to keep pace with the rapidly evolving labor market in their region, often relying on anecdotal input from employers and alumni. This section shows how the most in-demand occupations in your region align with your programs. You will discover core and specialized skills required for occupations that do not require a specific degree in your region. You will also learn how AI is shaping relevant high-demand occupations in your region.

Region: [State]

Occupational Area(s): Engineering

Introduction and Methodology (Cont.)



Report Limitations

- This report is customized to your college and reflects performance within your college's portfolio. **Findings should be interpreted only within your college and are not intended for direct comparison to other colleges at your institution.**
- This report filters programs using CIP Codes. Multiple programs across different colleges may report completions under a single CIP Code. As a result, **this analysis may include some programs that do not reside within your college.**
- This analysis evaluates CIP codes aligned to your programs regardless of where these programs are housed at comparator institutions. **This report does not make recommendations about how programs should be organized within colleges.**
- **Even the most recent completions data reflect the choices of students who declared several years ago** and should be considered a lagging indicator. We recommend reviewing internal enrollment and pipeline data to assess whether trends have continued or shifted.
- **This analysis is intended to inform, not replace, strategic decision-making.** The data do not capture program-specific context, such as institutional priorities, mission alignment, or other qualitative factors. We recommend considering both quantitative insights and these contextual elements when making portfolio decisions.

EAB University - College of Engineering and Computer Science Programs




The following programs were submitted by your college for this report.

Program	Title of 4-digit CIP Code	4-digit CIP Code
Computer Science	Computer and Information Sciences, General	11.01
Biomedical Engineering	Biomedical/Medical Engineering	14.05
Civil Engineering	Civil Engineering	14.08
Computer Engineering	Computer Engineering	14.09
Materials Engineering	Materials Engineering	14.18

Executive Summary

Based on our analysis of the 5 4-digit CIP Codes in the EAB University College of Engineering and Computer Science (CECS) portfolio, EAB recommends the following focus areas:

- Identify and replicate elements that support growth of programs growing faster than comparators, like Computer Science (11.01).
- Investigate opportunities to improve programs underperforming compared to comparators, such as Biomedical Engineering (14.05).
- Assess potential additions in areas where comparators offer programs and there is high labor market and student demand, such as Electrical Engineering (14.10).

	Metrics that Matter	Recommended Next Steps
 <p>Competitive Position</p>	<p>60% of CECS CIP Codes grew in completions over the last three years</p> <p>79% of CECS growth over the last three years came from 1 CIP Code</p> <p>80% of CECS CIP Codes outperformed comparator growth over the last three years</p>	<ul style="list-style-type: none"> ○ What Trends are Leading to Success Across Your Portfolio? Review growing programs, particularly those where comparator programs are declining such as Computer Science, to identify factors that may be driving program success. Discuss with EAB experts what factors may be driving program success and how that might translate to strengthen other programs in your portfolio. ○ Where Should I Invest Next to Stay Competitive? Explore areas where your programs are shrinking but comparators are growing (e.g., Biomedical Engineering) or fields with high comparator presence but no internal offerings (e.g., Electrical Engineering).
 <p>Return on Investment</p>	<p>100% of CECS CIP Codes have median earnings above the high school graduate earnings threshold</p>	<ul style="list-style-type: none"> ○ Which Students Need Additional Support to Achieve Better Outcomes? Review career services, experiential learning options, internships, and employer partnerships for fields with a median earnings below the peer and median earnings in your state (e.g., Civil Engineering level).
 <p>Labor Market Alignment</p>	<p>40% of the largest relevant occupations in [State] align with CECS CIP Codes</p>	<ul style="list-style-type: none"> ○ Are My Graduates Ready for the Labor Market? Evaluate how well your academic offerings align with regional labor market needs to ensure your graduates are prepared for high-demand jobs. Identify where gaps exist between your degree offerings and employer needs, and whether unoffered programs are the result of intentional strategy or missed opportunity.

Source: IPEDS, U.S. Department of Education, Lightcast, EAB analysis.

Introduction: How Is Your Portfolio Performing?

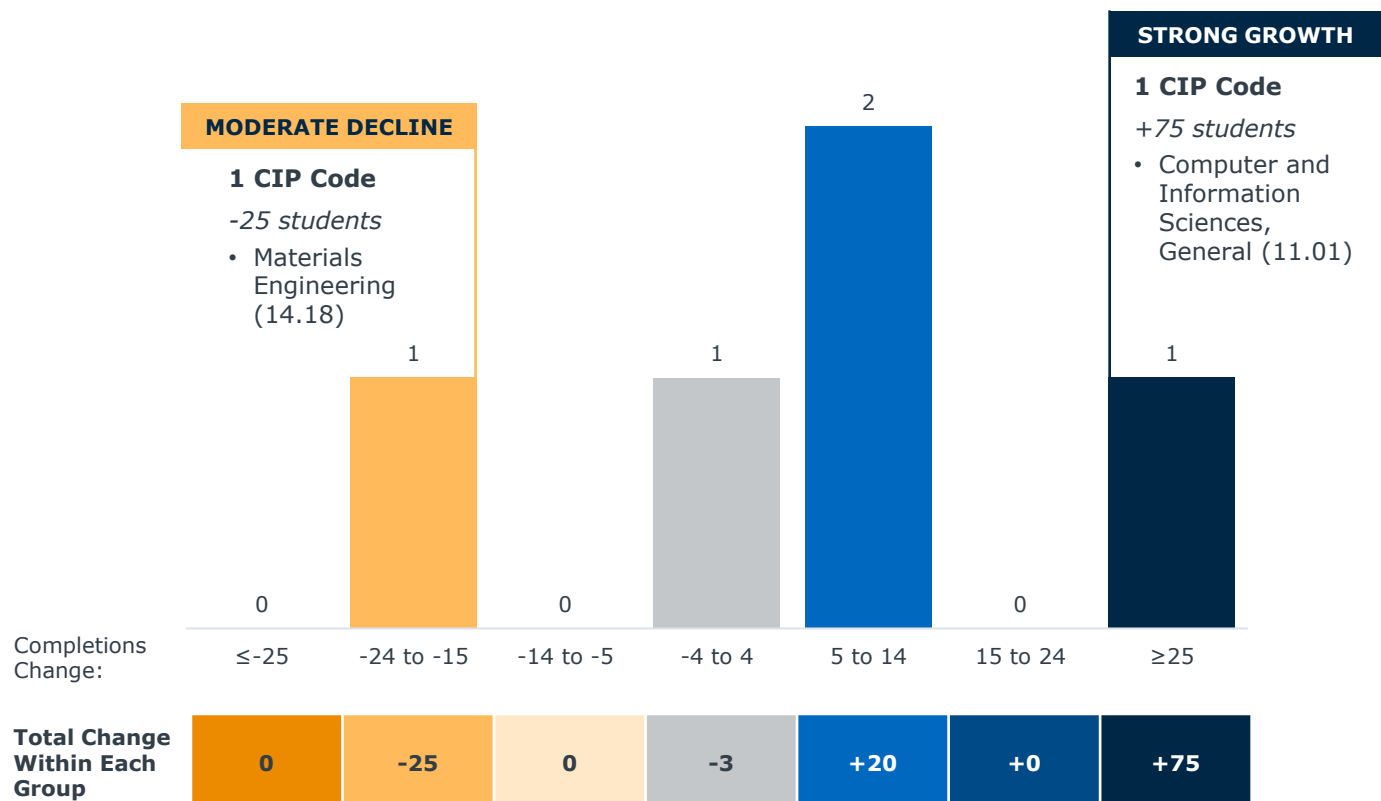
Reflection

How concentrated is the growth across your college's portfolio?

Before comparing performance against the broader market, it is important to first understand trends within your own college. The bar chart below illustrates how degree completions for each 4-digit CIP Code within your college's portfolio have changed between 2022 and 2024, specifically demonstrating the distribution of programs with declining completions, stagnating completions, and growing completions across your portfolio.

79%
of growth from
1 CIP Code

CIP Code Distribution by Change in Completions at EAB University College of Engineering and Computer Science, 2022-2024



See [Appendix](#) for full data.

Source: IPEDS, EAB analysis.

Is Your Portfolio Performing as Expected Compared to the Overall Market?

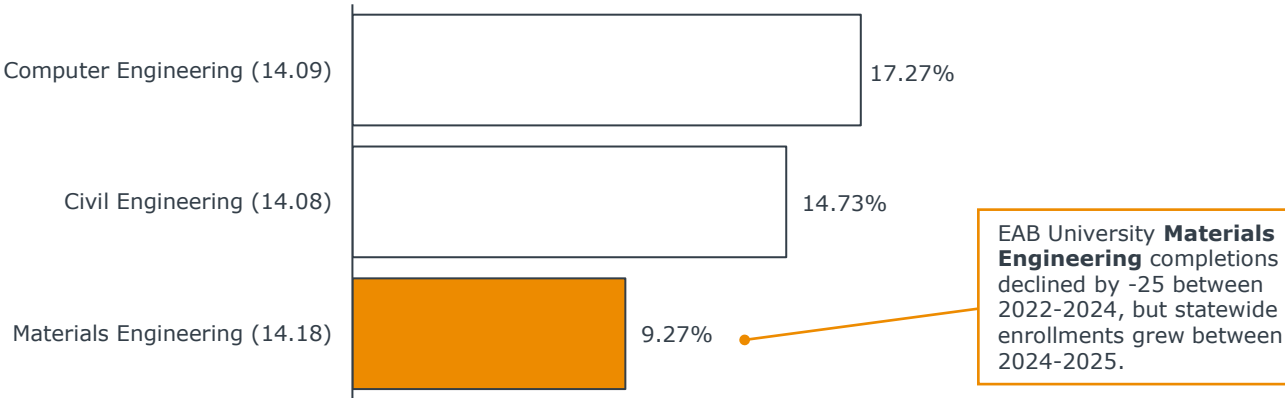
Reflection

Where are you surprised by the difference between yourself and the market?

EAB University's Largest Programs with Growing Statewide Enrollment

[State], 2024-2025

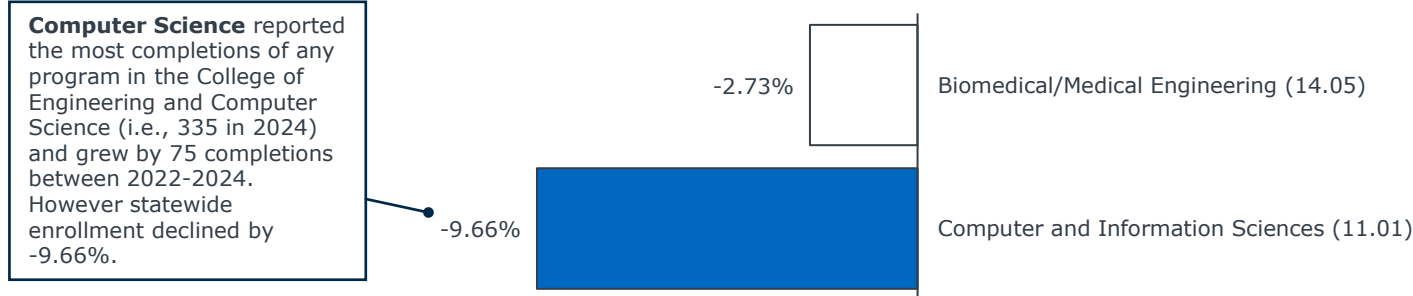
Programs highlighted in **orange** declined in completions at EAB University but grew in statewide enrollments. This divergence may signal a missed opportunity as these programs are positioned for future growth. Review your enrollment data to see if these programs have grown.



EAB University's Largest Programs with Declining Statewide Enrollment

[State], 2024-2025

Programs highlighted in **blue** grew at EAB University but declined in statewide enrollments. This divergence signals emerging risk as these programs may soon face enrollment pressure. Review your enrollment data to see if these programs have started to decline.



Legend



CECS completion trends align with state enrollment trends



CECS completions declined, but state enrollments grew



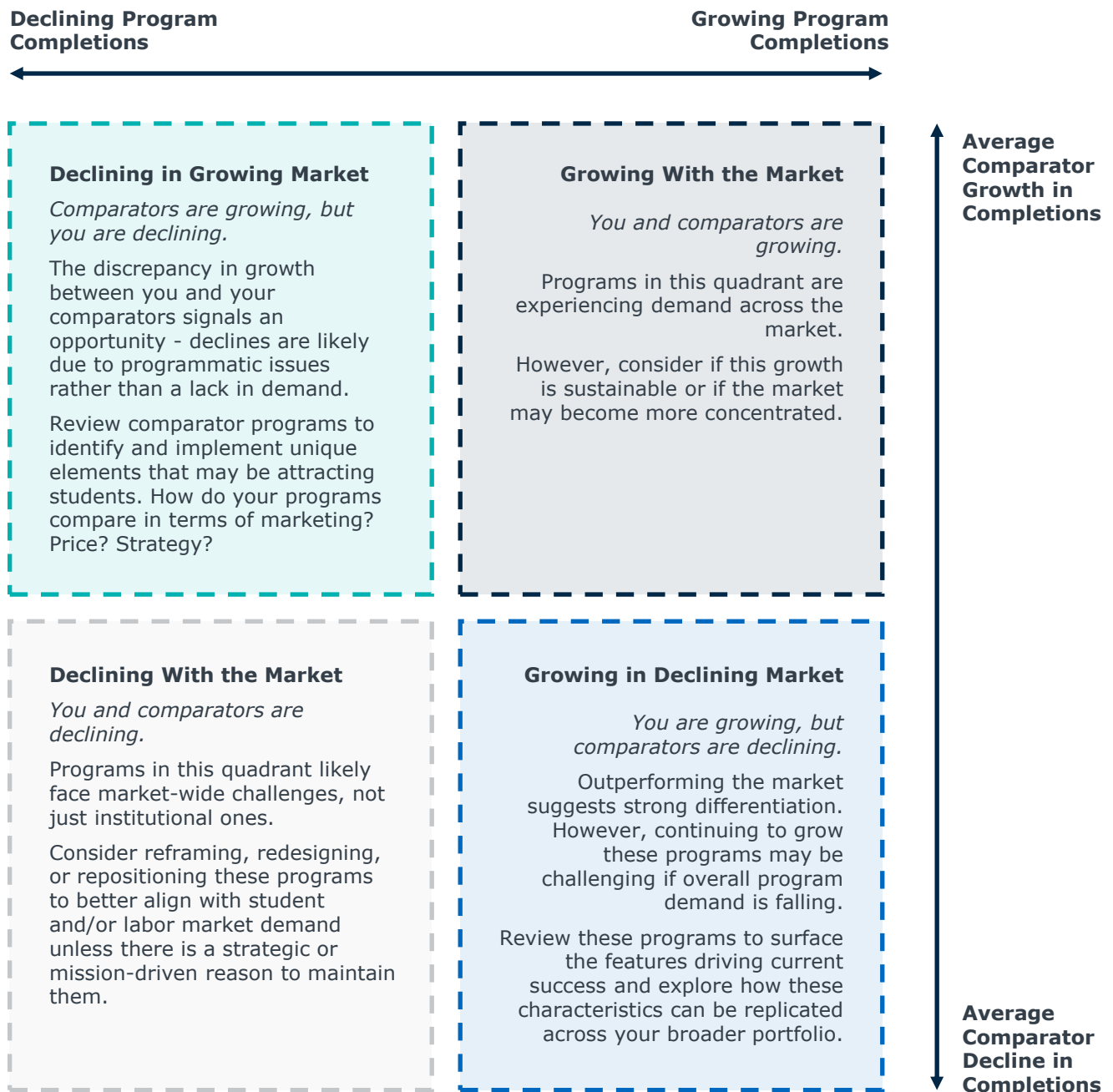
CECS completions grew, but state enrollments declined

Is Your Portfolio Performing as Expected Relative to Competitors?

Uncovering how your programs have changed in size relative to each other is not enough. To make more informed decisions, it is important to understand how your programs are performing relative to comparators. The bubble chart on the following page compares changes in completions by 4-digit CIP Code at your institution and comparator institutions to show how your programs compare to the broader market.

- The x-axis shows your programs' change in completions (declining programs on the left, growing programs on the right)
- The y-axis shows comparators' change in completions (growing programs at the top, declining programs at the bottom)
- The size of the bubble corresponds to the size of your program in 2024.

Each program falls into one of four quadrants:

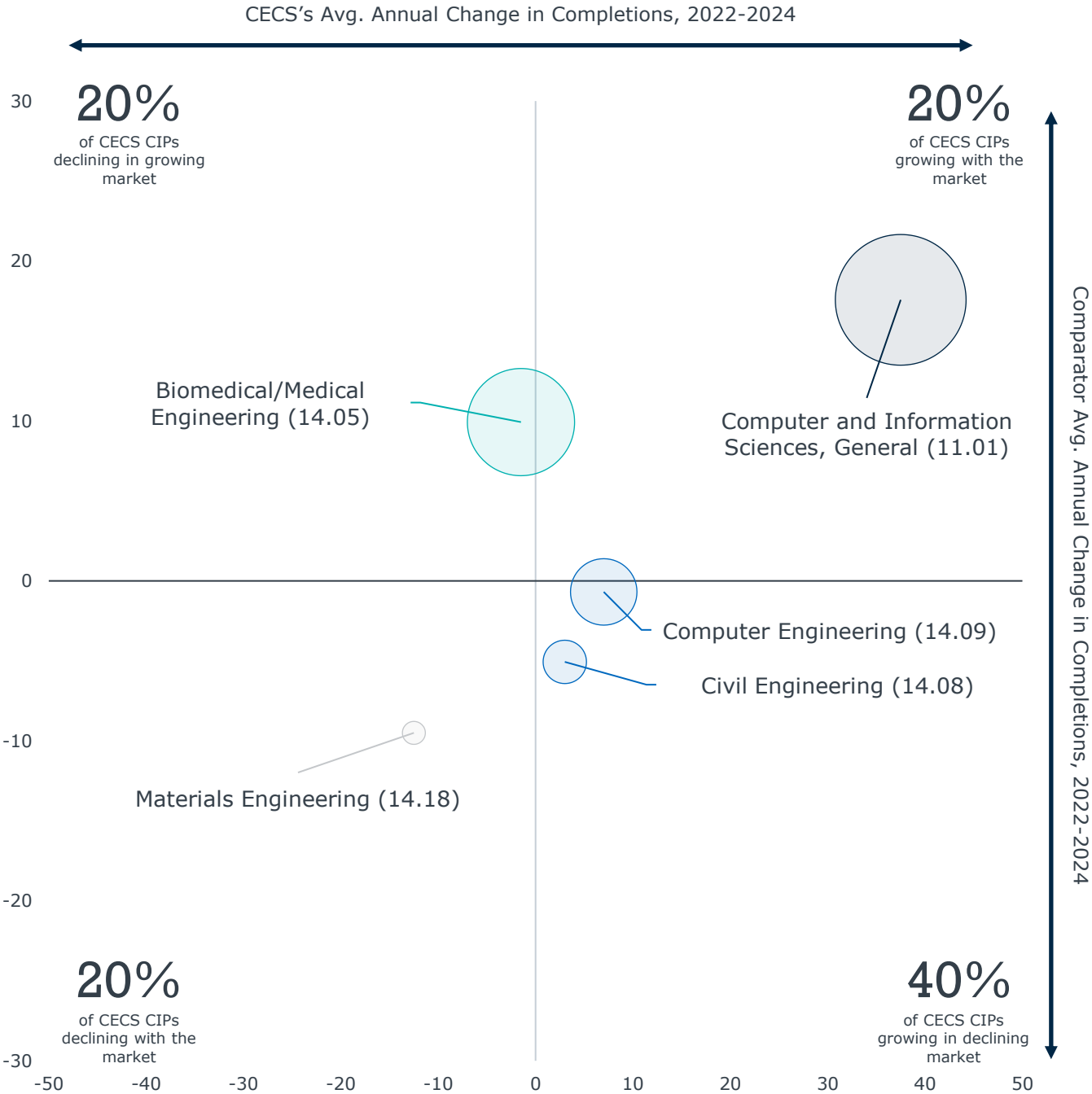


Is Your Portfolio Performing as Expected Relative to Competitors? (Cont.)

Reflection

Where are you surprised by the difference between yourself and your comparators?

Change in EAB University College of Engineering and Computer Science Program Completions Relative to Average Change in Comparator Program Completions, 2022-2024



See [Appendix](#) for full data.

Source: IPEDS, EAB analysis.

Where Do You Lead The Market?

Reflection

Is your strong market position in these programs working to your advantage?

Where in your portfolio do you lead the market compared to your comparators?

This analysis highlights the programs within your college that lead the market, holding over 60% of the market share relative to your comparators. These are fields you can capitalize on by being one of the few institutions in your comparator set that offers a particular program.

0
CECS CIP
Codes held
+60% of the
market

EAB University College of Engineering and Computer Science Market Leading CIP Codes Compared to Comparators

2022-2024

CIP Code	EAB University-Owned Market Share, 2024	Comparators Offering Program, 2024	EAB University Avg. Annual Completions, 2022 - 2024	EAB University Avg. Annual Completions Change (#), 2022 - 2024	EAB University Avg. Annual Completions Change (%), 2022 - 2024
Computer and Information Sciences, General (11.01)	38.81%	7/8	297.33	+37.50	+13.51
Biomedical/Medical Engineering (14.05)	28.41%	7/8	136.33	-1.50	-0.59%
Materials Engineering (14.18)	21.51%	6/8	67.33	-12.50	-17.08%
Civil Engineering (14.08)	10.89%	8/8	96.00	+3.00	+3.31%
Computer Engineering (14.09)	10.69%	8/8	137.33	+7.00	+5.33%

*Some programs may appear as market leaders if EAB University or comparators report under unique CIP Codes.

See [Appendix](#) for full data.

Source: IPEDS, EAB analysis.

What Gaps Exist Within Your Portfolio?

Reflection

Are these program gaps intentional or unrecognized opportunities?

What gaps exist within your portfolio?

This analysis highlights potential portfolio gaps, or programs that are offered by all or most of your comparators that you do not offer. **This is not necessarily a list of new programs to launch**, but rather a resource to assist in determining how well your offerings align with comparator institutions and evolving student expectations. However, well-performing programs offered by most comparators may signal missed opportunities.

2
CIP Codes offered by +60% of your comparators

EAB University College of Engineering and Computer Science CIP Code Gaps Compared to Comparators

2022-2024

CIP Code	Comparators Offering Program, 2024	Avg. Annual Comparator Completions, 2022 - 2024	Avg. Annual Comparator Completions Change (#), 2022 - 2024	Avg. Annual Comparator Completions Change (%), 2022 - 2024	Comparator Market Leader, % of Market Share, 2024
Manufacturing Engineering (14.36)	7/8	78.47	-9.80	-11.84%	[Institution], 31.96%
Electrical, Electronics, and Communications Engineering (14.10)	6/8	53.67	0.45	0.99%	[Institution], 35.02%

*Programs on this list align with CECS offerings at the 2-digit CIP Code level and are intended to surface potential gaps. Because this analysis uses institution-level data, some programs may be offered elsewhere at EAB University but not within your college. Inclusion on this list does not indicate a need to launch or relocate a program; rather, it highlights areas to evaluate based on your college’s strategy, capabilities, and existing offerings.

See [Appendix](#) for full data.

Source: IPEDS, EAB analysis.

Where Is Your Portfolio Exposed to Risk from ROI Regulations?

Reflection

Can you demonstrate that your programs in these fields earn above the high school threshold?

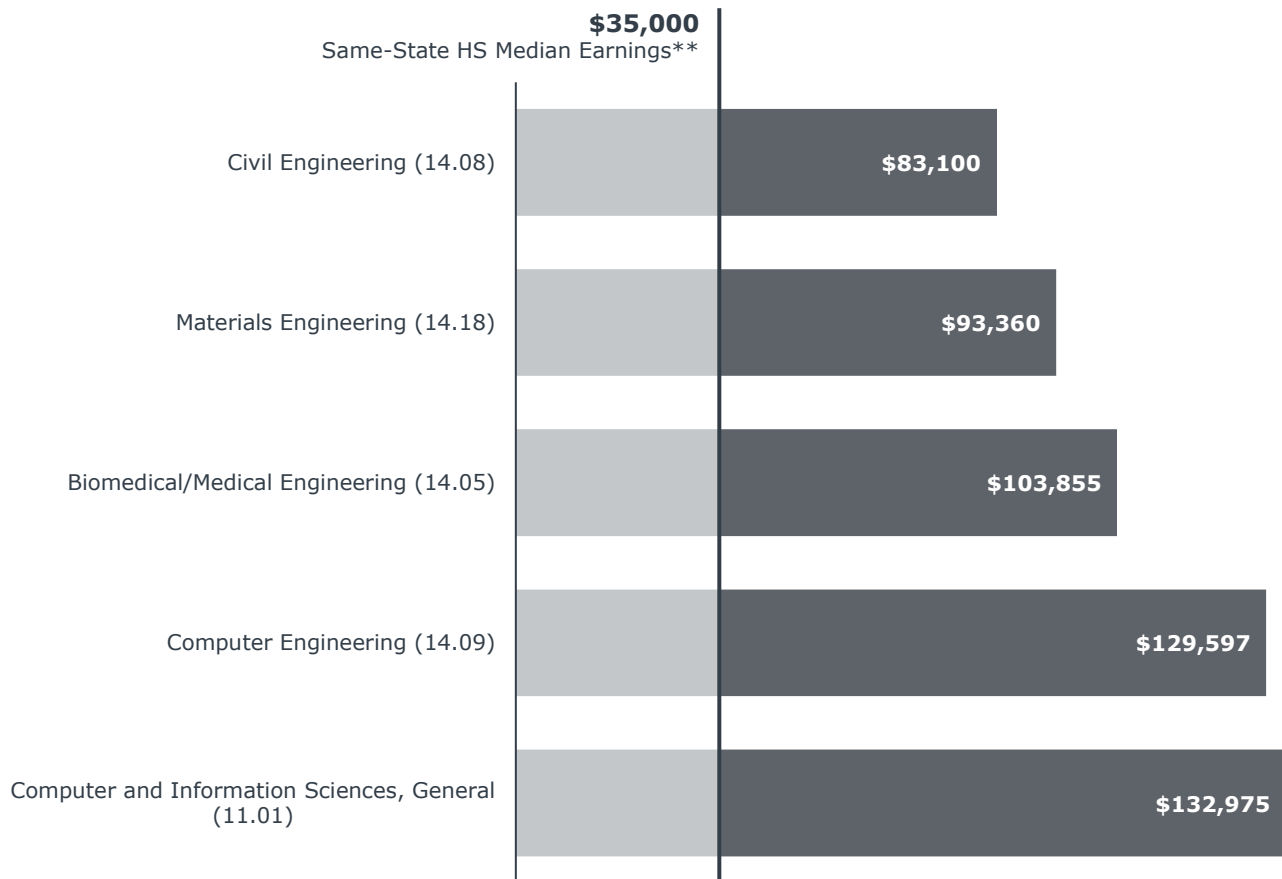
Recent policy changes indicate that if graduates' earnings in a particular academic program are too low (i.e., at the undergraduate level, graduates earn less than a median worker with a high school degree in your state) for two out of three consecutive years, the program will lose eligibility for student loans.

The data below shows how your college's median earnings by field (only for CIP Codes with sufficient reported data) compares to the median high school graduate salary in your state. **Fields falling below this threshold (in blue) are at risk of losing loan eligibility.**

100%
CECS CIP Codes above threshold

EAB University College of Engineering and Computer Science Graduates' Median Earnings Four Years After Graduation*

2017-2018 and 2018-2019 Pooled Award Year Cohort, by CIP Code



*Earnings data comes from the U.S. Department of Education Program Performance Data, which links students who received federal aid with "earnings from de-identified tax records." This data shows the median four-year earnings for students at your institution who took out loans. Due to privacy suppression, only 4-digit CIP Codes with enough reportings will be represented in the list above.

**Applies to institutions with at least 50% in-state enrollment. See [Appendix](#) for full data.

Legend

- Programs below earnings threshold
- Median high school graduate earnings threshold, [State]
- Programs above earnings threshold

Where Is Your Portfolio Exposed to Risk from ROI Regulations? (Cont.)

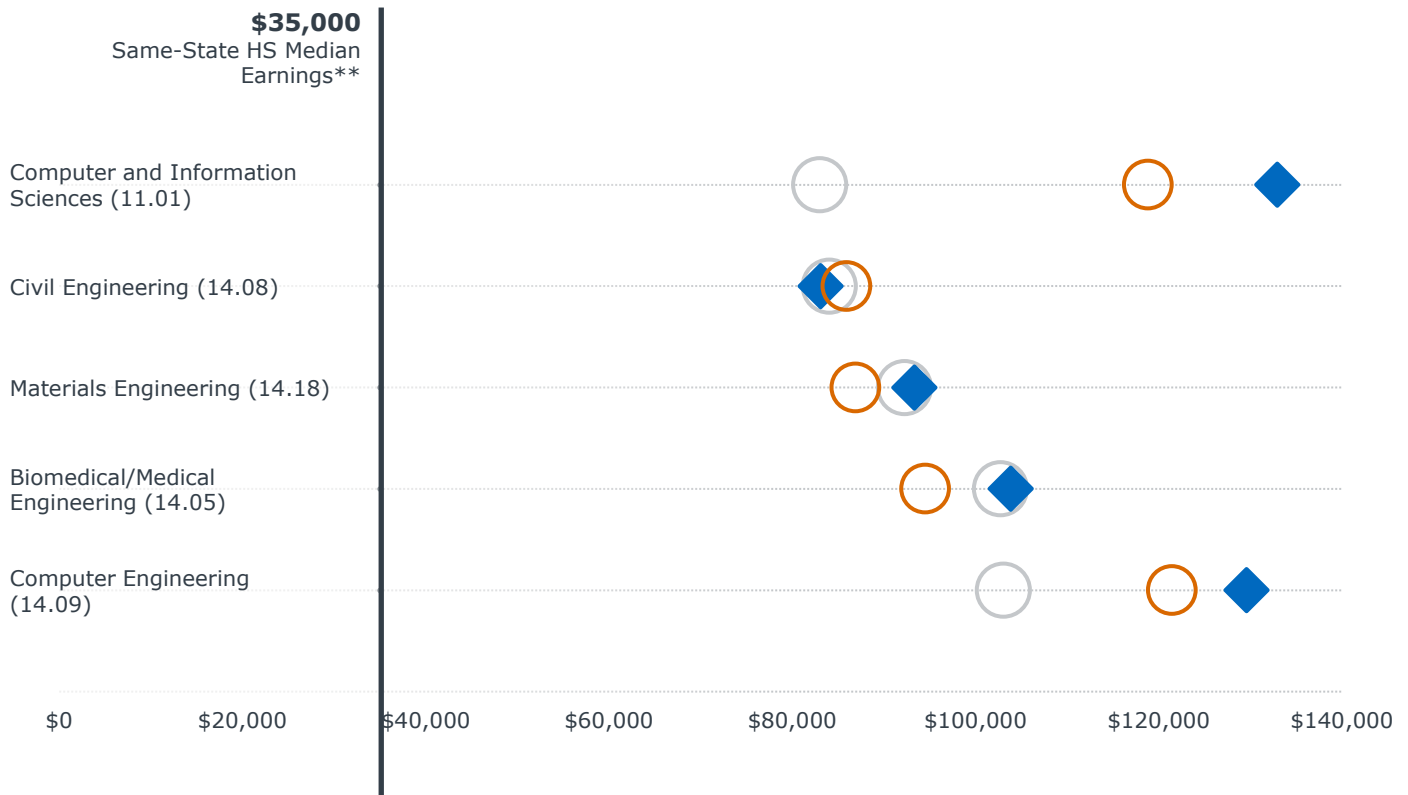
Reflection

Can you demonstrate that your programs in these fields earn above the high school threshold?

The data below shows how your college’s median earnings by field (only for CIP Codes with sufficient reported data – blue diamond) compares to the median comparator and state earnings and the median high school graduate earnings in your state. **Fields falling below this threshold are at risk of losing loan eligibility.**

Graduates’ Median Earnings Four Years After Graduation*

2017-2018 and 2018-2019 Pooled Award Year Cohort, by CIP Code



*Earnings data comes from the U.S. Department of Education Program Performance Data, which links students who received federal aid with “earnings from de-identified tax records.” This data shows the median four-year earnings for students who took out loans in each of these groups. Due to privacy suppression, only 4-digit CIP Codes with enough reportings will be represented in the list above.

**Applies to institutions with at least 50% in-state enrollment.

See [Appendix](#) for full data.

Legend

- ◆ Median CECS earnings
- Median [State] earnings
- Median comparator earnings

Source: U.S. Department of Education, EAB analysis.

Is Your Portfolio Aligned with the Labor Market?

Reflection

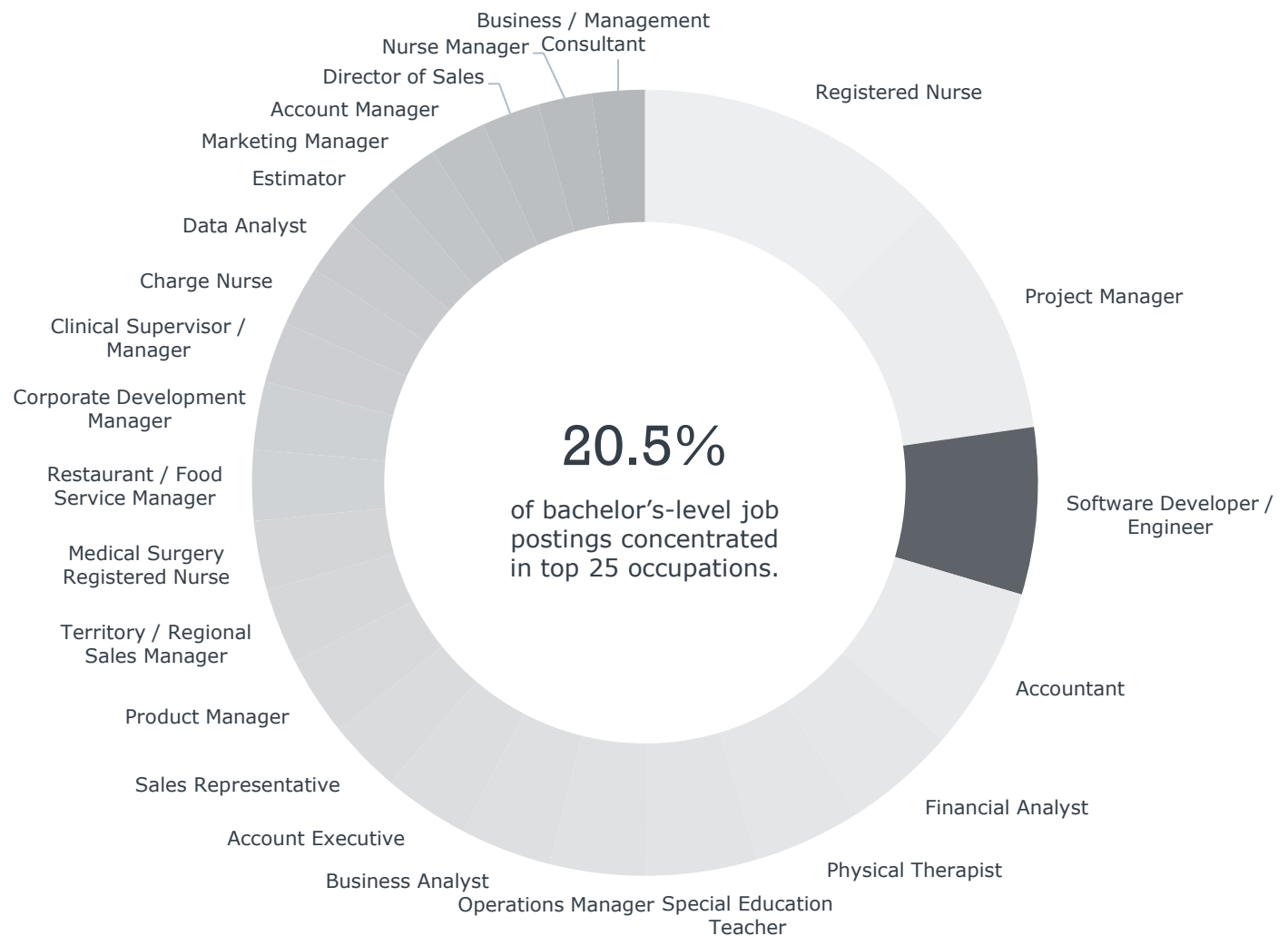
How well does your portfolio address employer demand trends in your area?

This analysis highlights the most in-demand occupations in your selected region based on number of job postings over the last year and maps these occupations to your programs. Fields preparing students for occupations that require a specific degree not offered by your institution may warrant further investigation.

4%
Alignment between top occupations and offered CIP Codes

Top 25 High-Demand Occupations in [State]

All Occupations, 2025 Q1 to 2025 Q4



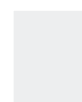
Legend



Occupation requires degree **not offered by college**



Occupation requires degree **offered by college**



Occupation does not align with degrees offered by college

Source: Lightcast, EAB analysis.

Is Your Portfolio Aligned with the Labor Market?

Reflection

How well does your portfolio address employer demand trends in your area?

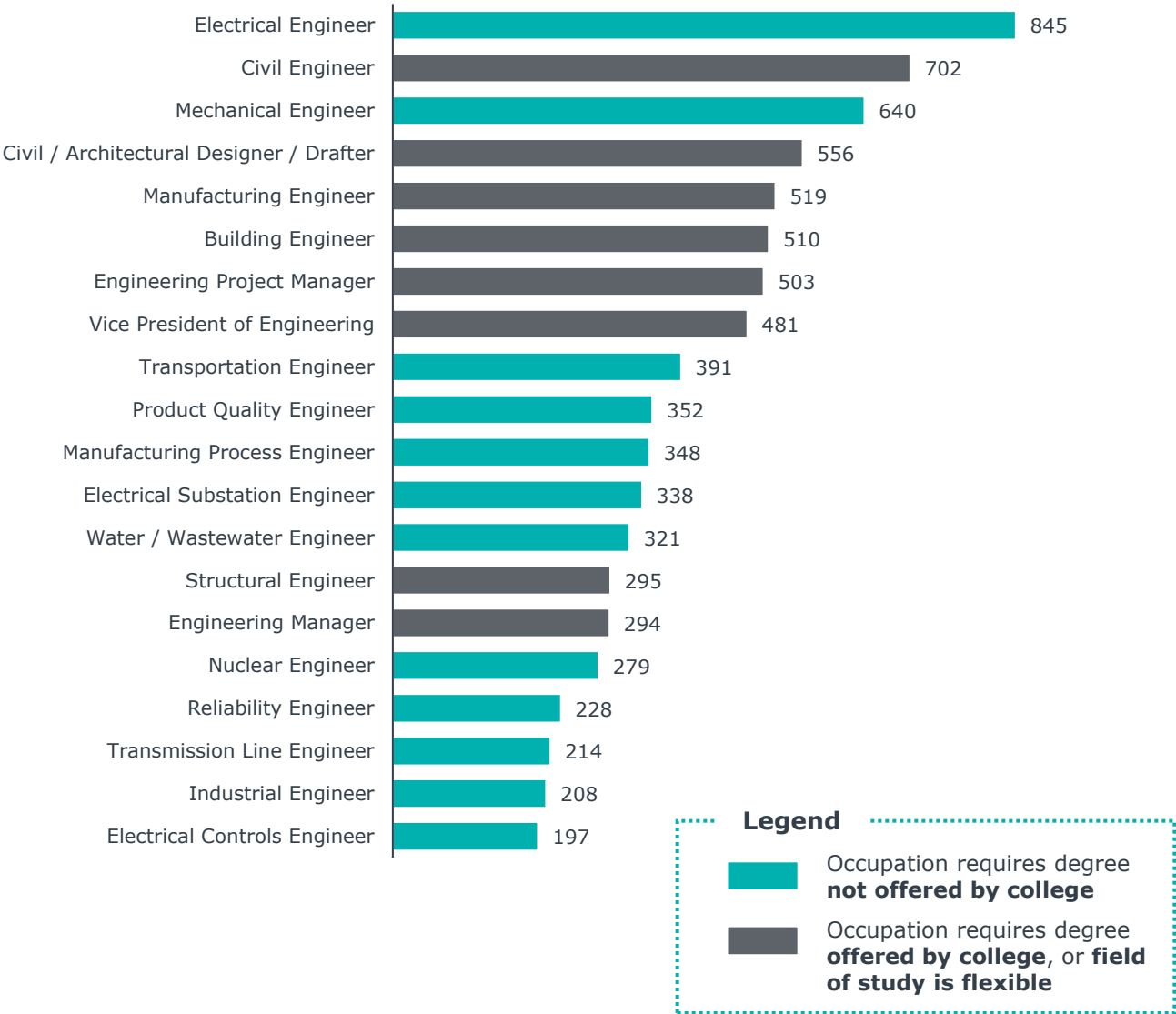
This analysis highlights the most in-demand occupations in your selected region based on number of job postings over the last year and maps these occupations to your programs. Fields preparing students for occupations that require a specific degree not offered by your college may warrant further investigation.

Note, not all teal occupations represent viable program opportunities. Some occupations may already be served by programs in other colleges, fall outside your college’s strategic focus, or not align with existing capabilities.

40%
Alignment between top occupations and offered CIP Codes

High-Demand Occupations With and Without a Matching Program at EAB University College of Engineering and Computer Science

Relevant Occupations in [State], 2025 Q1 to 2025 Q4



Source: Lightcast, EAB analysis.

Is Your Portfolio Aligned with the Labor Market? (Cont.)

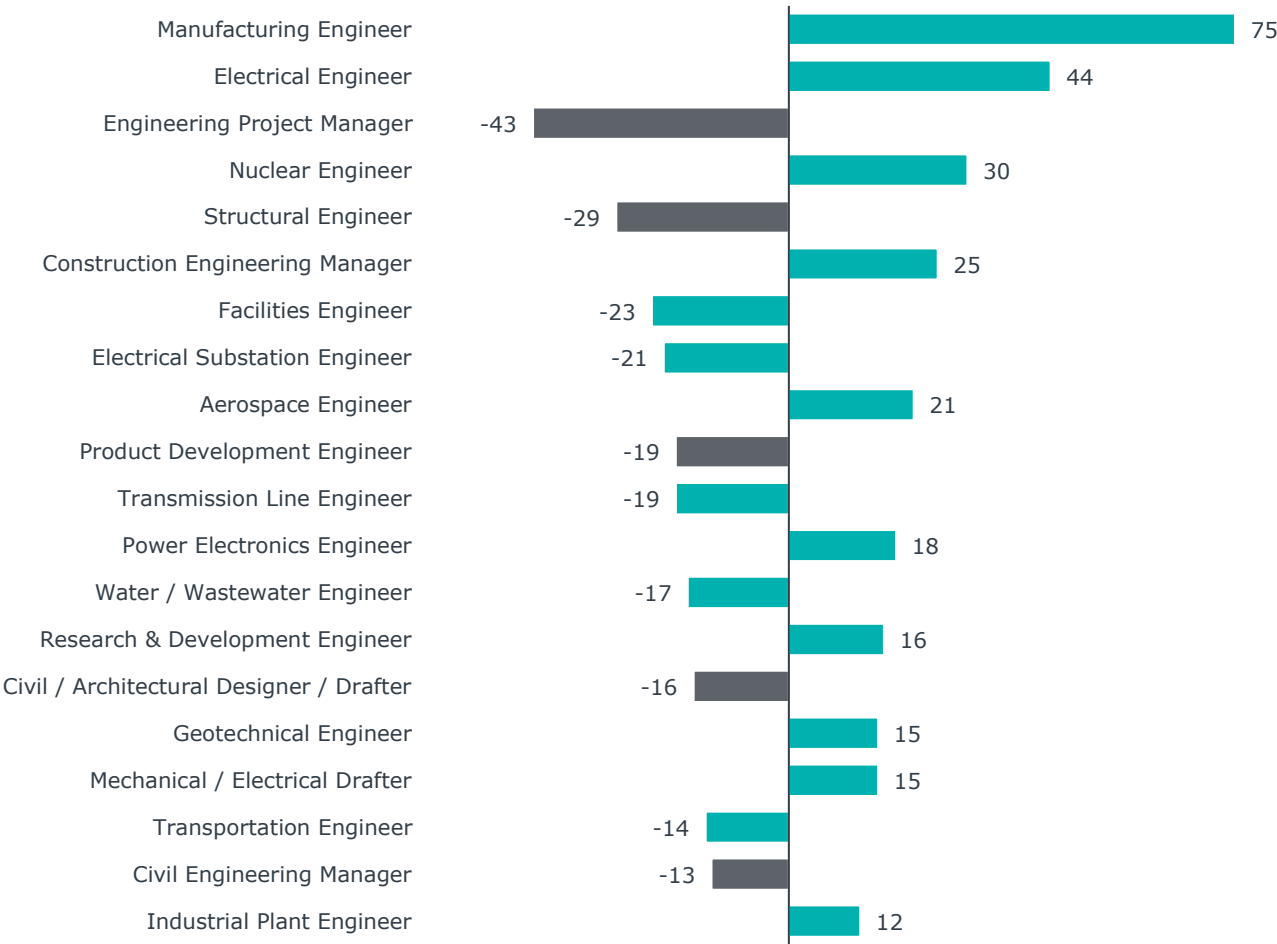
Reflection

How well does your portfolio address employer demand trends in your area?

This analysis highlights the occupations with the largest change in job postings in your selected region in the last year and maps these occupations to your programs. Pay close attention to occupations with especially large gains or declines.

Largest Changing Occupations With and Without a Matching Program at EAB University College of Engineering and Computer Science

Relevant Occupations in [State], 2024 Q4 to 2025 Q4



Legend

- Teal bar: Occupation requires degree **not offered by college**
- Dark grey bar: Occupation requires degree **offered by college, or field of study is flexible**

Source: Lightcast, EAB analysis.

Is Your Portfolio Adapting To Shifting Skill Demands?

Reflection

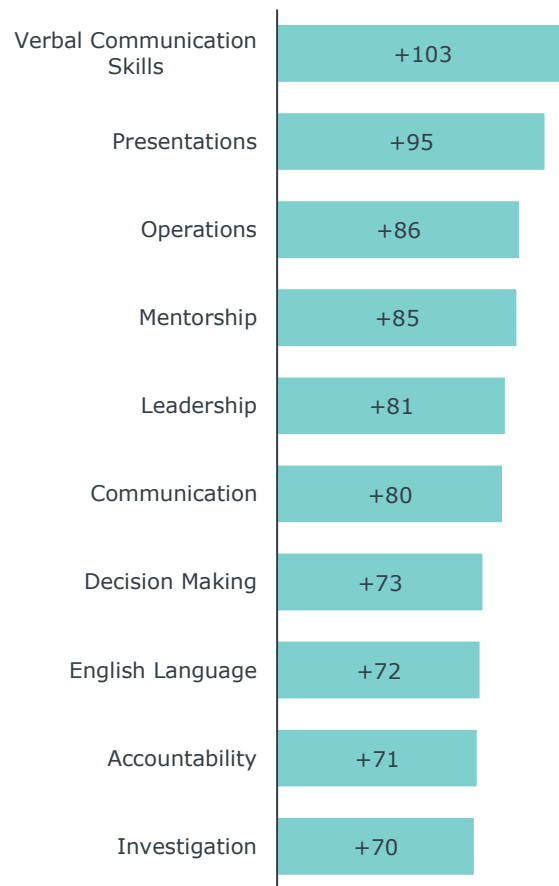
Are these skills integrated into your core curriculum?

Core Skill¹ Breakdown for Top 20 Relevant Occupations

Demand for Core Skills Across Top 20 Relevant Occupations in [State], 2025 Q1-2025 Q4



Change in Demand for Core Skills Across Top 20 Relevant Occupations in [State], 2024 Q4-2025 Q4



1) Lightcast defines these skills as "prevalent across many different occupations and industries, including both personal attributes and learned skills."

Source: Lightcast, EAB analysis.

Is Your Portfolio Adapting To Shifting Skill Demands?

Reflection

Are these skills integrated into your core curriculum?

Top Growing Core Skills¹ for Top Ten Relevant Occupations

Skills with Largest Increase in Relevant Job Postings in [State], 2024 Q4-2025 Q4

Top Growing Relevant Occupations	Top Growing Core Skills				
	1	2	3	4	5
Electrical Engineer	Communication	Innovation	Problem Solving	Reliability	Collaboration
Civil Engineer	Communication	Coordinating	Decision Making	Ethical Standards And Conduct	Quality Control
Mechanical Engineer	Customer Service	Ethical Standards And Conduct	Spreadsheets	Innovation	Microsoft Outlook
Civil / Architectural Designer / Drafter	Coordinating	Communication	Research	Planning	Project Design
Engineering Project Manager	Accountability	Relationship Building	Reliability	Team Management	Microsoft Word
Manufacturing Engineer	Operations	Leadership	Problem Solving	Troubleshooting (Problem Solving)	Innovation
Vice President of Engineering	Accountability	Mentorship	Consulting	Team Building	Team Management
Building Engineer	Leadership	Quality Control	Organizational Skills	Presentations	Professionalism
Transportation Engineer	Communication	Innovation	Presentations	Self-Motivation	Willingness To Learn
Product Quality Engineer	Investigation	Management	Planning	Report Writing	Verbal Communication Skills

1) Lightcast defines these skills as "prevalent across many different occupations and industries, including both personal attributes and learned skills."

Source: Lightcast, EAB analysis.

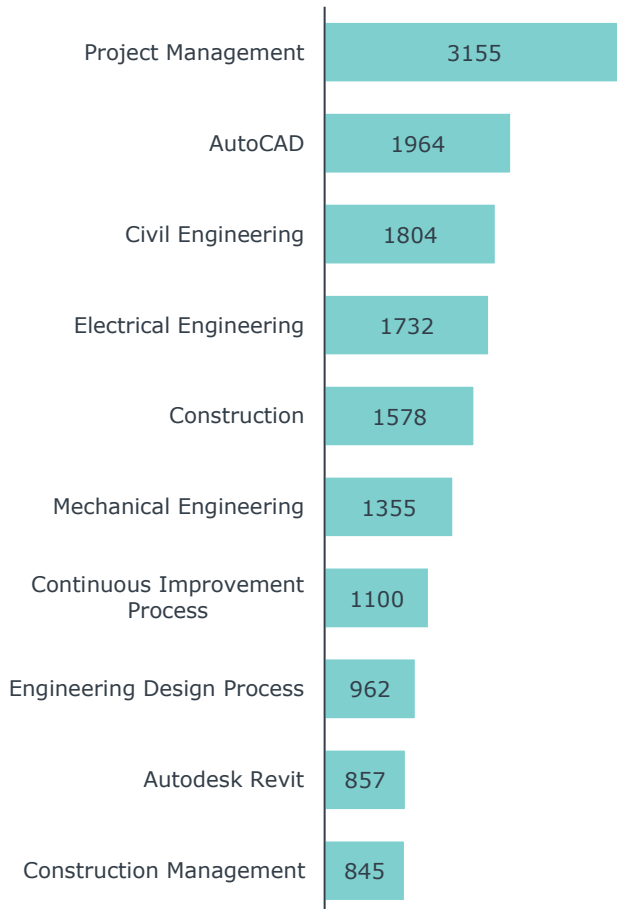
Is Your Portfolio Adapting To Shifting Skill Demands?

Reflection

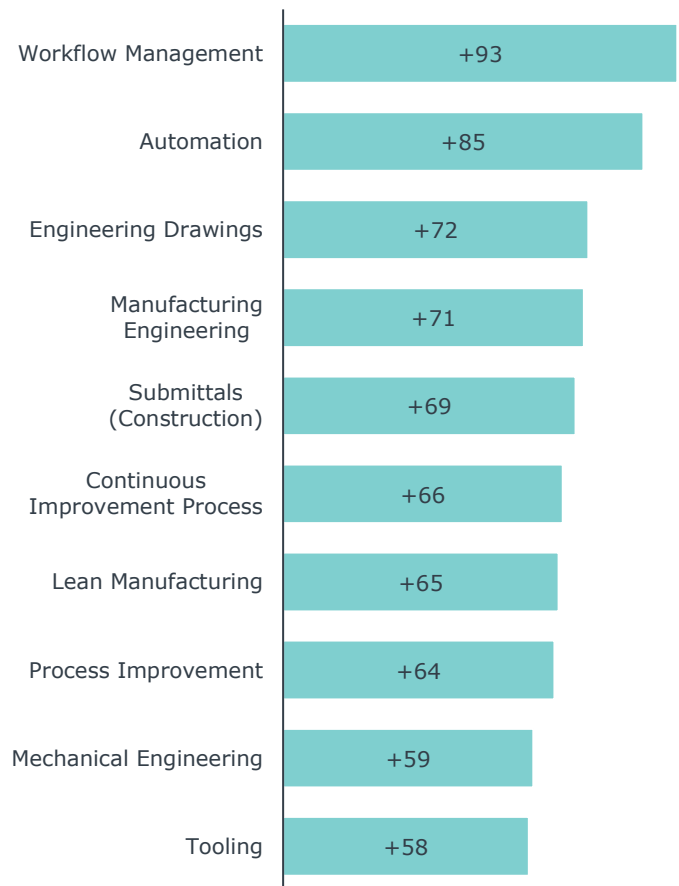
Are these skills integrated into your curriculum?

Specialized Skill¹ Breakdown for Top 20 Relevant Occupations

Demand for Specialized Skills Across Top 20 Relevant Occupations in [State], 2025 Q1-2025 Q4



Change in Demand for Specialized Skills Across Top 20 Relevant Occupations in [State], 2024 Q4-2025 Q4



1) Lightcast defines these skills as "primarily required within a subset of occupations or equip one to perform a specific task."

Source: Lightcast, EAB analysis.

Is Your Portfolio Adapting To Shifting Skill Demands?

Reflection

Are these skills integrated into your core curriculum?

Top Growing Specialized Skills¹ for Top Ten Relevant Occupations

Skills with Largest Increase in Relevant Job Postings in [State], 2024 Q4-2025 Q4

Top Growing Relevant Occupations	Top Growing Specialized Skills				
	1	2	3	4	5
Electrical Engineer	Electrical Engineering	Electrical Systems	Electric Power Distribution	Control Systems	Electric Power Systems
Civil Engineer	Stormwater Management	Design Software	Environmental Engineering	Technical Writing	Workplace Safety
Mechanical Engineer	Instrumentation	Marketing	Lifting Ability	Sheet Metal	SolidWorks (CAD)
Civil / Architectural Designer / Drafter	Building Information Modeling	Construction Documentation	Adobe Photoshop	Civil Engineering	Architectural Design
Engineering Project Manager	Continuous Improvement Process	Supply Chain	Cross-Functional Collaboration	Project Stakeholders	Request For Proposal
Manufacturing Engineer	Manufacturing Engineering	Tooling	Manufacturing Processes	Lean Manufacturing	Project Management
Vice President of Engineering	Governance	Strategic Management	Finance	Scalability	Workflow Management
Building Engineer	Civil Engineering	Construction Management	Structural Engineering	Request For Information (RFI)	Wastewater
Transportation Engineer	Transport Engineering	Civil Engineering	3D Modeling	Traffic Control	OpenRoads (Civil Design Software)
Product Quality Engineer	Geometric Dimensioning And Tolerancing	Process Improvement	Auditing	Engineering Drawings	Supply Chain

1) Lightcast defines these skills as "primarily required within a subset of occupations or equip one to perform a specific task."

Source: Lightcast, EAB analysis.

Are Your Largest Programs Prepared for AI Disruptions?

Reflection

Which occupations have above-average projected growth and integrated AI exposure?

This table spotlights relevant high-demand occupations in your region alongside two future-facing signals: projected 10-year growth and AI exposure. Growth shows where demand is expanding; AI exposure (from the IMF) signals how emerging models—especially large language models—may transform, integrate with, or bypass the role altogether.

The three main ways that Generative AI will affect jobs, and how programs will need to respond:

- **Transformed Jobs.** GenAI tools will complete some job functions (e.g., data entry) on their own, making many routine tasks irrelevant. Programs preparing students for these transformed jobs will need to double down on teaching the skills needed for expanded, ordinarily higher-order job responsibilities.
- **Integrated Jobs.** GenAI will serve as a helpful tool that increases the quality of output for existing tasks. Programs preparing students for integrated jobs will need to teach applied use of GenAI tools in industry-relevant tasks and projects.
- **Minimally Impacted Jobs.** These jobs will not be significantly different after GenAI integration. Programs preparing students for minimally impacted jobs need only teach basic GenAI literacy.

How Relevant High-Demand Occupations Are Predicted to Change Over Next Decade

Based on Bureau of Labor Statistics and International Monetary Fund Findings¹

Occupation Name (SOC)	10 yr Projected Growth, 2024-2034	AI Exposure
Civil Engineers	5.0%	Integrated
Industrial Engineers	11.0%	Integrated
Electrical Engineers	7.2%	Transformed
Architectural and Engineering Managers	3.8%	Integrated
Mechanical Engineers	9.1%	Transformed
Chemical Engineers	2.6%	Integrated
Architectural and Civil Drafters	4.1%	Transformed
Electronics Engineers, Except Computer	6.2%	Transformed
Engineers, All Other	2.1%	Transformed

1) For more information about these evidence-based estimates, please see page 33.

2) This page uses Standard Occupation Classification (SOC) codes whereas previous pages use Lightcast Occupational Taxonomy (LOT) codes.

Source: BLS, Pizzinelli et al., 2023; Felten et al., 2021; EAB analysis.

Next Steps

Next Steps and Corresponding Report Sections:

EAB Resources:



Revitalizing Programs

- **Declining in a Growing Market:** Examine growing comparator programs to identify distinctive practices that may be driving their success.
- **Declining with the Market:** Consider reframing, redesigning, or repositioning programs to better align with student and/or labor market demand.

1. Review [Academic Program Revitalization and New Program Launch Resource Center](#)
2. Request a [360 Program Assessment](#)
3. Review [Redesign Academic Programs to Meet Student Demand Tool](#)



Improving Return on Investment

- **ROI Risk:** Confirm programs that fall below the threshold and invest in resources to strengthen outcomes of these programs.

1. Review [Outpacing the New Federal Earnings Mandate Insight Paper](#)
2. Participate in [Experiential Major Maps Collaborative](#)
3. Review [Integrating Academic and Career Development Study](#)



Addressing Portfolio Gaps

- **Portfolio Gaps:** Assess whether these gaps are deliberate or reflect missed opportunities.
- **Employer Demand Trends:** Identify high-demand occupations not currently served by your degree offerings.

1. Request a [Market Opportunity Scan](#) to investigate labor market blind spots



Integrating AI into Programs

- **AI Disruptions:** Incorporate AI competencies into programs that lead to “transformed” or “integrated” jobs.

1. Request a [Generative AI Curriculum Prioritization Assessment](#)

Source: EAB analysis.



Appendix

SECTION

2



Appendix

How is Your Portfolio Performing?

EAB University College of Engineering and Computer Science 4-Digit CIP Codes, Change in Completions, 2022-2024

Change Category	4-digit CIP Code	EAB University Completions, 2022	EAB University Completions, 2024	Completions Change
>= 25 Completions Growth	Computer and Information Sciences, General (11.01)	260	335	75
5 to 14 Completions Growth	Computer Engineering (14.09)	129	143	14
	Civil Engineering (14.08)	95	101	6
4 to -4 Completions Change	Biomedical/Medical Engineering (14.05)	133	130	-3
-15 to -24 Completions Decline	Materials Engineering (14.18)	80	55	-25

Source: IPEDS, EAB analysis.

Appendix (Cont.)

Is Your Portfolio Performing as Expected Compared to the Overall Market?

Enrollment Trends in [State] at Programs Offered by EAB University
Sorted by largest to smallest change in [State] enrollments

CIP Code	EAB University Completions, 2024	EAB University Change in Completions (#), 2022 - 2024	[State] Enrollments, Fall 2025	[State] Change in Enrollments (%), 2024 - 2025	[State] Change in Enrollments (#), 2024 - 2025
Computer Engineering (14.09)	143	+14	3,056	+17.27%	+450
Civil Engineering (14.08)	101	+6	2,165	+14.73%	+278
Materials Engineering (14.18)	55	-25	224	+9.27%	+19
Biomedical/Medical Engineering (14.05)	130	-3	1,245	-2.73%	-35
Computer and Information Sciences, General (11.01)	335	+75	12,909	-9.66%	-1,381

Source: NSC, IPEDS, EAB analysis.

Appendix (Cont.)

Is Your Portfolio Performing as Expected Relative to Comparators?

Where are you growing with the market?

Sorted by largest differential

4-Digit CIP Code	EAB University Completions 2022	EAB University Completions 2024	EAB University Avg. Annual Completions Change (#) 2022 - 2024	Comparator Avg. Annual Completions 2022	Comparator Avg. Annual Completions 2024	Comparator Avg. Annual Completions Change (#) 2022 - 2024
Computer and Information Sciences, General (11.01)	260.00	335.00	297.33	253.57	288.71	17.57

Source: IPEDS, EAB analysis.

Appendix (Cont.)

Is Your Portfolio Performing as Expected Relative to Comparators?

Where are you growing in a declining market?

4-Digit CIP Code	EAB University Completions 2022	EAB University Completions 2024	EAB University Avg. Annual Completions Change (#) 2022 - 2024	Comparator Avg. Annual Completions 2022	Comparator Avg. Annual Completions 2024	Comparator Avg. Annual Completions Change (#) 2022 - 2024
Civil Engineering (14.08)	95.00	101.00	3.00	124.63	114.50	-5.06
Computer Engineering (14.09)	129.00	140.00	7.00	180.00	178.63	-0.69

Sources: Lightcast Analyst, EAB Research & Analysis
Source: IPEDS, EAB analysis.

Appendix (Cont.)

Is Your Portfolio Performing as Expected Relative to Comparators?

Where are you declining with the market?

4-Digit CIP Code	EAB University Completions 2022	EAB University Completions 2024	EAB University Avg. Annual Completions Change (#) 2022 - 2024	Comparator Avg. Annual Completions 2022	Comparator Avg. Annual Completions 2024	Comparator Avg. Annual Completions Change (#) 2022 - 2024
Materials Engineering (14.18)	80.00	55.00	-12.50	55.50	36.50	-9.50

Sources: Lightcast Analyst, EAB Research & Analysis
Source: IPEDS, EAB analysis.

Appendix (Cont.)

Is Your Portfolio Performing as Expected Relative to Comparators?

Where are you declining in a growing market?

4-Digit CIP Code	EAB University Completions 2022	EAB University Completions 2024	EAB University Avg. Annual Completions Change (#) 2022 - 2024	Comparator Avg. Annual Completions 2022	Comparator Avg. Annual Completions 2024	Comparator Avg. Annual Completions Change (#) 2022 - 2024
Biomedical/ Medical Engineering (14.05)	133.00	130.00	-1.50	79.14	99.00	9.93

Sources: Lightcast Analyst,
EAB Research & Analysis
Source: IPEDS, EAB analysis.

Appendix (Cont.)

Where Is Your Portfolio Exposed to Risk from ROI Regulations?

Four Year Return-on-Investment Metrics

2017-2018 and 2018-2019 Pooled Award Year Cohort, by CIP Code

4-digit CIP Code	Median EAB University Earnings by CIP4, Four Years	Median Comparator Earnings by CIP4, Four Years	Median [State] Earnings by CIP4, Four Years
Biomedical/Medical Engineering (14.05)	\$103,855	\$94,530	\$102,755
Civil Engineering (14.08)	\$83,100	\$85,940	\$84,073
Computer and Information Sciences, General (11.01)	\$129,597	\$118,833	\$83,000
Computer Engineering (14.09)	\$129,597	\$121,462	\$103,054
Materials Engineering (14.18)	\$93,360	\$86,932	\$92,260

Source: U.S. Department of Education, EAB analysis.

Data Sources



Lightcast

<https://lightcast.io/>

This report includes data made available through EAB's partnership with Lightcast (formerly Emsi), a labor market analytics firm serving higher education, economic development, and industry leaders in the U.S., Canada, and the United Kingdom.

Lightcast curates and maintains the most comprehensive labor market data sets available for academic program planning, providing real-time job posting data, workforce and alumni outcomes data, and traditional government sources of data. Under this partnership, EAB may use Lightcast's proprietary tools to answer partner questions about employer demand, the competitive landscape, in-demand skills, postings versus actual hires, and skills gaps between job postings and professionals in the workforce. The Lightcast tools also provide EAB with in-depth access to unsuppressed, zip-code-level government data for occupations, industries, programs, and demographics. For more complete descriptions of the Lightcast tools, visit:

- <https://lightcast.io/solutions/education/analyst>
- <https://lightcast.io/solutions/education/alumni-pathways>

To learn more about Lightcast and its software and services, please contact Bob Hieronymus, Vice President of Business Development at bob.hieronymus@lightcast.io.



Integrated Postsecondary Education Data System (IPEDS)

<https://nces.ed.gov/ipeds/>

The Integrated Postsecondary Education Data System (IPEDS) is the Department of Education's National Center for Education Statistics' (NCES) core postsecondary education data collection program. Information is collected annually from all providers of postsecondary education in fundamental areas such as enrollment, program completion and graduation rates, institutional costs, student financial aid, and human resources.

Data collected through IPEDS is publicly released and can be accessed through the IPEDS Data Center by postsecondary education institutions and the general public. The IPEDS Data Center is designed as a centralized, web-based tool for the retrieval and analysis of IPEDS data, the system allows users to access and evaluate institutional data using a wide-range of analytical features that includes the ability to construct customized data sets, download full data files, and create statistical and trend analyses reports.



U.S. Department of Education Program Performance Data

<https://ed.gov>

The Program Performance Data (PPD) is a dataset released by the Department of Education that was shared as part of the Accountability in Higher Education and Access through Demand-driven Workforce Pell (AHEAD) negotiated rulemaking. The PPD provides program-level earnings and debt metrics by 4-digit CIP and by institution and identifies whether programs meet the Department's established earnings thresholds for Title IV eligibility.

The PPD combines data from the National Student Loan Data System, IRS tax records, IPEDS, and College Scorecard to evaluate the debt and earning outcomes for graduates by program. EAB gathers the most up-to-date data from the Department of Education annually. PPD data can be accessed online by the general public.



EAB Research and Insights Library

<https://eab.com/research-and-insights/>

Data Sources (Cont.)

Research Methodology

AI Exposure and Disruption Scores

To quantitatively score GenAI impact, we utilized two separate impact measures: AI exposure and AI complementarity. These measures were developed by experts at the International Monetary Fund (IMF), Princeton University, and New York University Stern School of Business .

The AI exposure score was developed by Princeton and NYU researchers Edward Felten, Manav Raj, and Robert Seamans. To develop this score, they first isolated 10 core AI capabilities: abstract strategy games, real-time video games, image recognition, visual question answering, reading comprehension, language modeling, translation, speech recognition, and instrumental track recognition. Then, using crowd-sourced data, they linked these functions to the 52 occupational abilities as identified by O*NET, scoring the relation between each occupational ability and each AI function. Finally, researchers aggregated the AI exposure of each ability within each occupation—weighted by relevance—to develop the final list of occupational exposure scores.

The AI disruption score was developed by International Monetary Fund researchers Carlo Pizzinelli, Augustus Panton, Marina Mendes Tavares, Mauro Cazzaniga, and Longji Li. In their study, they built on the work of Felten et al. (2021) by introducing a measure of AI complementarity for each occupation. This complementarity measure is designed to reveal the extent to which AI can be used to support or replace key tasks in any given occupation, indicating the disruption potential GenAI has across each occupation. To build this measure, they utilized information from O*NET on the social, physical, educational, and experiential requirements influencing the work of each occupation. They then created the following six components to measure factors influencing AI automation: communication, responsibility, physical conditions, criticality, routine, and skills. Finally, they aggregated the prevalence of each of these six components within each occupation to measure the degree to which GenAI can serve as a complement or replacement for core occupational abilities.

We adjusted these measures in several ways. First, we limited our analysis to occupations that require at least some form of degree or certificate beyond a high school diploma, increasing the data's relevance to higher education. Additionally, we inverted the AI complementarity scores (which measure the degree to which GenAI can act as an augmenting tool) in order to develop our AI disruption scores (which measure the degree to which GenAI can act as an automating tool). Finally, we standardized these scores to have a mean of zero and a standard deviation of one, allowing us to visualize the relative differences between programs.

References

- Felten, E., Raj, M., & Seamans, R. (2021). Occupational, industry, and geographic exposure to artificial intelligence: A novel dataset and its potential uses. *Strategic Management Journal*, 42(12). <https://doi.org/10.1002/smj.3286>
- Pizzinelli, C., Panton, A., Mendes Tavares, M., Cazzaniga, M., & Li, L. (2023). Labor Market Exposure to AI: Cross-country Differences and Distributional Implications. *IMF Working Paper*, 216. <https://doi.org/10.5089/9798400254802.001>



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