

TECH TALENT ACCELERATOR 3.0

The Preliminary AI Skills Framework

Table of Contents

SECTION	SLIDE
About the Tech Talent Accelerator	3-9
About the Resource: The Preliminary AI Skills Framework	10-11
Creating Purposeful Partnerships	
Landscape Analysis	12-37
Voices from the Field	38-45
Conversations with business and higher ed	
Select Priority Occupations, Identify In-Demand AI Skills, and Validate with Employers	46-64
BHEF’s AI-Enabled Professional Framework	
Software Engineer Skills Map	
Business Analyst Skills Map	

The Tech Talent Accelerator is made possible due to support from the Connecticut Office of Workforce Strategy.



The Tech Talent Accelerator

An accelerated solution to ensure Connecticut's workforce is competitive in a time of rapid technological change.

The **Business-Higher Education Forum** and **The New England Board of Higher Education** developed and launched the Tech Talent Accelerator in 2022 with funding from the state.

TTA IS DESIGNED TO

- Develop and sustain high-impact partnerships between business and higher education;
- Convene businesses to identify in-demand skills, credentials, and hiring needs;
- Increase the supply of tech workers in Connecticut with in-demand skills and credentials; and
- Provide technical assistance to higher education institutions so they can rapidly:
 - Create new short-term training programs that lead to good tech jobs, and
 - Enhance existing curricula with industry-recognized credentials and validated knowledge, skills, and abilities.

The Tech Talent Accelerator 3.0

TTA is a proven model for rapidly aligning higher education programs with business demand. TTA 1.0 and 2.0 resulted in twelve business–higher education partnerships that created or updated short-term training or degree programs leading to high-demand tech pathways.

TTA 3.0 (launched in 2025) focuses on integrating AI skills into training pathways. A Pilot cohort embedded AI into existing programs, with an Innovation cohort now expanding new partnerships and pathways into AI-enabled roles.

To learn more about TTA 1.0 & 2.0, visit bhef.com/techtalentaccelerator

TTA 3.0 KEY PRIORITIES

- 01 **Reskill/upskill the tech workforce for AI competencies**
- 02 **Align postsecondary training programs with industry AI needs**
- 03 **Create pathways to AI skills for secondary students**
- 04 **Expand work-based learning opportunities**

The Tech Talent Accelerator 3.0: Pilot Cohort

COLLEGE	PROJECT SCOPE	PARTNERS
University of Connecticut	AEGIS: AI-Enabled Guided Intelligent Systems	AWS, Pratt & Whitney, RTX
Southern Connecticut State University	OWLL AI in Manufacturing	Nucor Wire Products, Greater New Haven Chamber of Commerce, NVIDIA
Connecticut College	AI in Entrepreneurship and Accounting	Accenture
Fairfield University	AI in Nursing	Stamford Health, Egan School of Nursing and Health Studies
Quinnipiac University	AI for Workforce	Masonicare, Access Health CT, Wheeler Health
University of Saint Joseph	Applied AI for Business	CGI, Charter Oak Health Center, VRSim, Inc.
University of New Haven	AI for Cybersecurity	Travelers

CASE STUDIES PILOT GRANTEE PROGRAMS APPEAR THROUGHOUT AS CASE STUDIES; EACH PAIRED WITH THE AI WORKFORCE CHALLENGE CONNECTICUT EMPLOYERS IDENTIFIED.

The Tech Talent Accelerator 3.0: Innovation Cohort

COLLEGE	PARTNERS	PROGRAM TITLE AND DESCRIPTION
Central Connecticut State University	New Britain Library, CT Humanities	Will launch the SCALE Pilot, a cross-disciplinary program serving up to 40 students that builds toward a stackable Certificate in Applied Scientific Communication. The for-credit initiative combines communication coursework with paid, supervised micro-internships for its top 20 participants.
Charter Oak State College	Community Health and Wellness Center, Metro Hartford Alliance	Will launch Durable Skills in the Age of AI, a noncredit course serving 25 incumbent healthcare workers. The self-paced open edX course pairs a weekly faculty-led synchronous component with a culminating applied project.
Eastern Connecticut State University	Hartford Healthcare, Daly Analytics	Will embed employer-informed AI competencies into ten existing for-credit courses, reaching 80–100 students initially and scaling to more than 200 annually. The healthcare-anchored modules require no additional coursework or fees.
Fairfield University	Sikorsky, ASML US LP, Accurate Lock and Hardware	Will launch AI-Assisted Manufacturing Readiness, a schoolwide digital-thread pathway embedding AI and digital manufacturing skills into for-credit engineering coursework for 200–250 students, plus a summer Manufacturing AI Bootcamp for about 20 industry-facing participants.
Mitchell College	TurboFlow AI Solutions, Darsan Technologies, Chamber of Commerce of Eastern CT	Will launch the Workplace AI Readiness Accelerator, a blended 8-week noncredit certificate for early-career employees serving 40 learners and scaling to 80 in year two, combining AI literacy, applied workflow practice, and human-performance skills.
Quinnipiac University	VRSim, Griffin Health, CT Children’s Hospital, Gaylord Specialty Healthcare, Hartford Healthcare	Will offer a noncredit, simulation-based micro-credential in AI-augmented clinical communication and coaching, projected to serve at least 120 learners, up from 70 in the prior pilot.

The Tech Talent Accelerator 3.0: Innovation Cohort

COLLEGE	PARTNERS	PROGRAM TITLE AND DESCRIPTION
Quinnipiac University	Inbox Health	Will launch a credit-bearing, stackable AI credential pathway within its School of Communications, projected to serve 20–35 learners in Year 1 and 35–50 in Year 2, introducing nine 1-credit companion courses issued as portable Credly digital badges.
Sacred Heart University	United Way Coastal and Western Connecticut, Area Congregations Together / Spooner House	Will launch the AI Leadership and Organizational Transformation (LOT) Lab, a for-credit work-based learning experience embedded in MGT370 Global Leadership, serving 30–40 learners on nonprofit AI adoption projects.
Sacred Heart University	iQ4 Corporation, Cybersecurity Workforce Alliance, Odyssey Re Holdings Corp.	Proposes AI TalentBridge, combining noncredit AI micro-credentials and an eight-week virtual pre-apprenticeship — roughly 40 students per year for badges and about 15 for the full pre-apprenticeship.
Southern Connecticut State University	Nucor Wire Products, New Haven Public Schools, MATCH	Will deliver a noncredit, stackable AI and quantum micro-credential program for high school students and opportunity youth ages 16–24, enrolling 20 learners per cohort and culminating in a public symposium.
The University of Bridgeport	Sikorsky Aircraft Company, Times Microwave Systems, EdMyst Inc., The Child & Family Guidance Center	University of Bridgeport will offer a credit-bearing Graduate Certificate in AI Leadership, Governance & Management through 21 modules offered between three courses to employer partner employees.

The Tech Talent Accelerator 3.0: Innovation Cohort

COLLEGE	PARTNERS	PROGRAM TITLE AND DESCRIPTION
The University of Connecticut	Pratt & Whitney – RTX	Will launch AI for Systems Engineering, a new 12-credit graduate certificate expected to serve 20–25 learners during the grant period and scale to 40–60 per year afterward. Anchored in aerospace manufacturing, it prepares incumbent engineers to apply AI across manufacturing supply chains.
The University of Hartford	Berkley Financial Specialists, Synchrony, Hartford Steam Boiler	Will launch a two-pillar AI in Business Learning Pathway, embedding AI-enhanced modules across undergraduate courses for 150–250 learners and offering a four-course graduate certificate for 15–25 post-baccalaureate learners.
The University of New Haven	Travelers	Will implement a for-credit AI for Cybersecurity concentration within its BS in Cybersecurity, designed to produce about 20 learners, featuring a 120-hour capstone using anonymized industry data and stackable micro-credentials through Riipen and IBM SkillsBuild.
The University of Saint Joseph	CGI, VRSim	Will launch a credit-bearing, employer-aligned applied AI pathway serving 50–70 learners, combining a new AI Applications course, stackable micro-credentials, an Applied AI for Business Certificate, a year-long capstone, and paid summer internships.
Western Connecticut State University	Northwell Health’s Danbury Hospital, Greater Danbury Chamber of Commerce, Connect Healthcare Regional Sector Partnership, AI Techlife USA Inc.	Proposes the AI-Ready Nursing Simulation Pathway, integrating two for-credit courses with a noncredit, eight-week Applied Generative AI Certificate to serve 25–30 unduplicated learners.

The Preliminary AI Skills Framework

Designed to capture early insights and build capacity across the state. Developed from the Pilot grant phase, the framework translates TTA's tested model into best practices and practical insights for institutions and employers working to design or update AI programs.

THE PRELIMINARY FRAMEWORK INCLUDES



A landscape analysis of AI's impact on jobs in Connecticut

To identify priority occupations for program development.



Voices from the Field

Employer and higher education insights on the data, surfacing gaps and highlighting opportunities for collaboration.



Employer-validated, role-specific AI skills maps

For software engineers and business analysts, offering a replicable model for aligning curricula with industry needs.



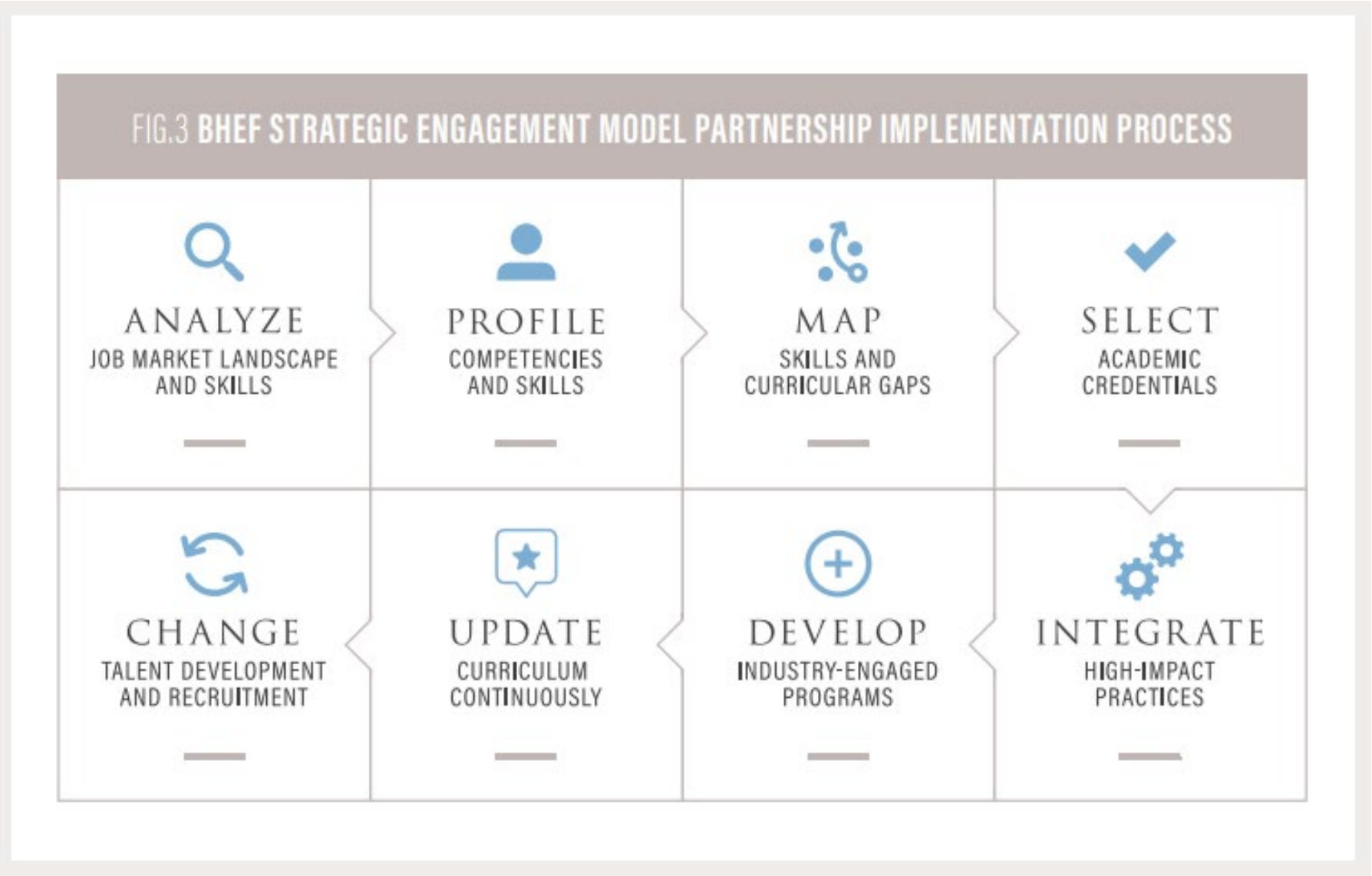
BHEF's AI-Enabled Professional Framework

Outlining the foundational AI competencies needed across roles and career stages.

Together, these resources provide a starting point for action. As Pilot and Innovation grantees continue to implement and refine their approaches, the framework will evolve, incorporating real-world examples to scale what works across Connecticut.

BHEF’s Strategic Engagement Model: Guiding Partnership Implementation

Provides a structured process for aligning business and higher ed around shared talent needs.



APPLYING THE MODEL TO THE AI SKILLS FRAMEWORK

Analyze. Analyzed labor market data to identify AI talent needs.

Profile Competencies and Skills. Validated labor market data with employers and created two examples of employer-validated AI skills maps.

WHAT COMES NEXT

TTA 3.0 grantees will work through the next steps in the process, generating best practices and implementation examples.



SECTION 01

Landscape Analysis

A data-driven view of how AI is reshaping roles in Connecticut — highlighting where demand is growing, which industries are being transformed, and how impacts vary across roles and career stages.

WHAT'S INCLUDED

- National AI data and dynamics shaping the labor market
- Statewide AI-enabled talent demand
- Statewide entry-level and mid- to advanced-level AI-enabled talent demand
- AI talent demand by industry, including Professional Services, Finance, Manufacturing, Information, and Healthcare

HOW TO USE IT

- Identify priority talent needs to inform new or expanded training programs
- Compare Connecticut AI transformation to national transformation
- Understand which roles, industries, and career stages are most impacted
- Surface gaps in job postings data as discussion points for validation with industry

Methodology

TERMINOLOGY

AI-Enabled Job Postings

Include 1 or more AI skills as defined by Stanford’s 2026 AI Index Report

Entry-Level Job Postings

Include job postings that request 0–3 years of experience

Mid-to-Advanced Level Job Postings

Include job postings that request 4+ years of experience

Industry Cross-Cutting Occupation

At least 5 AI-enabled job postings in more than 8 two-digit NAICS industries

AI ADOPTION BY OCCUPATION

Pervasive adoption	Greater than 50% of job postings are AI-enabled
Broad adoption	Between 21% and 49% of job postings are AI-enabled
Emerging adoption	Between 12% and 20% of job postings are AI-enabled

Source: Lightcast.



SOURCE & SEARCH CRITERIA

Lightcast

Collects real-time data from over 160,000 sources every day, contributing to a database with over 2.5 billion job postings.

Education and Experience Criteria

Job postings include those that request any level of education (degree) and any level of experience, unless otherwise specified.

Timeframe

Past 12 months unless specified otherwise (June 2025–June 2026)

Region

Connecticut

KEY FINDINGS

Global & National AI Data and Dynamics Shaping the Labor Market

01 AI is reshaping jobs, not simply replacing them.

Demand for AI skills continues to grow, and AI is changing the tasks performed within occupations, though its long-term impact on employment and job creation remains uncertain.

02 Entry-level work is changing as expectations rise.

As AI automates routine tasks and supports more complex work, entry-level employees are increasingly expected to take on higher-value work requiring stronger judgment and problem-solving. This is widening the gap between the skills employers expect and how prepared learners feel to enter the workforce.

03 Organizations are rethinking how workers learn and where AI adds value.

As AI takes on tasks traditionally used for training, employers need new ways for workers to practice, experiment, and build expertise. At the same time, leaders are shifting from an “AI-first” mindset toward a more measured approach that balances AI capabilities with human expertise.

KEY FINDINGS

Statewide Data and Dynamics Shaping the Labor Market

AI dispersion is happening fast

1 in 32 CT jobs now request AI skills (~18,000 postings/year), up from 1 in 52 a year ago and 1 in 70 two years ago.

AI skills give workers a wage premium

AI-enabled roles in CT command a significant wage premium, with median advertised salaries nearly double those of non-AI-enabled roles.

Industry spread is broadening

AI-enabled job postings are becoming more evenly distributed across industries.

Durable skills are the differentiator

As AI automates routine tasks, employers place greater emphasis on leadership, management, innovation, and operations.

Geographic concentration

Greater Hartford leads in AI-enabled job postings, followed by Bridgeport-Stamford-Danbury and New Haven.

Degree requirements remain high

AI-enabled roles offer opportunities across experience levels, but most require at least a bachelor's degree.

Top occupations track AI's automation potential

The top occupations requesting AI skills span traditional technology and data roles as well as business and financial roles, such as management analysts and marketing professionals.

AI skills travel with other technical skills

AI skills demand tends to be accompanied by other highly technical skills with high predicted growth.

KEY FINDINGS

Entry-Level vs. Mid-Advanced Level

As employer expectations for entry-level talent rise, there may also be an opportunity for early-career workers to stand out. Entry-level talent who can use AI responsibly to increase their productivity while demonstrating durable skills may be able to contribute at a higher level earlier in their careers, narrowing some of the traditional experience advantage held by more seasoned workers.

Only 1 in 5 AI-enabled postings are entry-level

And even those typically call for about two years of experience.

Expectations are rising for degrees

Entry-level AI-enabled jobs continue to favor bachelor's degree holders, with a growing share of postings now requesting master's degrees.

Durable skills matter even at entry level

Employers prioritize leadership, management, creativity, and problem solving.

Mid-advanced volume nearly doubles entry-level

Mid-advanced level AI-enabled job postings nearly double entry-level volume in Connecticut.

Entry-level demand skews more technical

This may reflect growing expectations that early-career talent enters the workforce with technical and AI skills, while more experienced workers are expected to apply AI alongside broader business, leadership, and management expertise.

KEY FINDINGS

By Industry

Across industries, AI demand is expanding beyond traditional tech roles, but the types of workers employers seek vary by sector. For now, AI-enabled demand remains concentrated in higher-skill professional, business, administrative, and technology roles rather than frontline, production, or patient-facing work.

Professional Services

The top industry seeking AI-enabled talent in CT, hiring for technology, data, and business roles.

Finance and Insurance

Employers are seeking AI-enabled technology and business/finance talent.

Manufacturing

A variety of experience requirements and an overwhelming preference for a bachelor’s degree, indicating the roles that need AI skills are most likely not trades or production.

Information

Only about 2% of CT’s workforce, which limits posting volume, but AI-enabled postings have grown steadily since late 2022. Employers expect AI skills even from non-tech workers — including operations, HR, and marketing.

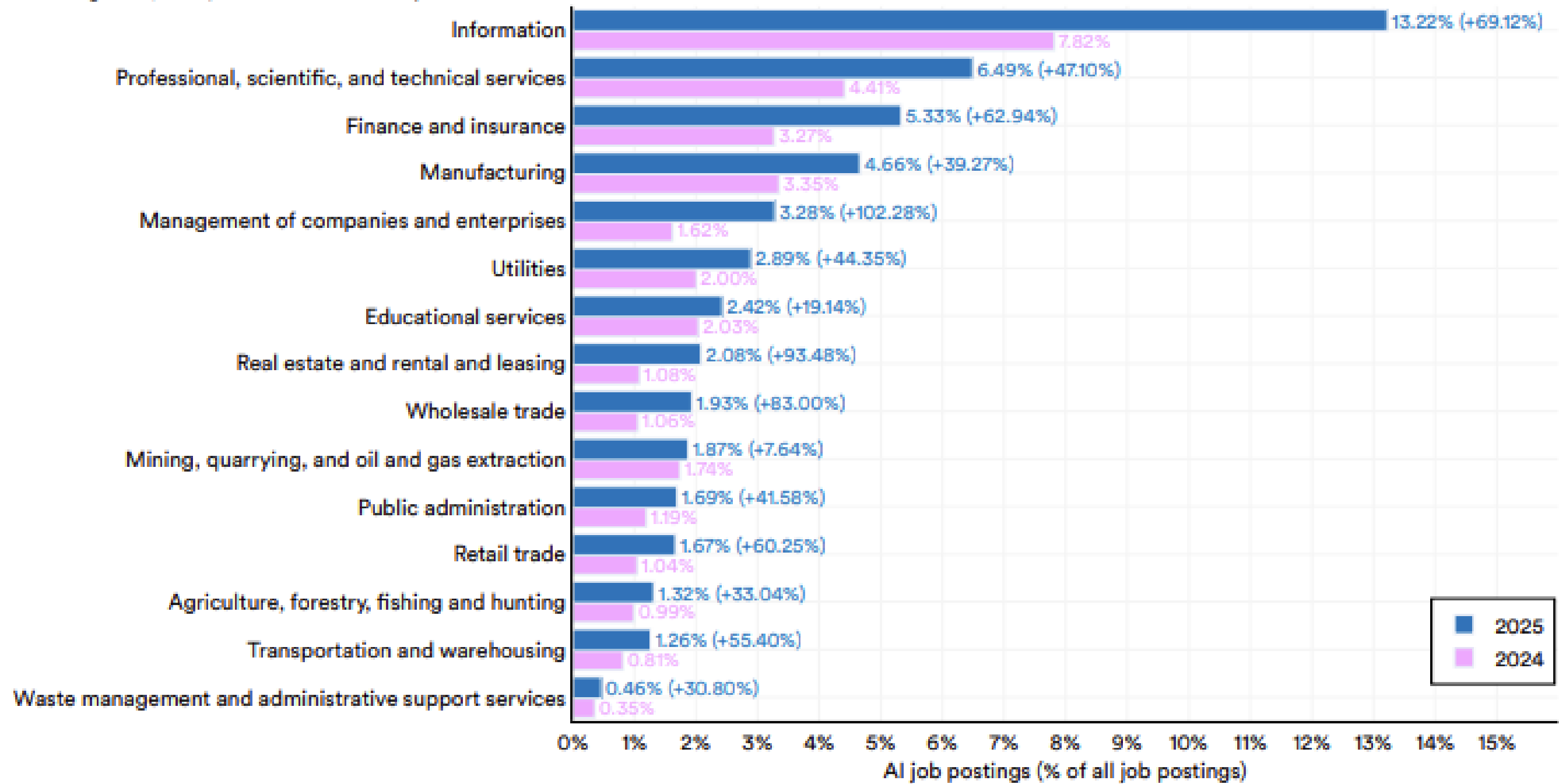
Healthcare

AI-enabled postings remain a small share of the healthcare job market, but demand is growing rapidly — concentrated in administrative and technology roles rather than patient-facing positions.

Demand for AI skills is accelerating across the entire economy.

AI job postings (% of all job postings) in the United States by sector, 2024 vs. 2025

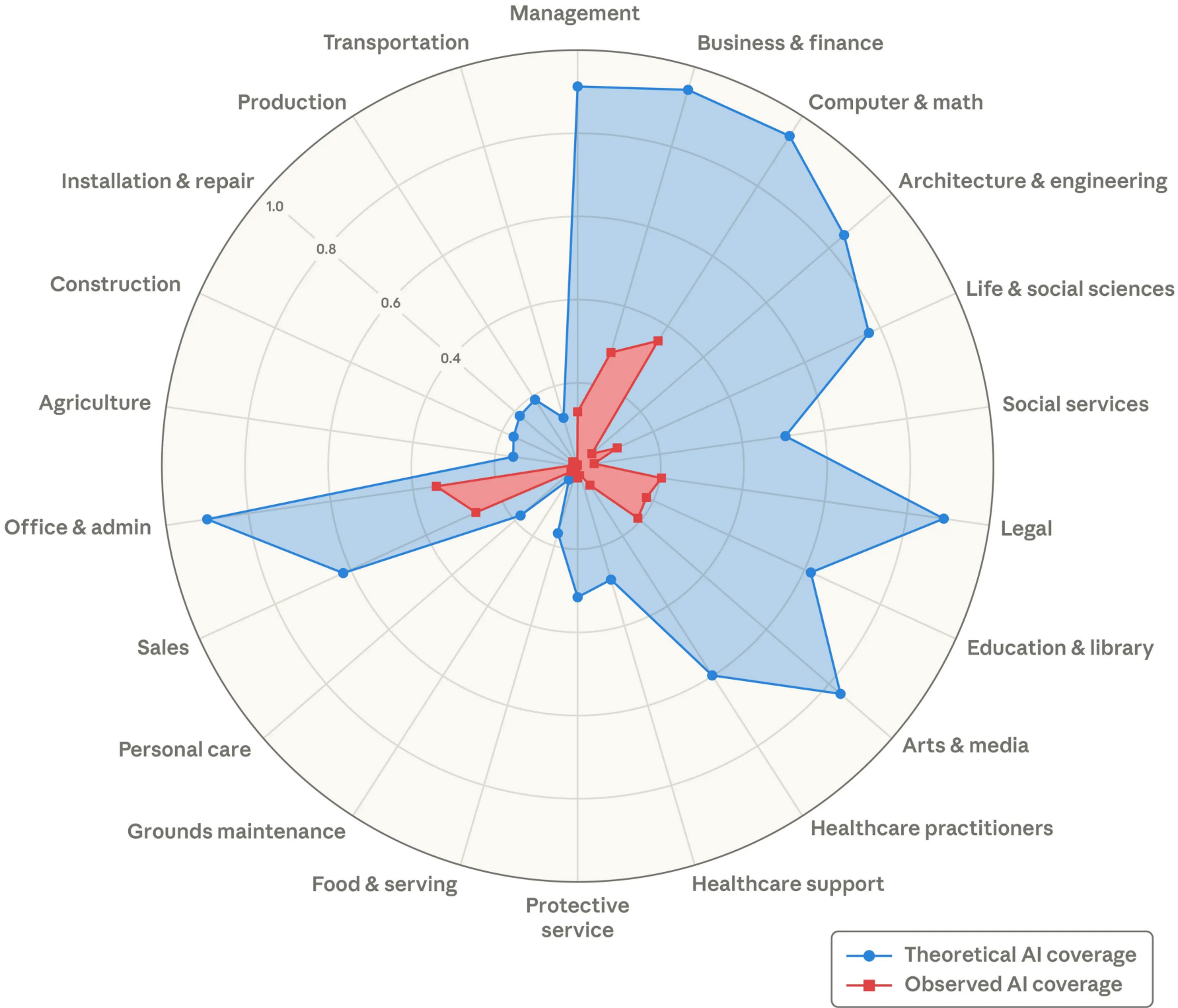
Source: Lightcast, 2025 | Chart: 2026 AI Index report



Source: Stanford University, *The 2026 AI Index Report*.

Theoretical capability and observed usage by occupational category

Today’s AI use is only the beginning. Current usage aligns with where AI has the greatest potential, but most occupations have yet to realize the full extent of AI’s capabilities, indicating substantial disruption is still ahead.



Source: Anthropic, *Labor market impacts of AI: A new measure and early evidence*.

AI is reshaping occupations in two distinct ways. In some occupations, AI is automating higher-level expert tasks, leaving workers to focus on less expert tasks like labor. In others, AI is automating routine tasks, allowing professionals to spend more time on higher-value, expert tasks.

AI is having two different impacts on jobs depending on whether it is automating more or less expert² tasks

52% of jobs are being
DEMOCRATISED
(shifted toward less expert tasks)

Example: Inventory Clerk

More expert tasks like manage inventory
AI automated
Less expert tasks like move stock
Remain

22% of jobs are being
PROFESSIONALISED
(shifted toward more expert tasks)

Example: Recruiter

More expert tasks like negotiate contracts
Remain
Less expert tasks like screen CVs
AI automated

Source: PwC, 2026 AI Global Jobs Barometer.

AI is raising the bar for entry-level talent. As AI reshapes the distribution of work within occupations, entry-level workers are increasingly expected to demonstrate senior-level skills from day one.

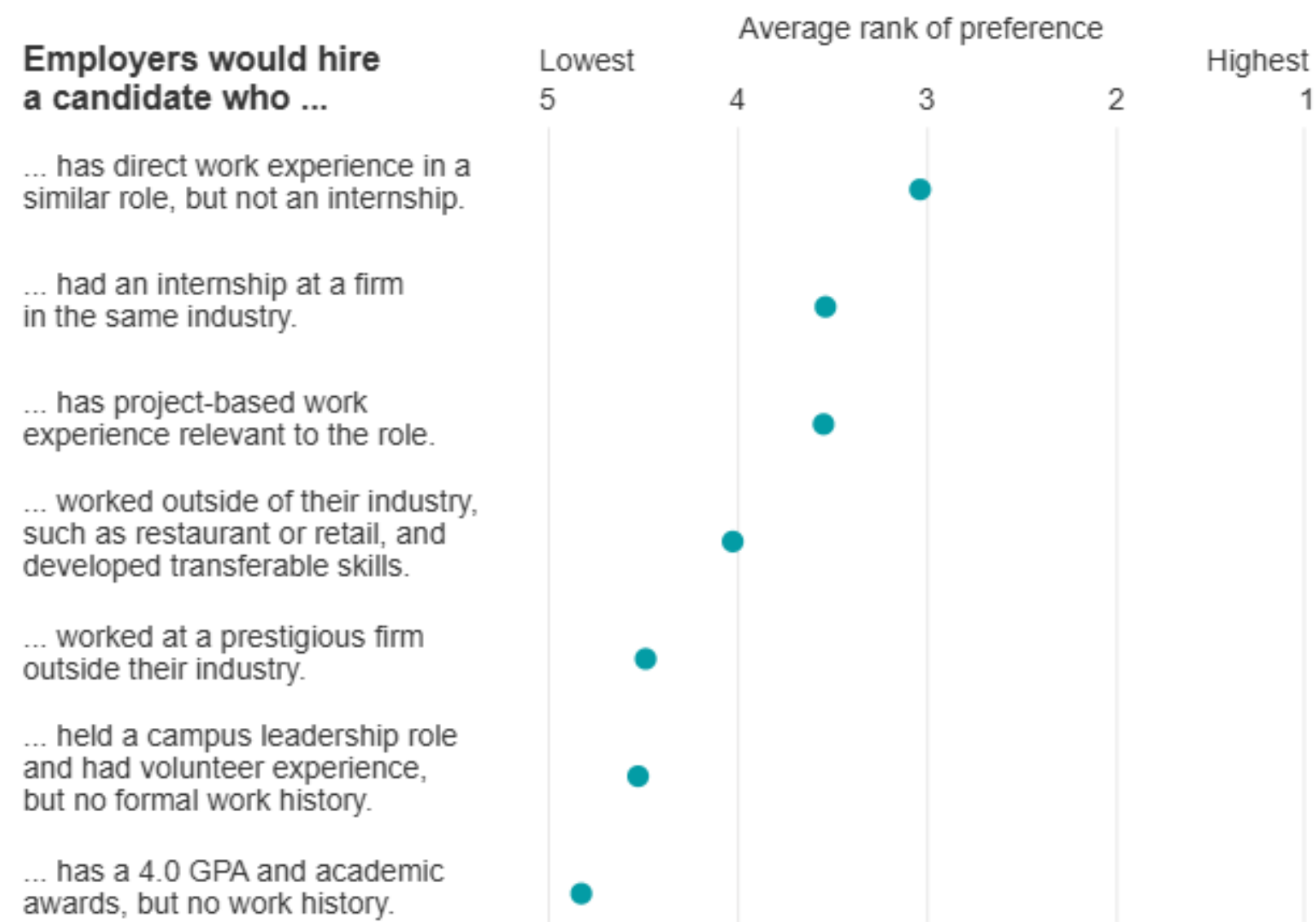
35%

**Entry level roles that now
require more than 10 new,
traditionally senior skills
are thriving with a growth
rate of 35%**

Source: PwC, 2026 AI Global Jobs Barometer.

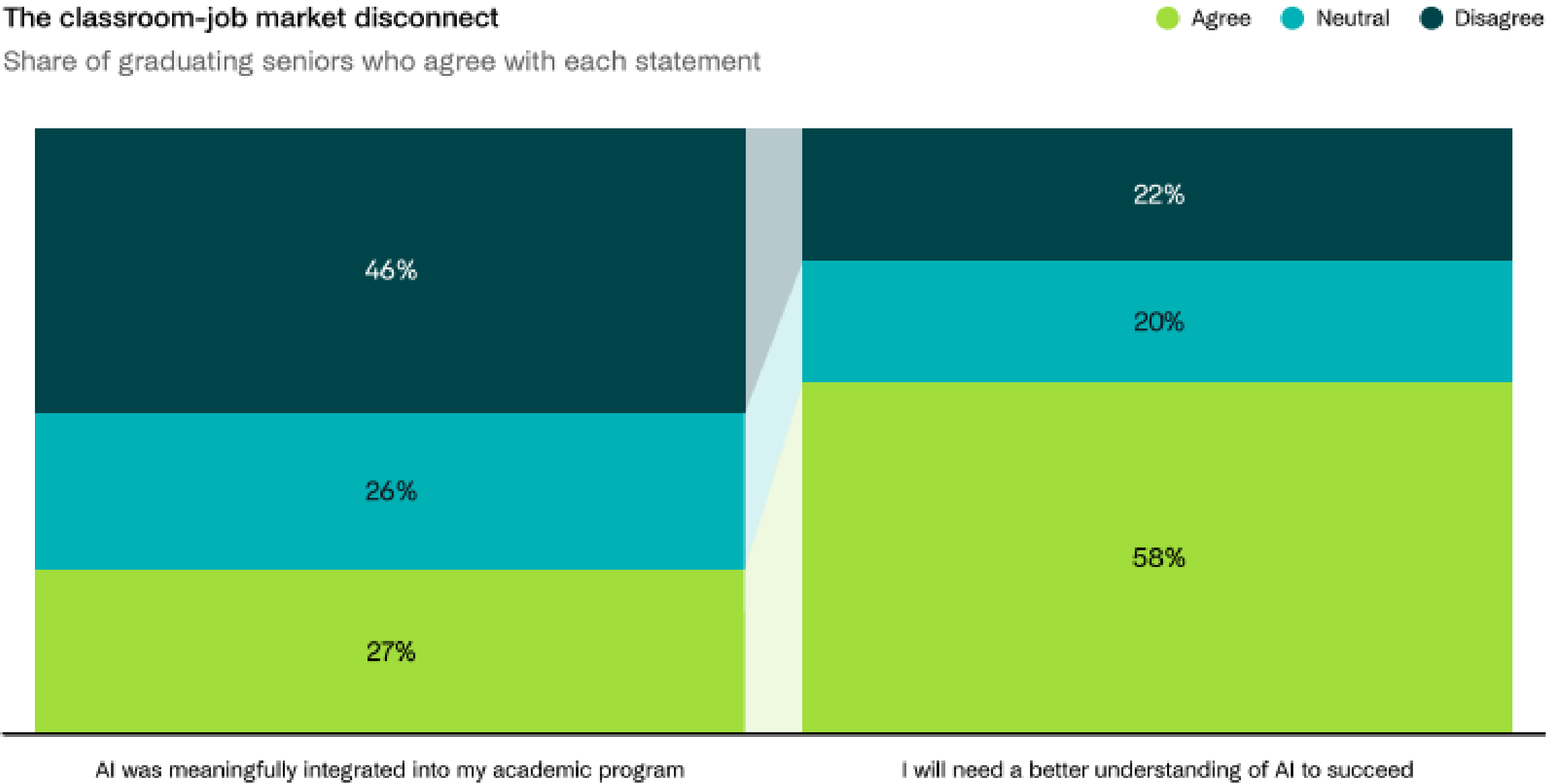
As expectations for entry-level talent rise, embedding work-integrated learning into academic programs matters more than ever. Employers increasingly prioritize candidates with direct work experience, internships, and project-based learning.

Employers' Average Rank of Preference of Profiles of Recent College Graduates



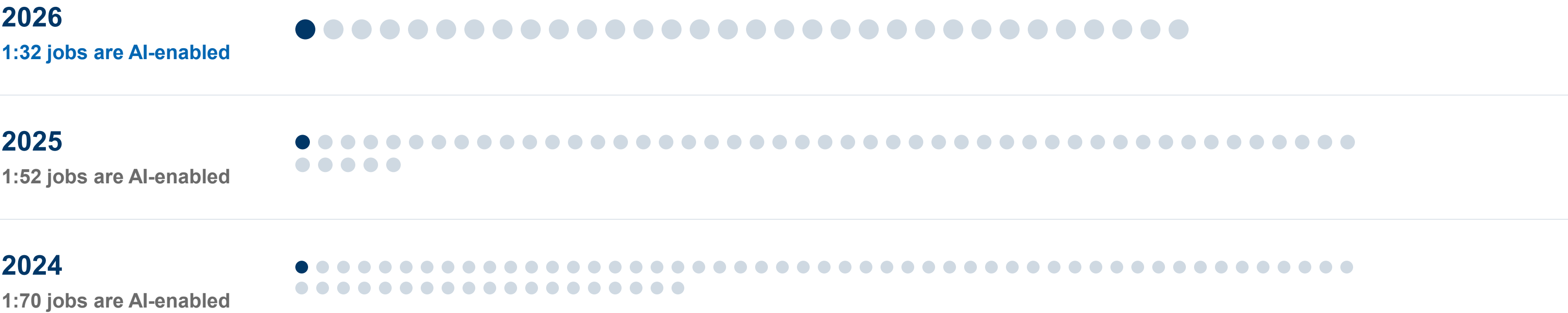
Source: Strada, *Entry-Level Hiring in the AI Era: What Employers are Thinking (and Doing)*.

Students don't feel adequately prepared for an AI-enabled workforce. Many report lacking AI skills and believe AI was not meaningfully integrated into their academic programs.



Source: Handshake, *AI and the Workforce Ahead: Survey of the Class of 2026*.

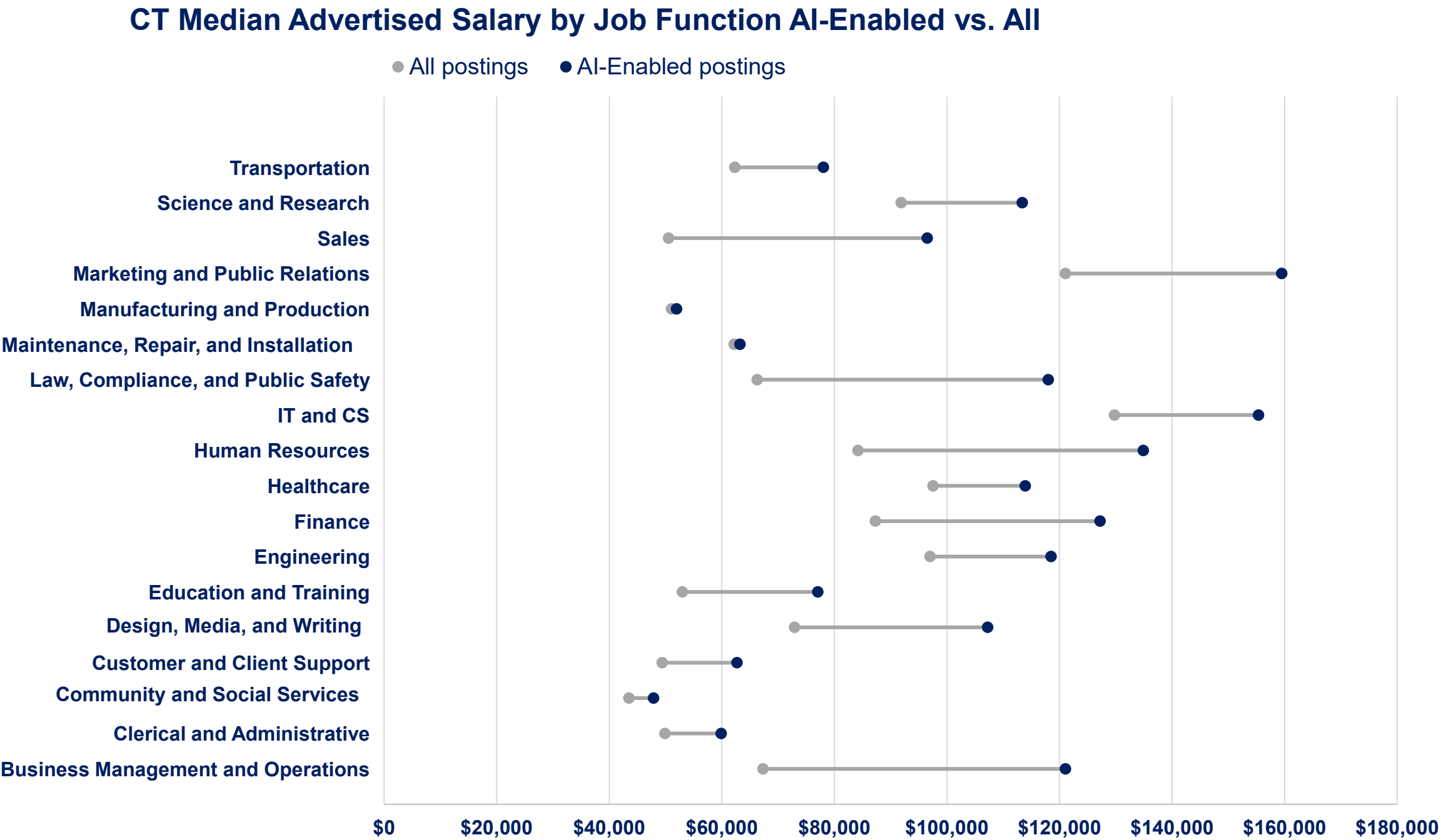
Today, 1 in 32 jobs in Connecticut request AI skills (18,000 job postings over the past year), up from 1 in 52 a year ago.



Source: Lightcast. Note: Based on total AI job postings in Connecticut over the past year (June 2025–June 2026) for any occupation or industry.

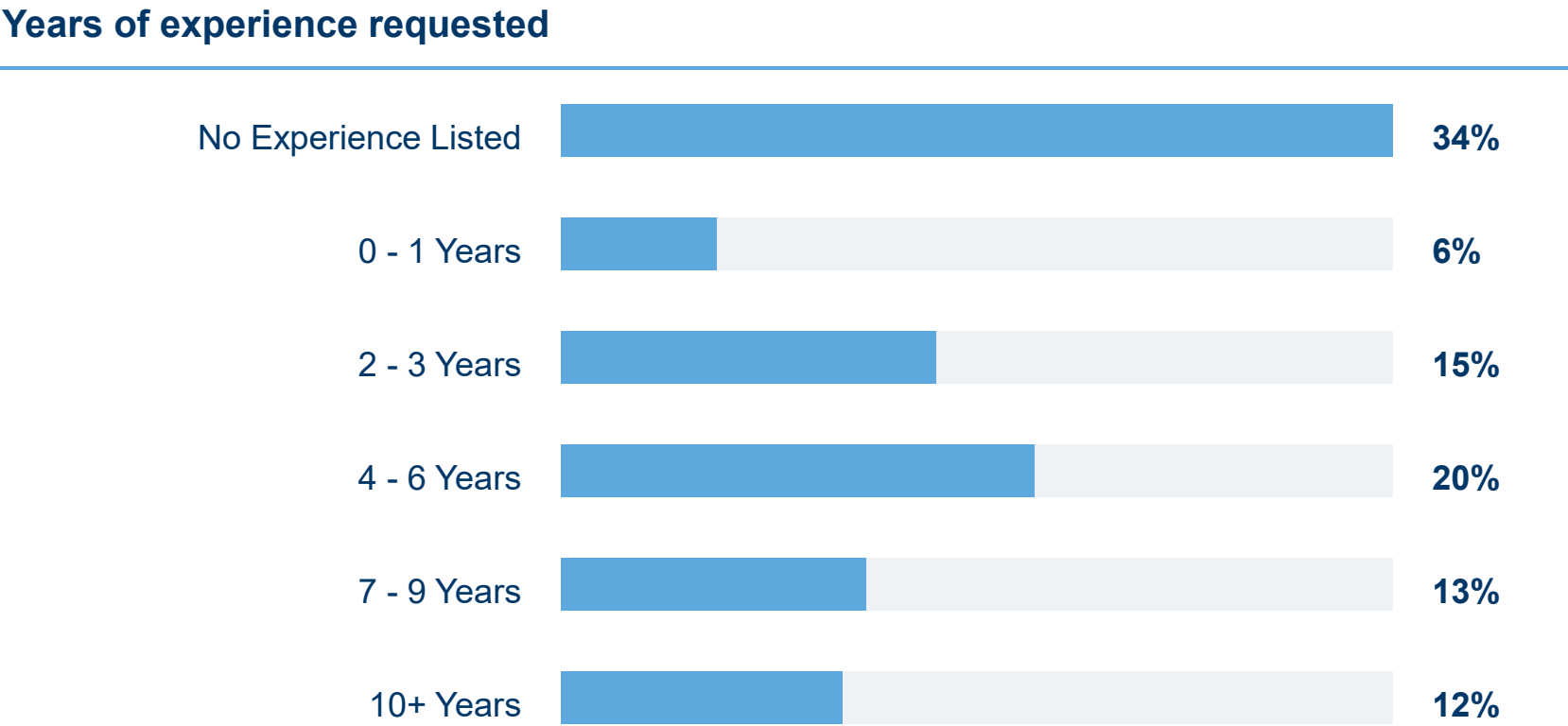
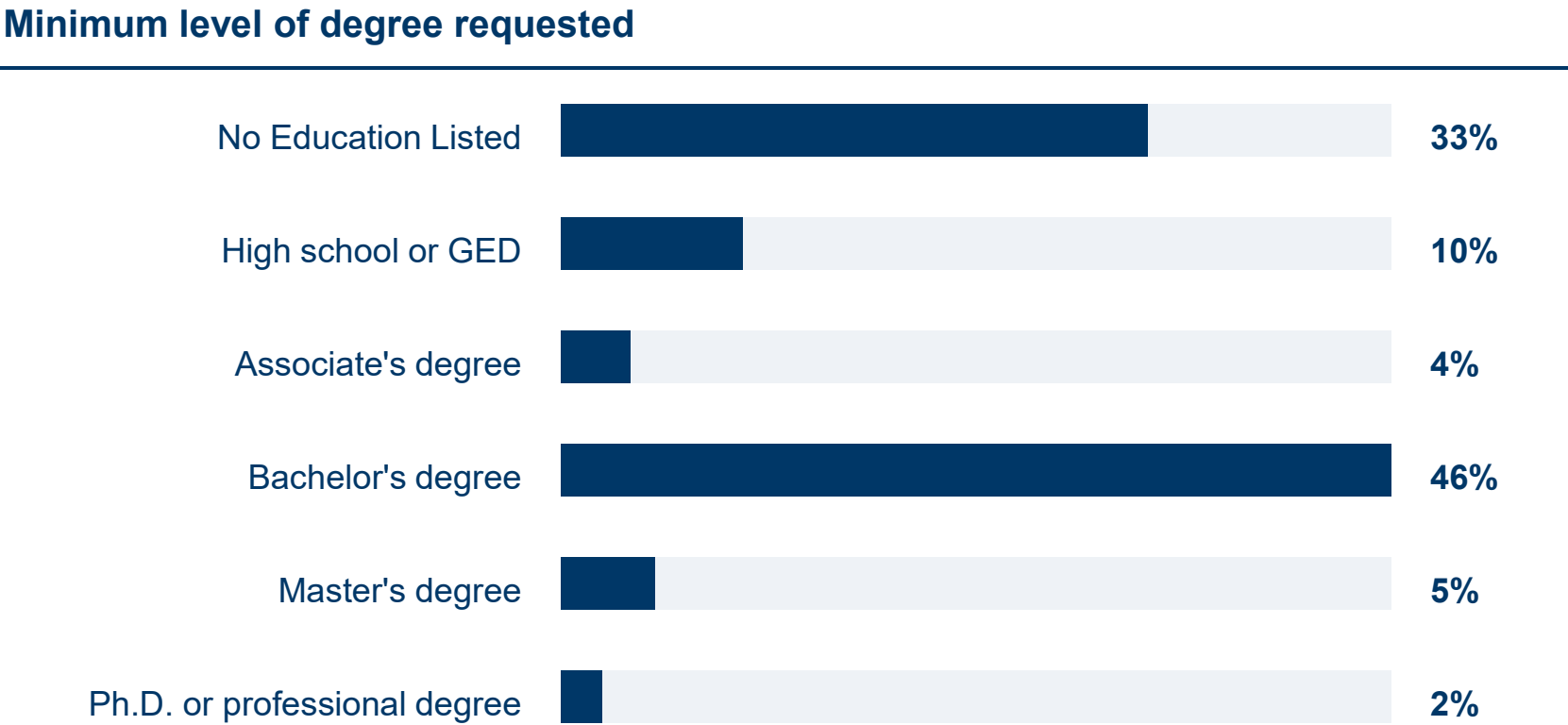
In Connecticut, AI skills command a significant wage premium across a wide range of occupations, with the smallest gains in skilled trades roles.

On average, the median advertised salary for an AI-enabled role in Connecticut is **\$133,000**, compared to **\$67,000** for a non-AI-enabled role.



Source: Lightcast. Note: Median advertised salary by career area, Connecticut, June 2025–June 2026.

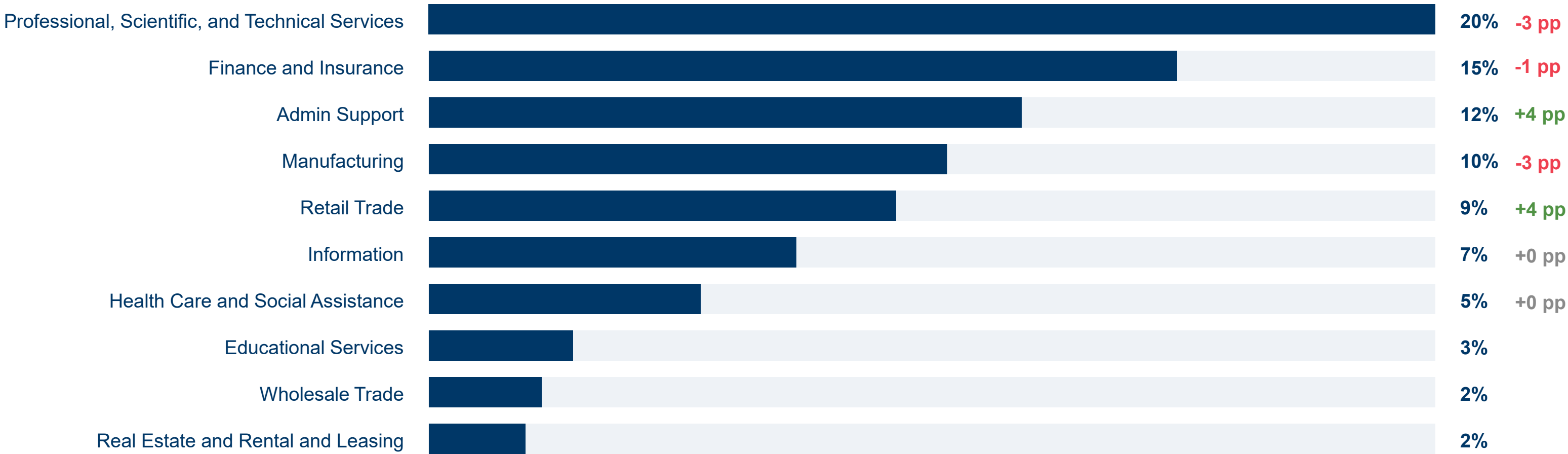
AI-enabled jobs in Connecticut set a higher bar for education and experience. Most require a bachelor’s degree (compared to just 21% of other CT jobs) and tend to require more experience.



Source: Lightcast. Note: Based on total AI job postings in Connecticut over the past year (June 2025–June 2026) for any occupation or industry.

While Professional Services and Finance account for more than one-third of CT’s AI-enabled job postings, demand is broadening across industries and growing in sectors such as Admin Support and Retail Trade, where AI demand has historically been less concentrated.

Share of Connecticut’s AI-Enabled Job Postings by Industry in Connecticut and Percentage Point Change from Previous Year



Source: Lightcast. Note: Based on total AI job postings in Connecticut over the past year (June 2025–June 2026) for any occupation or industry.

Top 20 AI-Enabled Occupations — By Number of Job Postings

Job Title	AI-Enabled Job Postings	Share of Occupation Postings
Software Developer / Engineer	1,351	26%
Artificial Intelligence Engineer	1,241	99%
Computer Systems Engineer / Architect	665	30%
Product Manager	444	25%
Business / Management Analyst	372	14%
Database Architect	363	81%
Data Scientist	361	75%
Marketing Manager	314	18%
Business Development / Sales Manager	270	6%
Physician	261	2%
Cyber / Information Security Engineer / Analyst	235	20%
Registered Nurse	229	0.4%
Account Executive	219	12%
Project Manager	209	5%
Data / Data Mining Analyst	207	27%
Data Engineer	201	21%
General Manager	201	8%
Engineering Manager	191	12%
Physical Therapist	184	2%
Financial Manager	183	8%

Source: Lightcast. Note: Based on total AI job postings in Connecticut over the past year (June 2025–June 2026) for any occupation or industry.

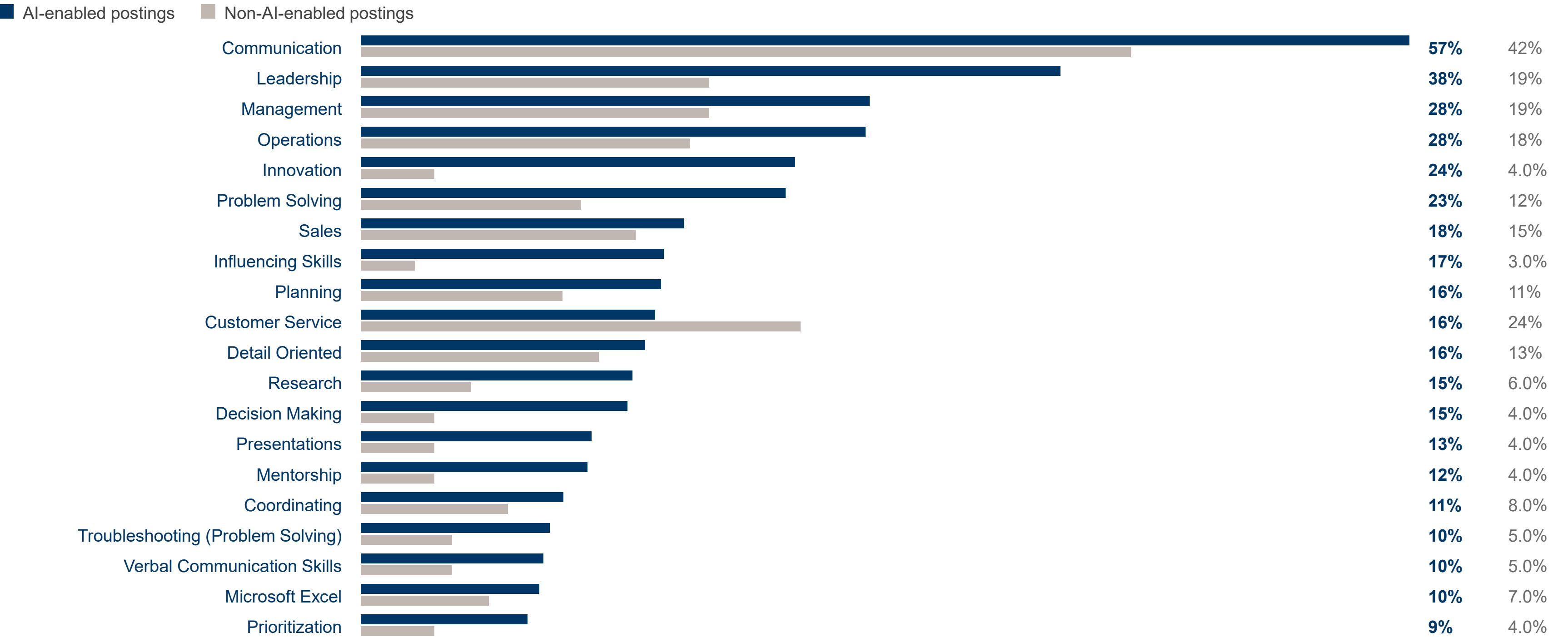
Top AI-Enabled Occupations — By Share of Occupation Job Postings

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Source: Lightcast. Note: Based on total AI job postings in Connecticut over the past year (June 2025–June 2026) for any occupation or industry.

AI-enabled jobs span a range of experience levels, but employers are placing greater emphasis on higher-level durable skills — leadership, management, innovation, and operations.

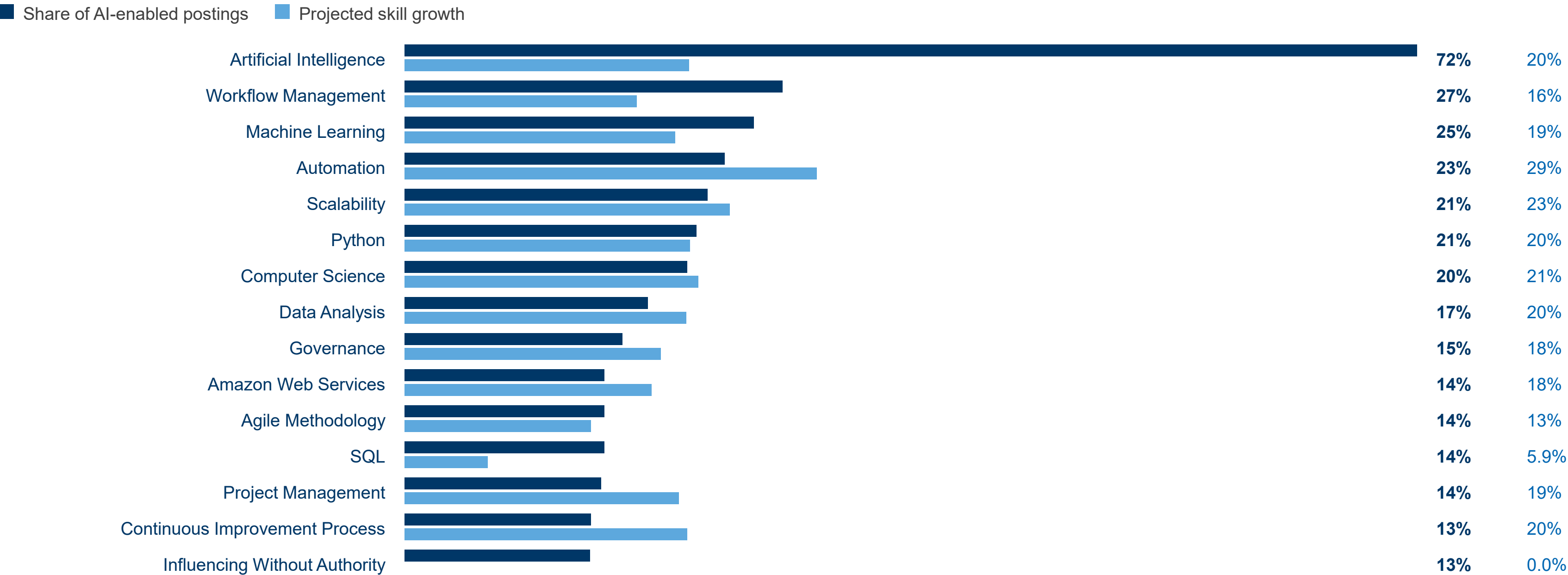
Top Durable Skills Requested in CT AI-Enabled Job Postings Compared to CT Non AI-Enabled Job Postings (Past Year)



Source: Lightcast. Note: Based on total AI job postings in Connecticut over the past year (June 2025–June 2026) for any occupation or industry.

AI skills demand tends to be accompanied by other highly technical skills with high predicted growth.

Top Specialized Skills Requested in AI-Enabled Job Postings in Connecticut, Past Year, and Projected Skill Growth



Source: Lightcast. Note: Based on total AI job postings in Connecticut over the past year (June 2025–June 2026) for any occupation or industry.

Industry Cross-Cutting AI-Enabled Occupations

Occupation	Total AI-Enabled	Professional Services	Finance & Insurance	Manufacturing	Information	Healthcare
Software Developer / Engineer	1,351	371	271	116	109	10
Artificial Intelligence Engineer	1,241	383	226	177	83	15
Computer Systems Engineer / Architect	665	157	128	106	57	6
Product Manager	444	74	80	62	72	5
Database Architect	363	128	64	32	18	8
Data Scientist	361	42	103	58	21	7
Data / Data Mining Analyst	207	46	36	29	16	8
Analytics Manager	144	30	37	23	6	4

Source: Lightcast. Note: Based on total AI job postings in Connecticut over the past year (June 2025–June 2026) for any occupation or industry.

Top 20 Professional Services AI-Enabled Occupations — By Number of Job Postings

Job Title	AI-Enabled Job Postings	Share of Occupation Postings in Industry
Business Development / Sales Manager	94	18%
Business / Management Analyst	86	16%
Marketing Manager	78	28%
IT Project / Program Manager	72	21%
Cyber / Information Security Engineer / Analyst	63	23%
Account Executive	60	22%
Software QA Engineer / Tester	55	23%
Chief Information Officer	47	56%
Business Intelligence Architect / Developer	44	13%
Sales Engineer	40	62%
UI / UX Designer / Developer	39	41%
Project Manager	38	4%
Engineering Manager	36	17%
Operations Manager / Supervisor	33	12%
Financial Manager	32	16%
Retail Sales Associate	32	12%
Data Engineer	27	31%
Software Development / Engineering Manager	26	68%
Technology Consultant	26	14%

Source: Lightcast. Note: Professional, Scientific, and Technical Services industry, Connecticut, June 2025–June 2026.

Top 20 Finance and Insurance AI-Enabled Occupations — By Number of Job Postings

Job Title	AI-Enabled Job Postings	Share of Occupation Postings in Industry
General Manager	110	25%
Business / Management Analyst	84	12%
Financial Manager	70	17%
Data Engineer	66	57%
Actuary	45	14%
Product Owner	45	26%
Marketing Manager	44	23%
Risk Analyst	44	23%
Chief Information Officer	42	58%
Personal Financial Advisor	40	5%
Cyber / Information Security Engineer / Analyst	34	24%
Software Development / Engineering Manager	30	5%
Engineering Manager	28	33%
IT Manager / Director	28	42%
Loan Officer	27	13%
Financial Analyst	26	8%
Personal Banker / Banking Sales Staff	26	2%
Insurance Underwriter	22	4%
Project Manager	22	9%
Business Development / Sales Manager	20	5%

Source: Lightcast. Note: Finance and Insurance industry, Connecticut, June 2025–June 2026.

Top 20 Manufacturing AI-Enabled Occupations — By Number of Job Postings

Job Title	AI-Enabled Job Postings	Share of Occupation Postings in Industry
Marketing Manager	48	15%
Engineering Manager	38	7%
Medical Director	33	17%
Business / Management Analyst	29	13%
UI / UX Designer / Developer	26	39%
Manufacturing Engineer	23	3%
Operations Manager / Supervisor	22	5%
Business Development / Sales Manager	22	3%
Chief Information Officer	21	46%
Marketing Specialist	21	21%
Cyber / Information Security Engineer / Analyst	20	11%
Mechanical Engineer	19	3%
IT Project / Program Manager	19	13%
Accountant	18	7%
Financial Analyst	17	8%
Financial Manager	17	8%
Project Manager	15	4%
Lawyer	15	13%
Account Manager / Representative	15	2%
Electrical Engineer	14	5%

Source: Lightcast. Note: Manufacturing industry, Connecticut, June 2025–June 2026.

Top 20 Information AI-Enabled Occupations — By Number of Job Postings

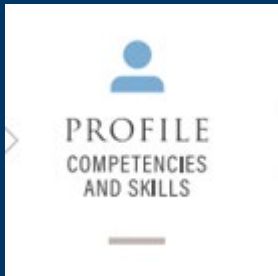
Job Title	AI-Enabled Job Postings	Share of Occupation Postings in Industry
Account Executive	74	19%
Medical Records / Health Information Technician	72	76%
Business Development / Sales Manager	41	15%
Marketing Manager	37	20%
UI / UX Designer / Developer	30	52%
General Manager	29	35%
Business / Management Analyst	27	20%
Cyber / Information Security Engineer / Analyst	22	19%
Engineering Manager	19	27%
Chief Information Officer	18	58%
Operations Manager / Supervisor	17	10%
Marketing Specialist	15	24%
Project Manager	12	9%
Communications / Public Relations Manager	12	17%
Retail Store Manager / Supervisor	12	6%
Program Manager	11	14%
Business Intelligence Analyst	11	29%
Software Development / Engineering Manager	11	50%
Editor	10	13%
Data Engineer	10	30%

Source: Lightcast. Note: Information industry, Connecticut, June 2025–June 2026.

Top 20 Healthcare AI-Enabled Occupations — By Number of Job Postings

Job Title	AI-Enabled Job Postings	Share of Occupation Postings in Industry
Registered Nurse	177	0.5%
Physician	163	4.5%
Software QA Engineer / Tester	49	86.0%
Psychologist	29	4.2%
Nurse Practitioner	28	0.7%
Physical Therapist	22	0.6%
Healthcare Administrator	18	0.8%
Radiologic Technician / Technologist	16	0.5%
Registrar / Patient Service Representative	12	0.6%
Quality Inspector / Technician	11	5.8%
Family / School / General Social Worker	9	1.5%
Nursing Assistant	9	0.2%
Ultrasound Technologist / Sonographer	8	1.7%
Clinical Analyst / Clinical Documentation and Improvement Specialist	7	7.1%
Clinical Data Systems Specialist	7	8.6%
Human Resources / Labor Relations Specialist	7	4.1%
Medical Director	7	2.7%
Nursing Manager / Supervisor	7	0.2%
Operations Analyst	7	18.9%
Program Manager	7	1.0%

Source: Lightcast. Note: Healthcare industry, Connecticut, June 2025–June 2026.



SECTION 02

Voices from the Field

Conversations with business and higher ed

The landscape analysis offered a data-driven view of how AI is reshaping jobs in CT. But job postings alone don't tell the full story, especially in a moment of rapid change.

In partnership with the Southwest CT Tech Hub and the Capital Area Tech Partnership, BHEF convened two roundtables to share the findings, validate emerging trends, and better understand how AI is impacting talent needs, hiring practices, and training approaches across industries.

WHAT'S INCLUDED

- What's shifting now in response to AI?
- Where are employers and institutions facing the greatest challenges in AI adoption?
- What priorities are emerging as organizations adapt to AI-driven change?

HOW TO USE IT

- Identify where employers and higher education institutions are aligned, and where gaps remain
- Understand how organizations are navigating near-term change
- Pinpoint opportunities for partnership and program development

Participating Partners



Participating Partners



Signals, Tensions, and Emerging Priorities for Employers

Signals of Change

WHAT'S SHIFTING

- 01 Task-level automation is already visible across functions and roles.
- 02 AI is compressing time-to-productivity and shortening the learning curve for entry-level workers.
- 03 Entry-level roles are intensifying and require higher proficiency on day one.
- 04 AI integration varies significantly by industry, role, company, and size.
- 05 Organizations are using AI internally to identify which tasks to automate.

Core Tensions

WHAT'S CREATING FRICTION

- 01 Fear and uncertainty around AI adoption persists.
- 02 AI literacy varies across teams.
- 03 Workers need AI literacy, a healthy skepticism, and the ability to interpret AI outputs responsibly, but training hasn't caught up.
- 04 In data-sensitive industries like healthcare, caution creates friction even where interest exists. **Case Study 01**
- 05 Workplace exposure and practical skills application are real gaps for early-career talent. **Case Study 02**

Emerging Priorities

WHAT LEADERS ARE PRIORITIZING

- 01 Embedding AI expectations into roles and hiring criteria in 2026, across all job families.
- 02 Re-designed workflows.
- 03 Opportunities for experimentation and play to build comfort with AI tools, such as internal competitions.
- 04 Establishing guardrails and awareness around data privacy and governance.

Signals, Tensions, and Emerging Priorities for Higher Ed

Signals of Change

WHAT'S SHIFTING

- 01 Learners outpace faculty in AI fluency and everyday tool use.
- 02 Demand is growing for tailored AI training tracks tied to specific roles and industries.
- 03 AI literacy is becoming a baseline expectation across all disciplines, not just technical fields.

Core Tensions

WHAT'S CREATING FRICTION

- 01 A wide faculty readiness gap exists while structured AI development programs are absent.
- 02 Learners are unaware of ethical AI use and data risks.
- 03 AI literacy starting points vary widely, so building standardized training is difficult.

Emerging Priorities

WHAT LEADERS ARE PRIORITIZING

- 01 Designing tailored role- and industry-specific training tracks. **Case Study 03**
- 02 Teaching AI durable skills like healthy skepticism alongside technical skills.
- 03 Expanding work-integrated learning opportunities that expose emerging talent to real workplace use cases.

How TTA Grantees Are Addressing Key Workforce Challenges

CASE STUDY 01

TTA 3.0 PILOT

In data-sensitive industries like healthcare, caution creates friction even where interest exists.

PARTNERS

**Masonicare ·
Access Health
CT · Wheeler
Health**

Quinnipiac University: AI for Business Innovation in Healthcare

In data-sensitive industries like healthcare, interest in AI is high, but caution around privacy, risk, and responsible use can make adoption challenging. Healthcare organizations need professionals who can identify where AI can add value, understand its limitations and risks, and confidently apply new tools within sensitive data environments.

QU designed its AI for Business Innovation in Healthcare program to help close that gap. Developed in partnership with healthcare employers, the seven-week online program gives working professionals a safe environment to build AI literacy and explore practical applications before bringing them into the workplace. Bringing together QU interdisciplinary expertise and flexible learning, the program addresses opportunities across clinical and care-team workflows, including documentation and decision support, as well as healthcare operations, such as analytics, process improvement, scheduling, patient access, quality, and employee productivity—all grounded in responsible use, privacy, and bias considerations. The program awards both an industry-recognized certification and a micro-credential that can be applied toward future degree pathways. Employer partners played a critical role in ensuring the curriculum addressed real workforce challenges rather than hypothetical use cases. Through ongoing feedback, industry leaders helped identify areas where AI could improve efficiency, support decision-making, enhance documentation processes, and strengthen patient and operational outcomes while maintaining appropriate safeguards around privacy and responsible use. This collaborative approach increased employer confidence in the program and enabled action-planning around real use cases that could be implemented immediately.

Early demand and outcomes reinforce the need:

- Employer partnership network expanded from three to seven healthcare organizations during program development and launch.
- 78% of learners were over the age of 35, demonstrating the demand for AI upskilling amongst incumbent workers in healthcare.
- 19 employer uses cases were developed and evaluated for feasibility by QU expert faculty setting employers up to take action towards implementation.
- 73 incumbent workers earned 1 or more industry-focused AI credentials.

The program demonstrates how strategic partnerships between higher education and employers can accelerate workforce readiness for emerging technologies. By engaging healthcare organizations throughout program development and implementation, Quinnipiac University created a trusted, employer-informed learning experience that generated demand beyond initial projections. The result is a scalable model for responsible AI adoption that helps healthcare organizations move from curiosity to practical application.

How TTA Grantees Are Addressing Key Workforce Challenges

CASE STUDY 02

TTA 3.0 PILOT

Workplace exposure and practical skills application are real gaps for early-career talent.

PARTNERS

**CGI · Charter
Oak Health
Center · VRSim**

University of Saint Joseph: Certificate in Applied AI for Business

As AI reshapes entry-level work, employers are asking more of early-career talent. Routine tasks that traditionally helped new employees build foundational knowledge are increasingly automated, while new hires are expected to exercise judgment, think critically, solve problems, and communicate effectively earlier in their careers. For CGI, a longtime business partner of the University of Saint Joseph (USJ), that meant needing early-career professionals who could work at the intersection of software development, AI, quality engineering, and business process improvement. Technical skills alone were not enough; graduates also needed to analyze problems, develop recommendations, and communicate solutions to technical and nontechnical stakeholders.

To address this need, in collaboration with CGI, USJ has revised four credit-bearing courses, is developing a new course on AI Applications, and is in the process of launching a Certificate in Applied AI for Business. These initiatives include opportunities for students to earn industry-recognized credentials like AWS Academy Generative AI Foundation certificates. USJ embedded work-integrated learning directly into the curriculum through CGI Consulting Challenges, capstone projects, and internships. Students work alongside peers on real CGI business challenges, have autonomy to test and iterate on ideas, and ultimately present their solutions to CGI leaders. These experiences built the necessary skills CGI was looking for as well as gave CGI fresh perspectives on real business challenges.

The partnership demonstrates the value of continuous employer–higher education collaboration as technology changes the nature of work. USJ gains real-time insight that keeps learning relevant, students gain the opportunity to practice higher-order skills in authentic workplace settings, and CGI gains both a stronger early-career talent pipeline and fresh perspectives on real business challenges.

How TTA Grantees Are Addressing Key Workforce Challenges

CASE STUDY 03

TTA 3.0 PILOT

Need for tailored role- and industry-specific training tracks.

PARTNERS

Nucor Wire Products · Greater New Haven Chamber of Commerce · NVIDIA

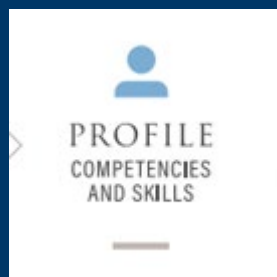
Southern Connecticut State University: OWLL AI in Manufacturing

All learners and workers need a baseline of AI literacy, but how workers apply AI varies significantly by industry and role. Effective training must reflect the unique skills employees need based not only on their roles and day-to-day responsibilities, but also on their ability to access and engage in training.

Southern Connecticut State University (SCSU) saw this opportunity through its partnership with Nucor. While employees expressed strong interest in AI, their existing knowledge, confidence, and potential use cases varied across roles. SCSU worked directly with Nucor leaders and employees to design training around real manufacturing needs, ultimately creating two distinct tracks: one for professionals in operations and business functions and another for employees on the manufacturing floor.

The partnership also provided important insight into how training needs to fit within the realities of the manufacturing environment. While employee and manager feedback initially informed a synchronous online model, implementation highlighted the challenges of asking employees to step away from the production floor for scheduled training, particularly when teams were understaffed and employees were working 12-hour shifts. These insights led SCSU to explore more flexible approaches to delivery, including a shift toward asynchronous learning, while continuing to refine the model based on employee engagement and support needs. Instructors also refined the content, reordered training, and added support based on participant feedback. The result is a new non-credit microcredential designed around both the skills manufacturers need and the realities of the workforce.

Early feedback shows that employees increased their understanding of how AI can improve efficiency, effectiveness, and problem-solving in their roles. The experience reinforced an important lesson: effective AI training is not just about what skills are taught—it is about continually adapting the content, applications, and delivery to the specific workers and workplaces the training is designed to serve. SCSU is using these lessons to continue refining the program so that AI upskilling is both relevant to industry needs and realistic for the employees being asked to participate.



SECTION 03

Select Priority Occupations, Identify In-Demand Role-Specific AI Skills, and Validate with Employers

- 01 Identify priority occupations.** Business analyst and software engineer were identified from the landscape analysis.
- 02 Validate with employers.** Employers reinforced that AI training must be tailored to specific industries and job functions.
- 03 Identify in-demand AI skills.** Draw on existing competency maps and combine with labor market data to draft skills maps.
- 04 Validate skills with employers.** Convene subject-matter experts to refine skills and provide insight into hiring practices.
- 05 Produce employer-validated skills maps.** Update and finalize AI skills maps.

WHAT'S INCLUDED

Methodology for the validation process
List of participating companies
Key takeaways and cross-cutting insights from participating companies
Employer-validated AI skills for Software Engineers and Business Analysts

HOW TO USE IT

Serves as a starting point for updating higher education programs
Provides a replicable model for engaging employers in skills mapping and curriculum design
Helps institutions design more industry- and role-specific AI training pathways
Offers employers visibility into how peers are approaching AI skill needs within similar roles

The BHEF AI-Enabled Professional Framework

Informed by input from over a hundred cross-industry leaders, the AI-Enabled Professional Framework is industry-agnostic and practical. It **gives a shared language for what it means to be AI-ready and a pathway to get talent there** — a flexible structure that supports immediate action while accommodating inevitable uncertainty.

SEVEN CORE COMPETENCIES

That matter across every AI-augmented role

The framework defines seven essential competencies that every individual needs to thrive in an AI-augmented workplace.

DOMAIN EXPERTISE

At the center of the framework

A skilled nurse still needs clinical knowledge; a tax accountant must still understand financial principles. What changes is how professionals apply that expertise alongside AI tools while keeping human judgment, creativity, and ethical reasoning at the center.

FIVE CAREER STAGES

Meeting people where they are

AI readiness looks different depending on career stage. The framework maps the core competencies across five stages, recognizing that the depth and application of each competency evolves with responsibility and experience.

SOURCE: BHEF 2026 AI-ENABLED PROFESSIONAL FRAMEWORK

The seven core competencies AI-Enabled Professionals need across their career journeys



AI-Enabled Professional Competencies Framework © 2026 by Business-Higher Education Forum is licensed under CC BY-NC-SA 4.0.

The competencies AI-Enabled Professionals need across career stages

COMPETENCIES	 ASPIRING LEARNER / CAREER STARTER	 EMERGING PROFESSIONAL	 SKILLED PRACTITIONER	 STRATEGIC LEADER	 EXECUTIVE LEADER
 AI Literacy	Understand basic AI concepts and terminology	Apply AI concepts to tasks; aware of emerging AI tools	Integrate AI into projects and workflows	Shape organizational AI adoption strategies	Guide enterprise-wide AI strategy and investments
 Data Literacy	Interpret basic data and visualizations	Use data insights for decisions; recognize bias	Manage and model data for AI insights	Oversee ethical and effective data use	Set data and AI governance frameworks
 Critical Thinking, Problem-solving, & Creativity	Question AI outputs; identify basic risks	Solve problems using AI tools under guidance	Independently select and deploy AI solutions	Lead AI-enabled complex problem-solving	Anticipate systemic AI challenges and opportunities
 Ethics, Governance & Responsible AI Use	Recognize ethical issues (bias, privacy)	Practice responsible AI use	Lead responsible AI initiatives in teams	Shape organizational responsible AI policies	Champion public and global responsible AI leadership
 Digital & Computational Skills	Use AI-powered applications; basic tech comfort	Modify and optimize workflows with AI	Integrate, manage, or build AI-enhanced tools	Drive AI-based digital transformation	Architect future-ready digital and AI ecosystems
 Collaboration & Communication in AI Context	Explain basic AI concepts to peers	Collaborate in AI-augmented teams	Lead multidisciplinary AI teams	Align AI messaging across business functions	Influence enterprise and public AI narratives
 Adaptability & Continuous Learning	Stay curious and open to AI trends	Experiment with new AI tools and methods	Advocate for AI learning among peers	Sponsor organizational AI learning initiatives	Lead industry-wide AI workforce development efforts

AI-Enabled Professional Competencies Framework © 2026 by Business-Higher Education Forum is licensed under CC BY-NC-SA 4.0. To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-sa/4.0/>

Role-Specific Use Cases: BHEF AI-Enabled Professional Framework

Building on the BHEF AI-Enabled Professional Framework, we identified two priority occupations — **Business Analysts** and **Software Engineers** — through the landscape analysis and conversations with employers from across the state. For each role, specific use cases were developed to expand the framework with domain-specific applications.

For example, a business analyst needs domain expertise to manage stakeholders, produce market insights, and build presentations. The AI-Enabled competency maps for Business Analysts and Software Engineers are designed to reflect this shift, using use cases to identify the specific AI skills needed within each role’s domain.

HOW TO USE THIS EXPANDED FRAMEWORK

A replicable model for engaging employers in validating skills and updating curriculum

A guide for designing role-specific AI training pathways

A resource for employers to benchmark how peers are approaching AI skill needs

A visual to ensure holistic training that combines core competencies with domain expertise and AI application within each role

SOURCE: BHEF 2026 AI-ENABLED PROFESSIONAL FRAMEWORK

Definitions: Employer-Validated AI Skills for Software Engineers and Business Analysts

Each competency was validated by employers, who assessed both the required proficiency level for the occupation and whether the competency is best categorized as a knowledge, skill, or ability.

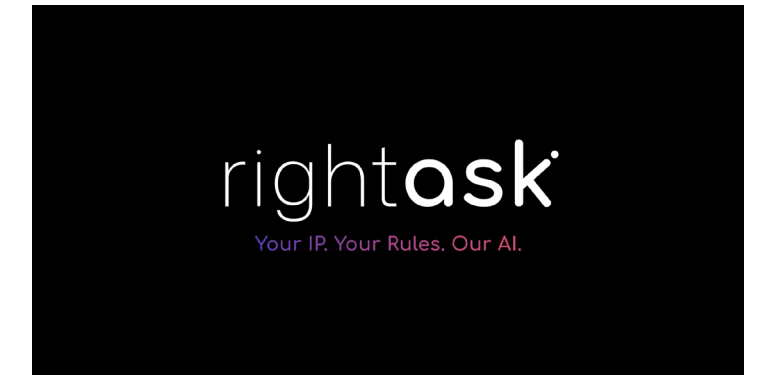
Proficiency level

- Basic.** Demonstrates foundational understanding and can perform tasks with guidance or support.
- Medium.** Applies knowledge and skills independently in typical situations with minimal guidance.
- High.** Demonstrates advanced expertise and can apply, adapt, and lead in complex or unfamiliar situations.

Knowledge, skills, and abilities

- Knowledge.** The understanding of concepts, information, or principles needed to perform a task.
- Skills.** Technical or manual proficiencies usually learned or acquired through training; measurable and observable.
- Abilities.** Demonstrated capacity to apply knowledge and skills simultaneously to complete a task or perform a behavior in real-world work contexts.

Participating Companies



METHODOLOGY

The Validation Process

Every subject-matter expert from industry received a copy of a skills map that listed the competencies identified for the role. Facilitators walked through each competency and asked participants to assess and validate it.

GUIDING QUESTIONS

- 01 Is each category applicable?
- 02 Is this knowledge, skill, or ability necessary and clear?
Should it be removed or modified?
- 03 **What additional knowledge, skills, or abilities are needed?**

Cross-Cutting Key Takeaways

Claude

Across companies, Claude was consistently cited as the primary GenAI tool used by both software engineers and business professionals.

Job Postings Lag Reality **Case Study 04**

AI skill demand appears low in labor market data, but employers note that postings are outdated and fail to reflect current, day-to-day skill needs.

One Role, Many Realities

The same role can look very different across organizations depending on industry, company size, and location — complicating standardized training design.

Durable Skills Are Essential

Employers consistently emphasize critical thinking and problem solving when working with AI, plus a passion for continuous learning and adaptability.

AI Adoption Is Still Taking Shape **Case Study 05**

Many companies are still early in integrating AI into workflows. Most organizations have yet to establish structured upskilling programs for AI skills.

Context Before Tools **Case Study 06**

AI can support task execution, but workers must first understand the concepts. In interviews, employers look for the thinking behind an answer, not the textbook answer.

Roles Are Blurring and Evolving **Case Study 07**

Boundaries between roles are blurring. The traditional software engineer is giving way to hybrid or specialized roles.

AI Skills Are a Differentiator

Some companies require AI skills for promotion, but employers said AI skills are not yet a hiring requirement — they are a plus.

How TTA Grantees Are Addressing Key Workforce Challenges

CASE STUDY 04

TTA 3.0 PILOT

Job postings lag reality — demand looks low in regulated industries where adoption has been slower.

PARTNERS

**Stamford
Health · Egan
School of
Nursing and
Health Studies**

Fairfield University: Embedding AI Competencies into Nursing Education

Labor market data can provide a valuable picture of employer skill needs, but job postings often lag behind emerging talent needs, particularly in regulated industries like healthcare where adoption of new technologies can move more slowly. As AI begins to reshape clinical workflows, healthcare employers increasingly need professionals who can combine clinical expertise with AI literacy, and responsible decision-making, even when those skills are not yet consistently reflected in job postings.

Fairfield University worked with Stamford Health to get ahead of that demand. Together, they co-designed training on how AI can support nursing practice, documentation, and clinical decision-making, while navigating the ethical and legal considerations of healthcare. Fairfield launched a survey of healthcare employers to gather direct insight into emerging needs rather than relying on job postings alone.

The new program is a non-credit digital badge designed to build AI competency among nurses (either RN and NP) and nursing students. Fairfield also launched an eight-week work-based learning experience that connects computer science students with the nursing simulation lab. Through this experience, students developed AI models that support simulation-based learning, including tools that generate simulated patient charts that will be used for pedagogical purposes by nursing faculty and practitioners.

The partnership demonstrates the importance of looking beyond current job postings when designing for emerging skills. By combining labor market insights with direct employer input and opportunities to experiment in a safe environment, Fairfield is building the skills and infrastructure healthcare workers will need as AI adoption accelerates.

How TTA Grantees Are Addressing Key Workforce Challenges

CASE STUDY 05

TTA 3.0 PILOT

AI adoption is still taking shape — few employers can build role-specific upskilling programs on their own.

PARTNERS

**AWS · Pratt &
Whitney · RTX**

University of Connecticut: AEGIS: AI-Enabled Guided Intelligent Systems

As AI adoption continues to take shape, employers are under pressure to rapidly upskill their workforce, but few have the infrastructure or instructional expertise to build role-specific training programs on their own. Employers understand the use cases and industry context, while higher education can translate those insights into structured, scalable learning experiences.

The University of Connecticut is bringing those strengths together through its longstanding partnerships with Pratt & Whitney and RTX. Together, they developed a cross-disciplinary AI workflow agent microcredential designed to build practical AI skills for engineers, including those with limited computer science backgrounds. The program covers agentic AI, workflow automation, retrieval-augmented generation, prompt design, AI governance, validation, and responsible deployment, while business partners contribute real-world use cases and data to keep learning grounded in work context.

UConn is also experimenting with new ways to rapidly develop and deliver training as AI evolves, including an AI-generated, podcast-style format where an AI agents discuss course content with the instructors conversationally. The non-credit program is designed to complement and stack into existing engineering degree pathways, creating opportunities to serve both students and incumbent workers.

The model shows how employers and higher education need collaboration to build an AI workforce; combining real-time industry needs with UConn's expertise to create training that evolves alongside the technology.

How TTA Grantees Are Addressing Key Workforce Challenges

CASE STUDY 06

TTA 3.0 PILOT

**Context
before tools
— workers
must
understand
the concepts
before AI can
help them
execute.**

PARTNERS
Accenture

Connecticut College: Applied AI Competencies into Accounting and Entrepreneurship Courses

Today's undergraduates are among the first to learn foundational subject knowledge and skills with powerful AI tools readily available. While that creates new opportunities, it also introduces a challenge: learners need to understand the concepts behind their work before they can effectively evaluate, guide, and build on what AI produces. Much like learning the fundamentals of math before relying on a calculator, students need a strong foundation to use AI as a complement to their own judgment.

Connecticut College, in collaboration with Accenture, integrated applied AI into three credit-bearing accounting and entrepreneurship courses. To address this challenge, rather than teaching AI skills in isolation, Conn College faculty pair foundational business knowledge with hands-on AI use, helping students understand the context behind their work before using AI to improve productivity and problem-solving. Accenture, a business partner, has also brought real-world perspectives into the classroom through discussions on responsible AI use. Conn College Dean, Noel Garrett, is experimenting with new ways to ensure AI strengthens learning and developed 12-13 custom AI bots that guide students through problems with questions and hints rather than simply providing answers, using an institutionally supported platform with instructor-controlled guardrails. Dean Garrett also established AI-use policies incorporating honor code and citation requirements to reinforce responsible use.

The approach demonstrates that preparing students for an AI-enabled workplace requires more than access to the latest tools. By building foundational knowledge first and then layering in AI, Connecticut College is helping students develop the context, judgment, and responsible-use skills to be valuable contributing members of the future workforce.

How TTA Grantees Are Addressing Key Workforce Challenges

CASE STUDY 07

TTA 3.0 PILOT

Roles are blurring and evolving — expertise increasingly crosses traditional disciplinary boundaries.

PARTNERS

Travelers

University of New Haven: CIT AI for Cybersecurity

As AI reshapes technology work, the skills required within roles are increasingly crossing traditional disciplinary boundaries. Technology professionals still need deep technical expertise, but they are also being asked to translate findings into business practical business solutions.

The University of New Haven (UNH) partnered with Travelers to respond to this shift through an AI for Cybersecurity concentration within its B.S. in Cybersecurity program. The credit-bearing program embeds AI competencies into cybersecurity education, preparing students to apply their skills across areas such as fraud detection, compliance, and cyber risk management. Travelers, which employs talent across cybersecurity, AI, software engineering, data engineering, cloud technologies, and business functions, helped shape the curriculum to reflect how these roles increasingly intersect in the workplace.

The partnership is also bringing interdisciplinary problem-solving into the student experience. Through a TTA 3.0 Innovation grant, UNH and Travelers are developing a 120-hour, for-credit capstone in which student teams will tackle real business problems using anonymized Travelers data, with support from both faculty and Travelers subject matter experts.

EMPLOYER-VALIDATED SKILLS MAP

AI-Enabled Software Engineer

AI-Enabled Software Engineer



AI-Enabled Software Engineer

1 — Prerequisite: Software Engineer Foundations

1.1 Prerequisite: Software Engineer Foundations

2 — Durable Skills

2.1 Critical Thinking, Problem Solving, & Creativity

2.2 Collaboration & Communication in AI Context

2.3 Adaptability, Continuous Learning, & Curiosity

2.4 Initiative & Ownership

3 — AI Literacy & Foundations for Engineers

3.1 AI Literacy & Foundations for Engineers

4 — AI-Assisted Development Workflows

4.1 AI-Assisted Development Workflows

5 — AI System Design & Integration

5.1 AI Application Design & Integration

5.2 Data Management for AI Applications

6 — AI Safety, Quality Assurance & Operations

6.1 AI Safety & Governance

6.2 AI Quality Assurance

6.3 AI Operations & Production Management

7 — Business Alignment & Product Thinking

7.1 Business Alignment & Product Thinking

8 — Agentic & Autonomous AI Systems

8.1 Agentic & Autonomous AI Systems

AI Competencies for Software Engineers

1 — Prerequisite: Software Engineer Foundations

1.1 Prerequisite: Software Engineer Foundations

2 — Durable Skills

- 2.1 Critical Thinking, Problem Solving & Creativity
- 2.2 Collaboration & Communication in AI Context
- 2.3 Adaptability, Continuous Learning & Curiosity
- 2.4 Initiative & Ownership

3 — AI Literacy & Foundations

3.1 AI Literacy & Foundations for Engineers

4 — AI-Assisted Development Workflows

4.1 AI-Assisted Development Workflows

5 — AI System Design & Integration

- 5.1 AI Application Design & Integration
- 5.2 Data Management for AI Applications

6 — AI Safety, QA & Operations

- 6.1 AI Safety & Governance
- 6.2 AI Quality Assurance
- 6.3 AI Operations & Production Management

7 — Business Alignment & Product Thinking

7.1 Business Alignment & Product Thinking

8 — Agentic & Autonomous AI Systems

8.1 Agentic & Autonomous AI Systems

View the full competency map, including detailed competencies under each subcategory, [here](#).

EMPLOYER-VALIDATED SKILLS MAP

AI-Enabled Business Analyst

AI-Enabled Business Analyst



AI-Enabled Business Analyst

1 — Business Professional Core

1.1 Business Professional Core

2 — AI Foundations

2.1 AI Foundations

2.2 Prompting

2.3 Responsible & Ethical AI Use & Organizational Context

3 — AI-Enabled Research & Analysis

3.1 AI-Enabled Research & Insight Creation

3.2 AI-Enabled Analysis (Role Specific)

4 — AI-Enabled Content and Deliverable Creation

4.1 AI for Ideation, Planning & Execution

4.2 AI for Internal/External Stakeholder Management, Writing & Communications

4.3 AI for Deck Creation, Reporting, & Presentations

5 — Domain Specific Durable Skills

5.1 Critical Thinking, Problem Solving & Creativity

5.2 Collaboration & Communication in AI Context

5.3 Adaptability & Curiosity

AI Competencies for Business Analysts

1 — Business Professional Core

1.1 Business Professional Core

2 — AI Foundations

2.1 AI Foundations

2.2 Prompting

2.3 Responsible & Ethical AI Use & Organizational Context

3 — AI-Enabled Research & Analysis

3.1 AI-Enabled Research & Insight Creation

3.2 AI-Enabled Analysis (Role-Specific)

4 — AI-Enabled Content and Deliverable Creation

4.1 AI for Ideation, Planning & Execution

4.2 AI for Internal/External Stakeholder Management, Writing & Communications

4.3 AI for Deck Creation, Reporting & Presentations

5 — Domain-Specific Durable Skills

5.1 Critical Thinking, Problem Solving & Creativity

5.2 Collaboration & Communication in AI Context

5.3 Adaptability & Curiosity

View the full competency map, including detailed competencies under each subcategory, [here](#).

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