

WORK SESSION
AUGUST 12-13, 2026

TAB	DESCRIPTION	ACTION
1	IRSA – NUCLEAR ENERGY AND POSTSECONDARY EDUCATION: ALIGNING IDAHO’S WORKFORCE STRATEGY	Information Item
2	IRSA – READY FOR AI: PREPARING POSTSECONDARY STUDENTS FOR AN AI-INTEGRATED WORLD	Information Item

**WORK SESSION
AUGUST 12-13, 2026**

SUBJECT

Nuclear Energy and Postsecondary Education: Aligning Idaho's Workforce Strategy – Work Session

BACKGROUND

Idaho National Laboratory (INL), the nation's leading nuclear research facility, continues to deepen its collaboration with Idaho's colleges and universities to meet growing workforce needs in nuclear energy and related technical fields. This work session will bring together Board members and INL representatives to discuss how Idaho's postsecondary institutions can align program development and enrollment strategy with the workforce that nuclear energy expansion will require in the coming years.

PROPOSAL

INL staff will share projected workforce needs across nuclear energy and adjacent technical fields, providing the Board with a clearer picture of the scale and timing of upcoming hiring demand. This information is intended to help board members and institutional leaders consider how current and future academic programs can best prepare Idaho students for these opportunities.

IMPACT

This work session offers the Board an opportunity to hear directly from INL about projected workforce demand and to consider how Idaho's institutions might further align their academic programs with that demand going forward.

BOARD STAFF COMMENTS AND RECOMMENDATIONS

At the December 2025 Board meeting, presenters described several nuclear workforce and education partnerships and Board staff provided information on current postsecondary academic and career-technical nuclear-related programming. The partnerships discussed included the College of Eastern Idaho's Future Tech Building, supported by a \$9 million investment from Battelle Energy Alliance and expected to open in 2026; the Idaho Advanced Energy Consortium's \$3.6 million workforce training initiative tied to the Intermountain West Nuclear Energy Corridor Tech Hub; the Critical Materials and Energy Systems Innovation Center formed by INL, Idaho State University, and the University of Idaho; and five year SUPER agreements between INL and the University of Idaho, Boise State University, and Idaho State University.

Since then, Board staff have discussed statewide postsecondary planning with INL and with each institution. Institutions are poised to enhance their contributions to the educational needs of the nuclear industry in purposeful and strategic ways. This work is timely given Idaho's recent selection as one of five finalists to host a proposed Nuclear Lifecycle Innovation Campus.

ATTACHMENTS

Attachment 1 – Future of Idaho's Nuclear Workforce

**WORK SESSION
AUGUST 12-13, 2026**

Attachment 2 – Current Programs: Nuclear, Mining, Cybersecurity and Engineering 2025 and Additions Since December 2025

BOARD ACTION

No action needed; this agenda item is for informational purposes only.

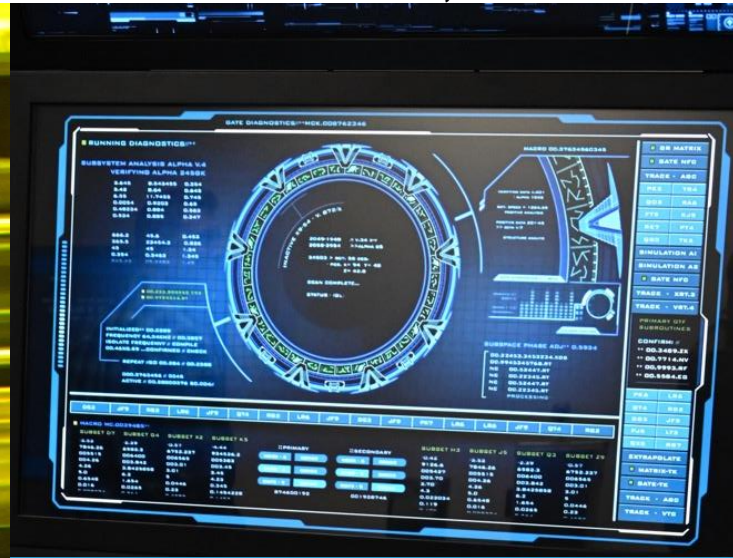
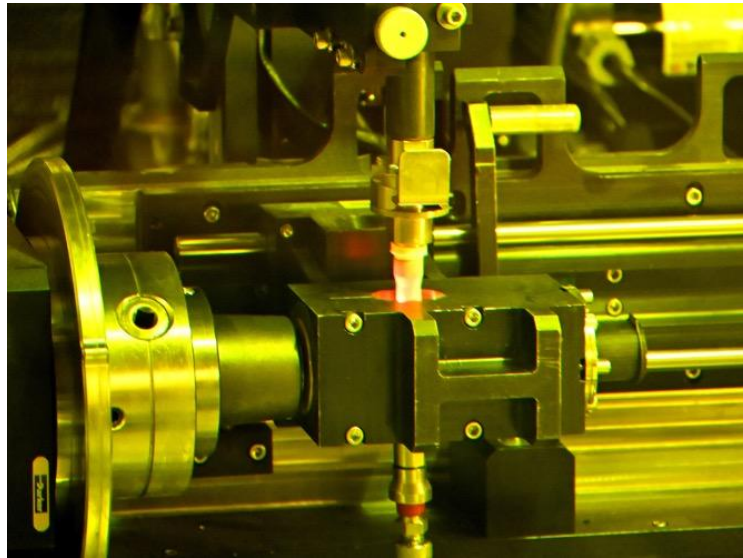
APPLICABLE STATUTE, RULE OR POLICY

Not applicable.

REFERENCE

December 2025

The Board heard an information item on Nuclear and Critical Materials Postsecondary Programs and Partnerships.



Hope Morrow
Workforce & Economic Development



Future of Idaho's Nuclear Workforce

State Board of Education Discussion

Battelle Energy Alliance manages INL for the
U.S. Department of Energy's Office of Nuclear Energy



Advanced reactor size comparison

Large-Scale Reactor

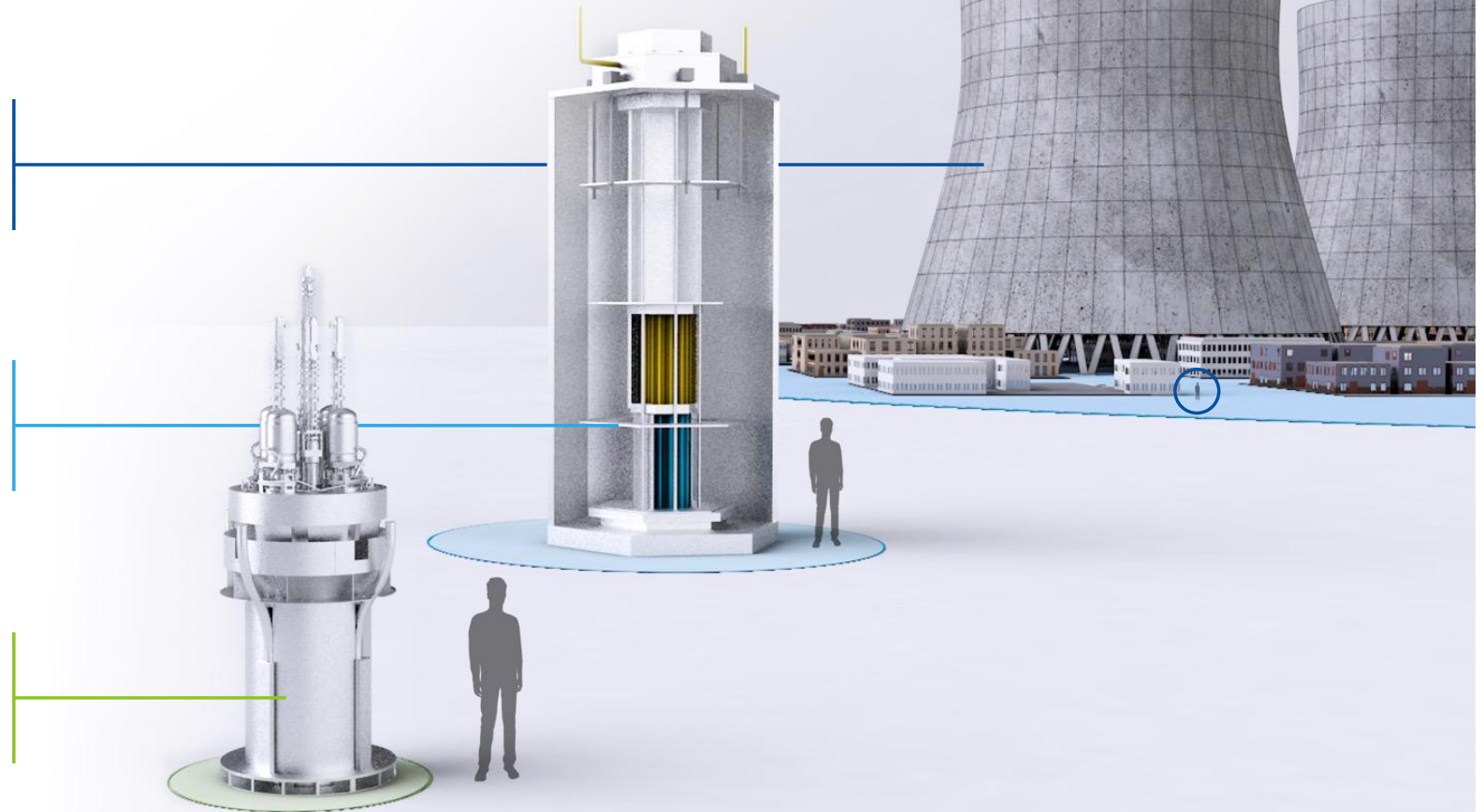
300 MW – 1,000+ MW
1,500 ACRES

Small Modular Reactor

20 MW – 300 MW
50 ACRES

Microreactor

1 MW – 20 MW
LESS THAN AN ACRE

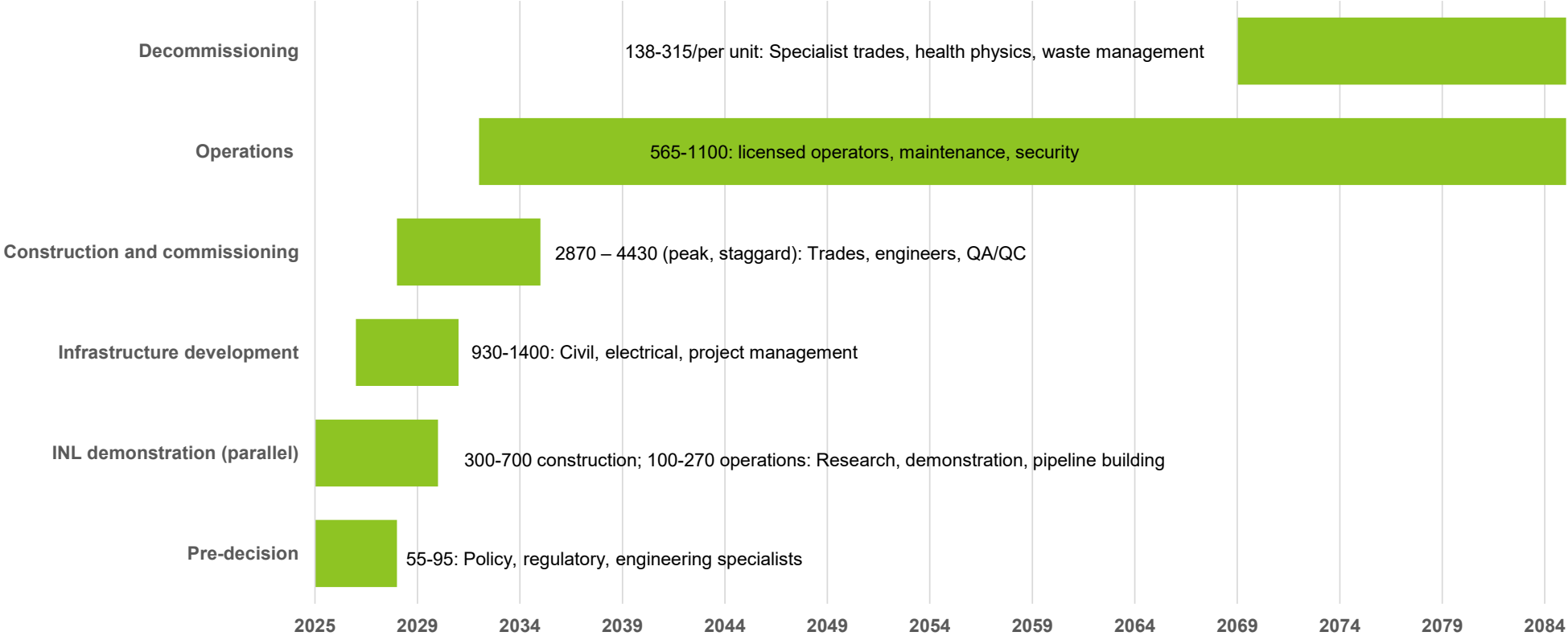




Occupations by Phase	
Phase 1: Pre-Decision (2025–2028)	
• Policy and regulatory professionals • Site assessment and environmental specialists	• Nuclear project development (utility side) • Academic and research (pipeline building)
Phase 2: Infrastructure Development (2027–2031)	
• Civil and earthworks • Project and construction management • Nuclear QA/QC oversight	• Environmental and safety monitoring • Supply chain and logistics • Electrical infrastructure
Phase 3: Construction and Commissioning (2029–2035)	
• Structural and civil construction • Mechanical and piping • Electrical and instrumentation • Nuclear-qualified welding • Nuclear engineering (design support)	• QA/QC inspection and documentation • Health physics and radiation protection • Commissioning and testing engineers • Project management and controls • Security
Phase 4: Operations (2033 onwards)	
• Licensed reactor operators • Senior reactor operators / shift supervisors • Health physics technicians • Maintenance technicians (mechanical, electrical, I&C) • Nuclear engineers (on-site)	• Chemistry and radiochemistry • Security • Operations management • Administrative and support
Phase 5: Decommissioning (2070+)	
• Decommissioning engineers • Radiation protection specialists • Skilled decommissioning trades	• Waste management specialists • Regulatory and legal

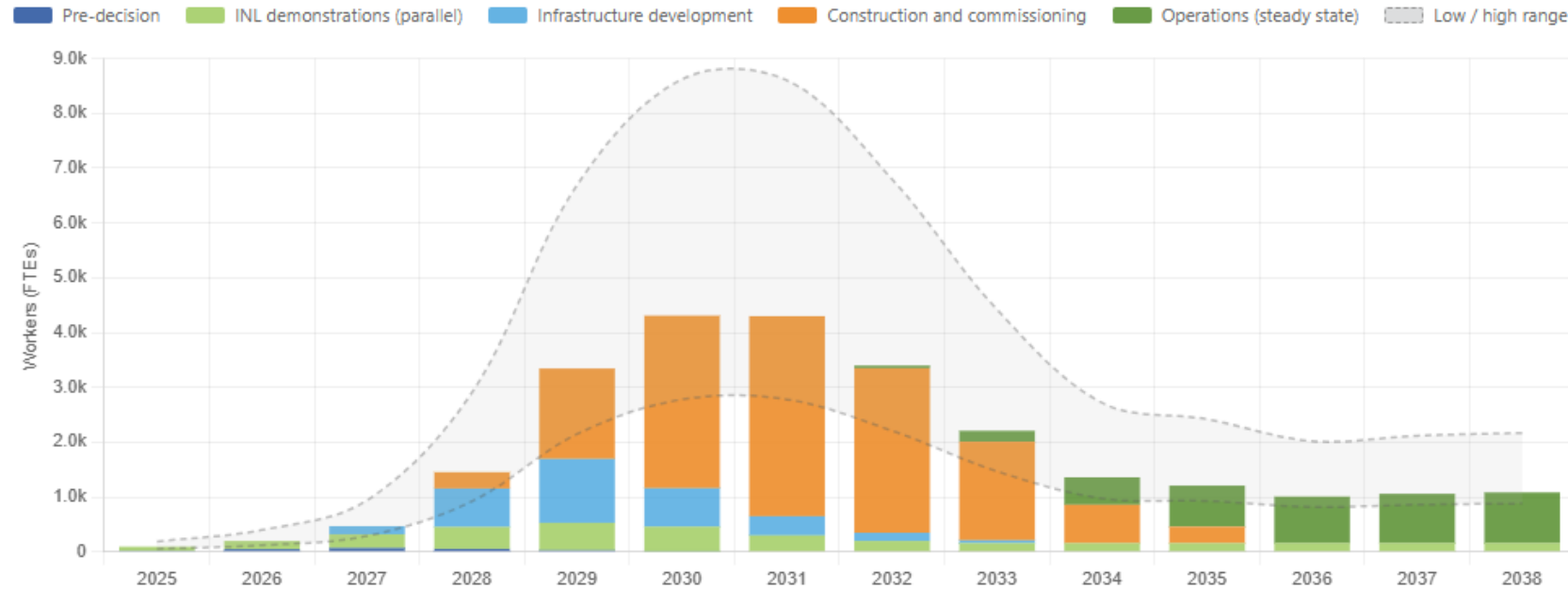


Est. Phase Timeline/Workforce Range



Est. Idaho Nuclear Workforce by Phase — Timeline

PRELIMINARY DISCUSSION DOCUMENT • FIGURES ARE INFORMED ESTIMATES • CENTRAL SCENARIO SHOWN



Construction surge — the critical challenge

Peak demand of 2,870–4,430 workers (2031–2033) is 3–5× the steady-state operations workforce. The national nuclear construction labor market will be severely constrained at exactly this time. Idaho must build its own qualified trades pipeline.

INL as the pipeline runway

INL demonstration projects (MARVEL, Oklo, PELE, HERMES) run in parallel across 2025–2030, creating the first in-state nuclear construction and operations experience before commercial deployment begins.

Operations — sustained and stable

Once units come online from 2033, operations workforce stabilizes at 565–1,100 FTEs. This is the long-term employment base — careers spanning decades, not projects.

Workforce estimates are informed estimates benchmarked against Jenson, Guaita et al. (INL/RPT-25-87791, DOE Systems Analysis & Integration Campaign, 2025); NuScale workforce disclosures (2021); NEI/NRC/BLS data; and ANSF (ISEA, September 2025). Phase shapes derived from construction industry mobilization patterns and nuclear project analogues. All figures require primary source verification before use in formal policy or budget processes.

Workforce Estimates by Phase

Beginning, Middle (peak) & End

Phase Estimates							
		Low Scenario			High Scenario		
Phase	Timeline	Start	Peak	End	Start	Peak	End
Pre-decision	2025–2028	15	55	40	25	95	65
INL demonstrations (parallel)	2025–2030	50	300	150	100	700	200
Infrastructure development	2027–2031	100	930	300	200	1,400	400
Construction and commissioning	2029–2035	200	2,870	600	400	4,430	800
Operations (steady state)	2033 onwards	150	700	900	250	1,000	1,100



Idaho Advanced Nuclear — Career Pathways

Five illustrative pathways from entry point to senior leadership. Select a pathway, then click each stage to expand details. All timelines and salary figures are indicative.

Operations

Construction trades

INL research professional

Utility / policy leader

Veteran / career changer

Operations

Nuclear operations technician → licensed reactor operator → shift supervisor

Entry point: High school graduate or career changer — Idaho LAUNCH eligible at ISU ESTEC

Peak: \$120,000–160,000+

1 Nuclear operations technician

Years 1–2 \$45,000–55,000

+

2 Licensed reactor operator (research / fuel cycle)

Years 2–4 \$65,000–85,000

+

3 Commercial SMR operator trainee

Years 4–6 \$80,000–100,000

+

4 Senior reactor operator / shift supervisor

Years 6–14 \$100,000–130,000

+

5 Operations manager / plant director

Years 14+ \$120,000–160,000+

+

Note: These pathways are illustrative and based on informed estimates developed in the Idaho Advanced Nuclear Workforce Strategy (preliminary discussion document, 2026). Salary figures draw on O*NET, BLS OES, ISU ESTEC programme data, and NEI workforce benchmarks — they are indicative and should be verified against INL published salary ranges and utility compensation data. Timelines assume reasonably linear full-time progression; real careers are rarely linear. Pathway 1 stage 3 (SMR-specific operator training) does not yet exist and represents a programme to be developed. This document was prepared with the assistance of Claude (Anthropic, 2026).

IDAHO NATIONAL LABORATORY



Idaho's Nuclear Workforce Foundation

- Idaho does not need to build a nuclear workforce from scratch. From what already exists, it needs to:
 - Scale
 - Connect
 - Qualify
- Construction surge hardest problem
 - Trade workforce lacks nuclear-grade qualification
- Strategic coordination and connection with institutions to avoid duplication
- ISU-ESTEC, INL (and CEI with new programming) are among the only nuclear training anchors in the West (for now)
 - Could lead region/tri-state compact or someone else will

Current industry aligned programs

ISU	CEI
Energy Systems Technology and Education Center (ESTEC) includes Nuclear Operations Technology	Health Physics Certification
Health Physics Certificate	Associate of Engineering (A.E.) pathways
Bachelor's, master's, and doctoral degrees in Nuclear Engineering	Information Assurance programs
Nuclear welding career-technical certificate	CTE programs: welding, heavy machinery, mechanical design
Additional CTE programs: welding, heavy machinery, mechanical design	CSI
Graduate programs in engineering, cybersecurity, governance and policy, and resilience engineering	Applied Science in Engineering degree
Active in AI research and curriculum development	Associate of Engineering (A.E.) pathways
BSU	Water Resource Management career-technical program
Nuclear safeguards and security programs Cybersecurity, cryptology, and threat intelligence programs	CTE programs: welding, heavy machinery, mechanical design
Graduate programs in engineering, cybersecurity, governance and policy, and resilience engineering	CWI
UI	Applied Science in Engineering degree
Master's degree in Nuclear Engineering	Associate of Engineering (A.E.) pathways
Nuclear Safeguards and Security Certificate	Mining Technician program
Graduate programs in engineering, cybersecurity, governance and policy, and resilience engineering	CTE programs: welding, heavy machinery, mechanical design
Active in AI research	



Workforce Programs Proposed in INEC Tech Hub

- Construction Trades: CEI & Gillette College
 - Development and implementation at both institutions
- Manufacturing & Fabrication:
 - ISU – advanced manufacturing, nuclear manufacturing
 - Western Wyoming Community College – Welding expansion and nuclear grade welding training development
- Update Nuclear Operator program: ISU ESTEC
- Chemical Engineering Tech Programming: Gillette College
- Engineering Pathways
 - BEA Applied STEM Institute Engineering Academy development
 - Distinguished transfer pathways for engineering programs, Tech Hub region wide



Current industry aligned programs (options to scale)

- Nuclear operations
- BS, MS, PhD in Engineering fields
- Nuclear welding
- Nuclear safeguards and security programs
- Cyber nuclear/industrial cybersecurity
- Associate of Engineering (A.E.) pathways
- CTE programs: welding, heavy machinery, mechanical design



Current industry aligned programs (options to connect)

- Engineering – map and strengthen transfer pipelines
- Welding
- Nuclear certifications
- Health physics
- Materials- handling, processing, milling, testing
- Energy systems



Programs to qualify or start, immediate needs

- Nuclear Welding (Qualify)
- Nuclear certifications (Qualify)
- Health physics (Qualify – outside of East Idaho)
- QA & NDE (missing would need to start and be qualified)
- Nuclear materials science (start classes that lean into nuclear specifically)
- Procurement Specialists
- Integrated Energy Systems (nuclear)

Workforce Pipeline - Critical Timing

Role group	People needed (state, 2040)	Training lead time	Program must start
Licensed reactor operators	60–120	18–24 months post program establishment	Program established by 2030–2031
Nuclear/plant engineers	50–100	4–6 years (degree pipeline)	Scholarships from 2026
Maintenance technicians	150–280	2–3 years	Apprenticeships from 2027
Health physics technicians	50–100	2–3 years	Program expansion from 2026–27
Nuclear QA/QC construction trades	250–400 (peak)	2–3 years qualification	Curriculum development from 2026
State agency nuclear capacity	10–20 FTEs	3–5 years (secondment model)	Immediately
Nuclear project development (utilities)	15–25 per active utility	2–4 years	Immediately



Battelle Energy Alliance manages INL for the U.S. Department of Energy's Office of Nuclear Energy. INL is the nation's center for nuclear energy research and development, and also performs research in each of DOE's strategic goal areas: energy, national security, science and the environment.

WWW.INL.GOV

**Current Programs
Nuclear, Mining, Cybersecurity, and Engineering
Additions Since December 2025**

Institution	Title	Award	CIP Code	Location	Delivery Method
BSU	Applied Artificial Intelligence	M.S.	11.0102	Online	Online
ISU	Applied Artificial Intelligence	Specialized Certificate	11.0102	Online	Online
UI	Artificial Intelligence	M.Engr. M.S.	11.0102	Coeur d'Alene/ Moscow	Face-to-face/Hybrid
UI	Artificial Intelligence	B.S.	11.0102	Coeur d'Alene/ Moscow	Hybrid
ISU	Artificial Intelligence Sciences	BS	11.0102	Pocatello	Face-to-face/some online
ISU	Artificial Intelligence Sciences: Computer Science concentration	BS	11.0701	Pocatello	Face-to-face/some online
ISU	Artificial Intelligence Sciences: Math and Statistics concentration	BS	27.0503	Pocatello	Face-to-face/some online
UI	Energy Literacy	Undergraduate Certificate	14.2701	Moscow	Face-to-face
ISU	Industrial Automation Engineering Technology (consolidation of Energy System Electrical Eng Tech and Energy System Instrumentation Eng Tech)	AAS	15.0406	Pocatello	Face-to-face
ISU	Industrial Cybersecurity	Specialized Certificate	11.1003	Online	Online
UI	Industrial and Systems Engineering	B.S.	14.3501	Coeur d'Alene/ Moscow	Face-to-face/Hybrid
UI	Industrial and Systems Engineering	M.Engr. M.S.	14.3501	Coeur d'Alene/ Moscow	Face-to-face/Hybrid
ISU	Intelligent and Trustworthy Digital Systems (3YR)	BAS	11.1003	Pocatello	Face-to-face/some online
ISU	Nuclear Hot Cell Manipulator Technology	ITC	15.1401	Pocatello	Face-to-face

**Current Programs
Nuclear, Mining, and Cybersecurity 2025**

Institution	Title	CIP Code	Award	College	Locations	Delivery Methods
BSU	Cryptology Security Analyst	11.1003	Graduate Certificate	Arts and Sciences	Boise	Online
BSU	Cybersecurity	11.1003	M.S.	Arts and Sciences	Boise	Some portion online
BSU	Cybersecurity Management	11.1003	Graduate Certificate	Business and Economics	Boise	Traditional (face-to-face)
BSU	Cybersecurity: Computer Science emphasis	11.1003	M.S.	Arts and Sciences	Boise	Traditional (face-to-face)
BSU	Cybersecurity: Cryptanalysis and Signals Analysis emphasis	11.1003	M.S.	Arts and Sciences	Boise	Traditional (face-to-face)
BSU	Cybersecurity: Management emphasis	11.1003	M.S.	Arts and Sciences	Boise	Traditional (face-to-face)
CEI	Information Assurance and Cybersecurity	11.1003	AAS	Technology	Idaho Falls	Traditional (face-to-face)
CEI	Information Assurance and Cybersecurity	11.1003	ITC	Technology	Idaho Falls	Traditional (face-to-face)
CEI	Information Assurance and Cybersecurity	11.1003	Specialized Certificate	Technology	Idaho Falls	Traditional (face-to-face)
CSI	Cybersecurity and Programming	11.1003	AAS	Business and Information Systems	Twin Falls	Hybrid Traditional (face-to-face)
CSI	Introduction to Cybersecurity	11.1003	BTC	Business and Information Systems	Twin Falls	Hybrid Traditional (face-to-face)
CWI	Cybersecurity	11.1003	AAS	School of Science, Technology, and Math	Boise Boise	Online Traditional (face-to-face)
CWI	Cybersecurity	11.1003	ATC	School of Science, Technology, and Math	Boise	Online Traditional (face-to-face)
LCSC	Cybersecurity Management	11.1003	BA/BS	Professional Studies and Graduate Studies	Lewiston	Online Traditional (face-to-face)
NIC	Cybersecurity and Networking	11.1003	BTC	Career and Technical Professional Programs	Coeur d'Alene	Traditional (face-to-face)
NIC	Cybersecurity INFOSEC Administration	11.1003	AAS	Career and Technical Professional Programs	Coeur d'Alene	Traditional (face-to-face)
NIC	Cybersecurity INFOSEC Administration	11.1003	ATC	Career and Technical Professional Programs	Coeur d'Alene	Traditional (face-to-face)
NIC	Cybersecurity INFOSEC Administration	11.1003	ITC	Career and Technical Professional Programs	Coeur d'Alene	Traditional (face-to-face)
UI	Cybersecurity	11.1003	B.S.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Cybersecurity	11.1003	Certificate-UG	College of Engineering	Moscow	Traditional (face-to-face)
UI	Cybersecurity	11.1003	M.S.	College of Engineering	Coeur d'Alene Idaho Falls Moscow	Traditional (face-to-face)
UI	Cybersecurity	11.1003	Ph.D.	College of Engineering	Coeur d'Alene Moscow	Hybrid Online Traditional (face-to-face)
UI	Cybersecurity (Coeur d'Alene)	11.1003	B.S.	College of Engineering	Coeur d'Alene	Traditional (face-to-face)
ISU	Nuclear Engineering	14.2301	BS	Science and Engineering	Pocatello	Hybrid
ISU	Nuclear Science and Engineering	14.2301	MS	Science and Engineering	Idaho Falls Pocatello	Hybrid
ISU	Nuclear Science and Engineering	14.2301	Ph.D.	Science and Engineering	Idaho Falls Pocatello	Hybrid
UI	Nuclear Criticality Safety	14.2301	Certificate-GR	College of Engineering	Idaho Falls	Online Traditional (face-to-face)
UI	Nuclear Decommissioning and Used Fuel Management	14.2301	Certificate-GR	College of Engineering	Idaho Falls	Online
UI	Nuclear Engineering	14.2301	M.Engr.	College of Engineering	Idaho Falls Moscow	Online Traditional (face-to-face)
UI	Nuclear Engineering	14.2301	M.S.	College of Engineering	Coeur d'Alene Idaho Falls Moscow	Online Traditional (face-to-face)
UI	Nuclear Engineering	14.2301	Ph.D.	College of Engineering	Coeur d'Alene Idaho Falls Moscow	Online Traditional (face-to-face)
UI	Nuclear Materials Engineering	14.2301	Certificate-GR	College of Engineering		Online
UI	Nuclear Technology Management	14.2301	Certificate-GR	College of Engineering	Idaho Falls	Online
CWI	Mining Technician	15.0901	AS	School of Science, Technology, and Math	Nampa	Hybrid
ISU	Energy Systems Nuclear Operations Technology: Nuclear Facility Technician concentration	41.0205	AAS	Technology	Pocatello	Traditional (face-to-face)
CEI	Digital Forensics and Analytics	43.0403	BAS	Business	Idaho Falls	Hybrid Traditional (face-to-face)
LCSC	Cybersecurity	43.0403	Undergraduate Certificate	Career and Technical Education	Lewiston	Hybrid
BSU	Analyst and Threat Intelligence	43.0404	Graduate Certificate	Engineering	Boise	Online
BSU	Applied Computing, Systems, and Network	43.0404	Undergraduate Certificate	Engineering	Boise	Online
BSU	Cyber Operations and Resilience	43.0404	B.A.S.	Engineering	Boise	Online
BSU	Cyber Operations and Resilience	43.0404	B.S.	Engineering	Boise	Online
BSU	Cyber Operations and Resilience (MS)	43.0404	M.S.	Engineering	Boise	Online
BSU	Cybersecurity Career Technical Education Emphasis	43.0404	B.A.S. emphasis	Engineering	Boise	Online
BSU	Cybersecurity Career Technical Education Emphasis	43.0404	B.S. emphasis	Engineering	Boise	Online
BSU	Governance Policy Administration	43.0404	Graduate Certificate	Engineering	Boise	Online
BSU	Resilience Engineering	43.0404	Graduate Certificate	Engineering	Boise	Online

**Current Programs
Engineering and Engineering Related 2025**

Institution	Title	CIP Code	Award	College	Locations	Delivery Methods
BSU	Engineering	14.0101	B.S.	Engineering	Boise	Traditional (face-to-face)
BSU	Engineering	14.0101	Ph.D	Engineering	Boise	Traditional (face-to-face)
BSU	Engineering Design	14.0101	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Engineering: EngineeringPLUS emphasis	14.0101	B.S. emphasis	Engineering	Boise	Traditional (face-to-face)
BSU	Engineering: Pre-Medical emphasis	14.0101	B.S. emphasis	Engineering	Boise	Traditional (face-to-face)
BSU	Engineering: Secondary Education emphasis	14.0101	B.S. emphasis	Engineering	Boise	Traditional (face-to-face)
BSU	Semiconductor for All	14.0101	Undergraduate Certificate	Innovation and Design	Boise	Traditional (face-to-face)
CEI	Associate of Engineering	14.0101	AE	General Education	Idaho Falls	Hybrid Online Traditional (face-to-face)
CSI	Engineering	14.0101	AS	Engineering, Physical, and Computer Sciences	Twin Falls	Some portion online Traditional (face-to-face)
CWI	Engineering	14.0101	AE	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
NIC	Engineering	14.0102	AS	Math, Computer Science and Engineering Division	Coeur d'Alene	Hybrid Online Traditional (face-to-face)
BSU	Biomedical Engineering	14.0501	Minor	Engineering		Traditional (face-to-face)
BSU	Biomedical Engineering	14.0501	Ph.D	Engineering	Boise	Traditional (face-to-face)
BSU	Biomedical Instrumentation	14.0501	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
UI	Biomedical Engineering	14.0501	Undergraduate Certificate	College of Engineering	Moscow	Traditional (face-to-face)
UI	Chemical Engineering	14.0701	B.S.	College of Engineering	Coeur d'Alene Moscow	Online Traditional (face-to-face)
UI	Chemical Engineering	14.0701	M.Engr.	College of Engineering	Coeur d'Alene Moscow	Online Traditional (face-to-face)
UI	Chemical Engineering	14.0701	M.S.	College of Engineering	Coeur d'Alene Moscow	Online Traditional (face-to-face)
UI	Chemical Engineering	14.0701	Ph.D.	College of Engineering	Coeur d'Alene Moscow	Online Traditional (face-to-face)
UI	Chemical Engineering of Semiconductors	14.0701	Undergraduate Certificate	College of Engineering	Moscow	Traditional (face-to-face)
BSU	Civil Engineering	14.0801	B.S.	Engineering	Boise	Traditional (face-to-face)
BSU	Civil Engineering	14.0801	M.Engr.	Engineering	Boise	Traditional (face-to-face)
BSU	Civil Engineering	14.0801	M.S.	Engineering	Boise	Traditional (face-to-face)
ISU	Civil Engineering	14.0801	BS	Science and Engineering	Pocatello	Hybrid
ISU	Civil Engineering	14.0801	MS	Science and Engineering	Pocatello	Hybrid
ISU	Engineering and Applied Science: Civil Engineering	14.0801	Concentration	Science and Engineering	Pocatello	Some portion online Traditional (face-to-face)
UI	Civil Engineering	14.0801	B.S.	College of Engineering	Coeur d'Alene Moscow	Traditional (face-to-face)
UI	Civil Engineering	14.0801	M.Engr.	College of Engineering	Coeur d'Alene Moscow	Online
UI	Civil Engineering	14.0801	M.S.	College of Engineering	Coeur d'Alene Moscow	Traditional (face-to-face)
UI	Civil Engineering	14.0801	Ph.D.	College of Engineering	Coeur d'Alene Moscow	Traditional (face-to-face)
UI	Water Resources	14.0805	M.S.	College of Agriculture and Life Sciences	Boise Coeur d'Alene Idaho Falls Moscow	Hybrid Traditional (face-to-face)
UI	Water Resources	14.0805	Ph.D.	College of Agriculture and Life Sciences	Boise Coeur d'Alene Idaho Falls Moscow	Hybrid Traditional (face-to-face)
UI	Water Resources Engineering Science Option	14.0805	M.S. option	College of Agriculture and Life Sciences	Boise Coeur d'Alene Idaho Falls Moscow	Hybrid Traditional (face-to-face)
UI	Water Resources Engineering Science Option	14.0805	Ph.D. option	College of Agriculture and Life Sciences	Boise Coeur d'Alene Idaho Falls Moscow	Hybrid Traditional (face-to-face)
BSU	Computer Engineering	14.0901	B.S.	Engineering	Boise	Traditional (face-to-face)
BSU	Cyber for All	14.0901	Undergraduate Certificate	Engineering	Boise	Online Traditional (face-to-face)
BSU	Cyber Operations	14.0901	Undergraduate Certificate	Engineering	Boise	Online
BSU	Mechanical Engineering	14.0901	B.S.	Engineering	Boise	Traditional (face-to-face)
BSU	Mechanical Engineering	14.0901	M.Engr.	Engineering	Boise	Traditional (face-to-face)
BSU	Mechanical Engineering	14.0901	M.S.	Engineering	Boise	Traditional (face-to-face)
BSU	Security in Cyber-Physical Systems: Hardware and Firmware Focus	14.0901	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Security in Cyber-Physical Systems: Industrial Control Focus	14.0901	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Security in Cyber-Physical Systems: Power Systems Focus	14.0901	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Security in Cyber-Physical Systems: Software Focus	14.0901	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
ISU	Computer Engineering	14.0901	BS	Science and Engineering	Idaho Falls Pocatello	Traditional (face-to-face) Web/video
ISU	Electrical & Computer Engineering	14.0901	MS	Science and Engineering	Pocatello	Traditional (face-to-face) Web/video
ISU	Electrical & Computer Engineering: Computer Engineering concentration	14.0901	MS	Science and Engineering	Idaho Falls Pocatello	Traditional (face-to-face) Web/video
UI	Computer Engineering	14.0901	B.S.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Computer Engineering	14.0901	M.Engr.	College of Engineering	Moscow	Online
UI	Computer Engineering	14.0901	M.S.	College of Engineering	Moscow	Online
ISU	Software Engineering	14.0903	BS	Science and Engineering	Idaho Falls Pocatello	Traditional (face-to-face) Web/video
LCSC	Computer Science: Software Engineering	14.0903	BS emph	Professional Studies and Graduate Studies	Coeur d'Alene Lewiston	Hybrid Online Traditional (face-to-face)
BSU	Electrical Engineering	14.1001	B.S.	Engineering	Boise	Traditional (face-to-face)
BSU	Electrical Engineering	14.1001	Minor	Engineering		Traditional (face-to-face)

**Current Programs
Engineering and Engineering Related 2025**

Institution	Title	CIP Code	Award	College	Locations	Delivery Methods
ISU	Electrical & Computer Engineering: Electrical Engineering concentration	14.1001	MS	Science and Engineering	Idaho Falls Pocatello	Traditional (face-to-face) Web/video
ISU	Electrical Engineering	14.1001	BS	Science and Engineering	Pocatello	Hybrid
ISU	Engineering and Applied Science: Electrical and Computer Engineering	14.1001	Concentration	Science and Engineering	Pocatello	Some portion online Traditional (face-to-face)
UI	Electrical Engineering	14.1001	B.S.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Electrical Engineering	14.1001	M.Engr.	College of Engineering	Moscow	Online
UI	Electrical Engineering	14.1001	M.S.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Electrical Engineering	14.1001	Ph.D.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Electrical Engineering - Global	14.1001	B.S.E.E.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Electrical Engineering: Communications emphasis	14.1001	B.S.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Electrical Engineering: Microelectronics emphasis	14.1001	B.S.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Electrical Engineering: Power emphasis	14.1001	B.S.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Power Syst Protection & Relay	14.1001	Graduate Certificate	College of Engineering	Coeur d'Alene Moscow	Online
UI	Smart Grid Cybersecurity	14.1001	Graduate Certificate	College of Engineering	Coeur d'Alene Moscow	Online Traditional (face-to-face)
UI	Advanced Microelectronics Fabrication	14.1099	Graduate Certificate	College of Engineering	Moscow	Some portion online Traditional (face-to-face)
UI	Advanced Semiconductor Design	14.1099	Graduate Certificate	College of Engineering	Moscow	Online Traditional (face-to-face)
UI	High-Speed Circuits and Systems	14.1099	Graduate Certificate	College of Engineering	Moscow	Online Traditional (face-to-face)
UI	Microelectronics Fabrication	14.1099	Undergraduate Certificate	College of Engineering	Coeur d'Alene	Some portion online Traditional (face-to-face)
UI	Semiconductor Design	14.1099	Undergraduate Certificate	College of Engineering	Moscow	Online Traditional (face-to-face)
CSI	Engineering	14.1301	AE	Engineering, Physical, and Computer Sciences	Twin Falls	Hybrid
ISU	Engineering and Applied Science	14.1301	Ph.D.	Science and Engineering	Pocatello	Hybrid
ISU	Engineering and Applied Science: Environmental Engineering	14.1401	Concentration	Science and Engineering	Pocatello	Some portion online Traditional (face-to-face)
ISU	Environmental Engineering	14.1401	MS	Science and Engineering	Idaho Falls Pocatello	Hybrid
BSU	Computational Materials Science and Engineering	14.1801	Graduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Foundations in Materials Science and Engineering	14.1801	Graduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Materials Science and Engineering	14.1801	B.S.	Engineering	Boise	Traditional (face-to-face)
BSU	Materials Science and Engineering	14.1801	M.Engr.	Engineering	Boise	Traditional (face-to-face)
BSU	Materials Science and Engineering	14.1801	M.S.	Engineering	Boise	Traditional (face-to-face)
BSU	Materials Science and Engineering	14.1801	Minor	Engineering		Traditional (face-to-face)
BSU	Materials Science and Engineering	14.1801	Ph.D.	Engineering	Boise	Traditional (face-to-face)
BSU	Materials Science and Engineering: Secondary Education	14.1801	B.S. emphasis	Engineering		Traditional (face-to-face)
BSU	Nanomaterials Science and Engineering	14.1801	Graduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Semiconductor Materials	14.1801	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Biomedical Engineering	14.1901	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Computational	14.1901	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Mechanical Design	14.1901	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Mechatronics	14.1901	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Solid Mechanics	14.1901	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Thermal-Fluids	14.1901	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
ISU	Engineering and Applied Science: Mechanical Engineering	14.1901	Concentration	Science and Engineering	Pocatello	Some portion online Traditional (face-to-face)
ISU	Mechanical Engineering	14.1901	BS	Science and Engineering		Hybrid
ISU	Mechanical Engineering	14.1901	MS	Science and Engineering		Hybrid
ISU	Mechanical Engineering, Accelerated BS/MS	14.1901	BS	Science and Engineering		
ISU	Mechanical Engineering, Accelerated BS/MS	14.1901	MS	Science and Engineering		
UI	Aerospace	14.1901	Undergraduate Certificate	College of Engineering	Moscow	Traditional (face-to-face)
UI	Computer-Aided Engineering	14.1901	Undergraduate Certificate	College of Engineering	Moscow	Traditional (face-to-face)
UI	Material Behavior and Performance	14.1901	Undergraduate Certificate	College of Engineering	Moscow	Traditional (face-to-face)
UI	Mechanical Design and Manufacturing	14.1901	Undergraduate Certificate	College of Engineering	Moscow	Traditional (face-to-face)
UI	Mechanical Engineering	14.1901	B.S.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Mechanical Engineering	14.1901	M.Engr.	College of Engineering	Moscow	Online
UI	Mechanical Engineering	14.1901	M.S.	College of Engineering	Coeur d'Alene Moscow	Traditional (face-to-face)
UI	Mechanical Engineering	14.1901	Minor	College of Engineering	Moscow	Traditional (face-to-face)
UI	Mechanical Engineering	14.1901	Ph.D.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Thermal Energy System Design and Analysis	14.1901	Undergraduate Certificate	College of Engineering	Moscow	Traditional (face-to-face)
ISU	Nuclear Engineering	14.2301	BS	Science and Engineering	Pocatello	Hybrid

**Current Programs
Engineering and Engineering Related 2025**

Institution	Title	CIP Code	Award	College	Locations	Delivery Methods
ISU	Nuclear Science and Engineering	14.2301	MS	Science and Engineering	Idaho Falls Pocatello	Hybrid
ISU	Nuclear Science and Engineering	14.2301	Ph.D.	Science and Engineering	Idaho Falls Pocatello	Hybrid
UI	Nuclear Criticality Safety	14.2301	Graduate Certificate	College of Engineering	Idaho Falls	Online Traditional (face-to-face)
UI	Nuclear Decommissioning and Used Fuel Management	14.2301	Graduate Certificate	College of Engineering	Idaho Falls	Online
UI	Nuclear Engineering	14.2301	M.Engr.	College of Engineering	Idaho Falls Moscow	Online Traditional (face-to-face)
UI	Nuclear Engineering	14.2301	M.S.	College of Engineering	Coeur d'Alene Idaho Falls Moscow	Online Traditional (face-to-face)
UI	Nuclear Engineering	14.2301	Ph.D.	College of Engineering	Coeur d'Alene Idaho Falls Moscow	Online Traditional (face-to-face)
UI	Nuclear Materials Engineering	14.2301	Graduate Certificate	College of Engineering		Online
UI	Nuclear Technology Management	14.2301	Graduate Certificate	College of Engineering	Idaho Falls	Online
ISU	Engineering and Applied Science: Measurement & Control Engineering	14.2701	Concentration	Science and Engineering	Pocatello	Some portion online Traditional (face-to-face)
ISU	Measurement and Control Engineering	14.2701	MS	Science and Engineering		Traditional (face-to-face)
BSU	Industrial Engineering	14.3501	Minor	Business and Economics		Traditional (face-to-face)
ISU	Geology: Engineering Geology Concentration	14.3901	BS	Science and Engineering	Idaho Falls Pocatello	Some portion online Traditional (face-to-face)
UI	Geological and Mining Engineering	14.3901	Minor	College of Engineering	Moscow	
UI	Geological Engineering	14.3901	B.S.	College of Engineering	Moscow	Traditional (face-to-face)
UI	Geological Engineering	14.3901	M.S.	College of Engineering	Moscow	Online
UI	Robotics Engineering	14.4201	Undergraduate Certificate	College of Engineering	Moscow	Traditional (face-to-face)
UI	Biological Engineering	14.4501	B.S.	College of Engineering	Moscow	Online Traditional (face-to-face)
UI	Biological Engineering	14.4501	M.Engr.	College of Engineering	Moscow	Online Traditional (face-to-face)
UI	Biological Engineering	14.4501	M.S.	College of Engineering	Moscow	Online Traditional (face-to-face)
UI	Biological Engineering	14.4501	Ph.D.	College of Engineering	Moscow	Online Traditional (face-to-face)
BSU	Electrical & Computer Engineering	14.4701	Ph.D.	Engineering	Boise	Traditional (face-to-face)
BSU	Electrical and Computer Engineering	14.4701	M.Engr.	Engineering	Boise	Traditional (face-to-face)
BSU	Electrical and Computer Engineering	14.4701	M.S.	Engineering	Boise	Traditional (face-to-face)
BSU	Semiconductor	14.4701	Emphasis	Engineering	Boise	Traditional (face-to-face)
UI	Engineering Management	14.9999	M.Engr.	College of Engineering	Moscow	Online
ISU	Civil Engineering Technician	15.0201	ATC	Technology	Pocatello	Online
ISU	Civil Engineering Technology	15.0201	AAS	Technology	Pocatello	Online
ISU	Civil Engineering Technology	15.0201	BAS			Hybrid
ISU	Civil Engineering Technology-Materials Testing and Specification	15.0201	BTC	Technology	Pocatello	Hybrid
ISU	Civil Engineering, Accelerated BS/MS	15.0201	BS	Science and Engineering	Idaho Falls Pocatello	Some portion online Traditional (face-to-face)
ISU	Civil Engineering, Accelerated BS/MS	15.0201	MS	Science and Engineering	Idaho Falls Pocatello	Some portion online Traditional (face-to-face)
CSI	Electronic Engineering Technician	15.0303	AAS	Engineering, Physical, and Computer Sciences	Twin Falls	Some portion online Traditional (face-to-face)
CWI	Advanced Mechatronics Engineering Technology	15.0303	AAS	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
CWI	Advanced Mechatronics Engineering Technology	15.0303	BTC	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
ISU	Basic Electronics (RCET Robotics)	15.0303	ITC	Technology	Pocatello	Traditional (face-to-face)
ISU	Electrical Engineering Technology	15.0303	BS	Science and Engineering	Pocatello	Hybrid
ISU	Energy Systems Technology	15.0303	ITC	Technology	Pocatello	Hybrid
ISU	Robotics and Communications Systems Engineering	15.0303	AAS	Technology	Pocatello	Hybrid
ISU	Robotics and Communications Systems Engineering	15.0303	ATC	Technology	Pocatello	Hybrid
ISU	Robotics Engineering Technology	15.0303	BAS	Technology	Idaho Falls Pocatello Twin Falls	Traditional (face-to-face)
ISU	Laser/Electro-Optics Technology	15.0304	ATC	Technology	Pocatello	Hybrid
BSU	Integrated Circuit Design	15.0306	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
CEI	Mechatronics Engineering Technology	15.0403	AAS	Trades and Industry	Idaho Falls	Traditional (face-to-face)
ISU	Energy Systems Instrumentation Engineering Technology	15.0404	AAS	Technology	Pocatello	Hybrid
ISU	Industrial Controls (Under Energy Systems)	15.0404	AAS	Technology	Pocatello	Hybrid
ISU	Instrumentation and System Automation Asst.	15.0404	BTC	Technology	Pocatello	Hybrid
CSI	Automation Engineering Technology	15.0406	AAS	Trade and Industry	Twin Falls	Hybrid Traditional (face-to-face)
CSI	Automation Engineering Technology	15.0406	BTC	Trade and Industry	Twin Falls	Hybrid Traditional (face-to-face)
CSI	Automation Engineering Technology	15.0406	ITC	Trade and Industry	Twin Falls	Hybrid Traditional (face-to-face)
CSI	Water Resource Mgmt	15.0506	BTC	Agriculture	Twin Falls	Hybrid Traditional (face-to-face)
NIC	Wastewater Treatment Plant Technician	15.0506	AAS	Trades and Industry	Coeur d'Alene	Traditional (face-to-face)
UI	Engineering Technology (Coeur d'Alene)	15.0612	B.S.Tech.	College of Engineering	Coeur d'Alene	Hybrid Traditional (face-to-face)
UI	Engineering Technology (Idaho Falls)	15.0612	B.S.Tech.	College of Engineering	Idaho Falls	Hybrid Traditional (face-to-face)

**Current Programs
Engineering and Engineering Related 2025**

Institution	Title	CIP Code	Award	College	Locations	Delivery Methods
UI	Engineering Technology (Moscow)	15.0612	B.S.Tech.	College of Engineering	Moscow	Hybrid Traditional (face-to-face)
UI	Technology Management	15.0612	M.S.	College of Engineering		Online
BSU	Semiconductor Device Physics	15.0616	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
BSU	Semiconductor Processing	15.0616	Undergraduate Certificate	Engineering	Boise	Traditional (face-to-face)
CWI	Semiconductor Manufacturing Technology	15.0616	AAS	School of Industry, Engineering, and Trades	Nampa	Hybrid Traditional (face-to-face)
CWI	Semiconductor Manufacturing Technology	15.0616	BTC	School of Industry, Engineering, and Trades	Nampa	Hybrid Traditional (face-to-face)
ISU	Semiconductor Manufacturing Technology	15.0616	AAS	Technology	Pocatello	Hybrid
ISU	Semiconductor Manufacturing Technology	15.0616	ITC	Technology	Pocatello	Hybrid
UI	Human Safety Performance	15.0705	Undergraduate Certificate	College of Engineering	Idaho Falls	Online Traditional (face-to-face)
ISU	Energy Systems Mechanical Engineering Technology	15.0805	AAS	Technology	Pocatello	Hybrid
CWI	Mining Technician	15.0901	AS	School of Science, Technology, and Math	Nampa	Hybrid
ISU	Professional Land Surveying	15.1102	Academic Certificate	Technology		Online
ISU	Surveying and Geomatics Engineering Technology	15.1102	BS	Technology	Pocatello	Hybrid
ISU	Surveying Technician	15.1102	BTC	Technology	Pocatello	Online
CSI	Drafting Technology	15.1302	AAS	Trade and Industry	Twin Falls	Hybrid Traditional (face-to-face)
CSI	Drafting Technology	15.1302	ITC	Trade and Industry	Twin Falls	Hybrid Traditional (face-to-face)
CWI	Drafting Technology	15.1302	AAS	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
CWI	Drafting Technology	15.1302	ATC	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
CWI	Drafting Technology	15.1302	ITC	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
ISU	Computer Aided Design Drafting Technology	15.1302	AAS	Technology	Pocatello	Traditional (face-to-face)
ISU	Computer Aided Design Drafting Technology	15.1302	ATC	Technology	Pocatello	Traditional (face-to-face)
ISU	Computer Aided Design Drafting Technology	15.1302	BAS	Technology		Traditional (face-to-face)
ISU	Drafting, Architectural Drafting	15.1303	ITC	Technology	Pocatello	Traditional (face-to-face)
LCSC	Engineering Technology	15.1304	AAS	Career and Technical Education	Lewiston	Traditional (face-to-face)
LCSC	Engineering Technology - Civil Emph	15.1304	AAS	Career and Technical Education		
ISU	Drafting, Mechanical Drafting	15.1306	ITC	Technology	Pocatello	Traditional (face-to-face)
LCSC	Engineering Technology - Mechanical Emph	15.1306	AAS	Career and Technical Education		
NIC	Mechanical Design Engineering Technology	15.1307	AAS			
NIC	Mechanical Design Engineering Technology	15.1307	ATC	Trades and Industry	Coeur d'Alene	Hybrid Online Traditional (face-to-face)
NIC	Mechanical Design Engineering Technology	15.1307	ITC			
BSU	Nuclear Safeguards and Security	15.1401	Graduate Certificate	School of Public Service	Boise Moscow Pocatello	Online
ISU	Energy Systems Nuclear Operations Technology	15.1401	AAS	Technology	Pocatello	Hybrid
ISU	Energy Systems Nuclear Operations Technology: Licensed Operator concentration	15.1401	AAS	Technology	Pocatello	Traditional (face-to-face)
ISU	Energy Systems Nuclear Operations Technology: Nuclear Facility Technician concentration	15.1401	AAS	Technology	Pocatello	Traditional (face-to-face)
ISU	Nuclear Engineering Technology Management (online)	15.1401	BAS	Technology	Pocatello	Online
ISU	Nuclear Safeguards and Security	15.1401	Graduate Certificate	Science and Engineering	Boise Moscow Pocatello	Online
UI	Nuclear Safeguards and Security	15.1401	Graduate Certificate	College of Engineering	Boise Moscow Pocatello	Online
CEI	Energy Systems Technology	15.1701	AAS	Trades and Industry	Idaho Falls	Traditional (face-to-face)
CEI	Energy Systems Technology	15.1701	ATC	Trades and Industry	Idaho Falls	Traditional (face-to-face)
CEI	Energy Systems Technology	15.1701	ITC	Trades and Industry	Idaho Falls	Traditional (face-to-face)
ISU	Energy Systems Electrical Engineering Technology	15.1701	AAS	Technology	Pocatello	Hybrid

**Current Programs
Manufacturing Related 2025**

Institution	Title	CIP Code	Award	College	Locations	Delivery Methods
CEI	Welding Technology	48.0508	AAS	Trades and Industry	Idaho Falls	Traditional (face-to-face)
CEI	Welding Technology	48.0508	ATC	Trades and Industry	Idaho Falls	Traditional (face-to-face)
CEI	Welding Technology	48.0508	ITC	Trades and Industry	Idaho Falls	Traditional (face-to-face)
CSI	Machining and Manufacturing Technology	48.0501	AAS	Trade and Industry	Twin Falls	Hybrid Traditional (face-to-face)
CSI	Machining and Manufacturing Technology	48.0501	BTC	Trade and Industry	Twin Falls	Hybrid Traditional (face-to-face)
CSI	Machining and Manufacturing Technology	48.0501	ITC	Trade and Industry	Twin Falls	Hybrid Traditional (face-to-face)
CSI	Welding Technology	48.0508	AAS	Trade and Industry	Twin Falls	Hybrid Traditional (face-to-face)
CSI	Welding Technology	48.0508	BTC	Trade and Industry	Twin Falls	Hybrid Traditional (face-to-face)
CSI	Welding Technology	48.0508	ITC	Trade and Industry	Twin Falls	Hybrid Traditional (face-to-face)
CWI	Machine Tool Technology	48.0501	AAS	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
CWI	Machine Tool Technology	48.0501	BTC	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
CWI	Machine Tool Technology	48.0501	ITC	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
CWI	Welding & Metals Fabrication	48.0508	AAS	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
CWI	Welding & Metals Fabrication	48.0508	BTC	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
CWI	Welding & Metals Fabrication	48.0508	ITC	School of Industry, Engineering, and Trades	Nampa	Traditional (face-to-face)
ISU	Computerized Machining Technology: CNC Operator	48.0510	ATC	Technology	Pocatello	Traditional (face-to-face)
ISU	Computerized Machining Technology	48.0510	AAS	Technology	Pocatello	Traditional (face-to-face)
ISU	Computerized Machining Technology: Machining Technology	48.0510	ATC	Technology	Pocatello	Traditional (face-to-face)
ISU	Nuclear Welding	48.0508	Specialized Certificate	Technology	Pocatello	Traditional (face-to-face)
ISU	Welder-Fitter	48.0508	AAS	Technology	Pocatello	Traditional (face-to-face)
ISU	Welder-Fitter	48.0508	ATC	Technology	Pocatello	Traditional (face-to-face)
ISU	Welding	48.0508	ITC	Technology	Pocatello	Traditional (face-to-face)
LCSC	CNC Machining Technology	48.0510	AAS	Career and Technical Education	Lewiston	Traditional (face-to-face)
LCSC	CNC Machining Technology	48.0510	ATC	Career and Technical Education	Lewiston	Traditional (face-to-face)
LCSC	CNC Machining Technology	48.0510	ITC	Career and Technical Education	Lewiston	Traditional (face-to-face)
LCSC	Welding Technology	48.0508	AAS	Career and Technical Education	Lewiston	Traditional (face-to-face)
LCSC	Welding Technology	48.0508	ATC	Career and Technical Education	Lewiston	Traditional (face-to-face)
LCSC	Welding Technology	48.0508	ITC	Career and Technical Education	Lewiston	Traditional (face-to-face)
NIC	Advanced Manufacturing Engineering and CNC Technologies	48.0510	A.A.S.	Trades and Industry	Coeur d'Alene	Hybrid
NIC	Computer Control Automation Technology	48.0501	ITC	Trades and Industry	Coeur d'Alene	Hybrid Online Traditional (face-to-face)
NIC	Machine & CNC Technology	48.0501	AAS	Trades and Industry	Coeur d'Alene	Hybrid Online Traditional (face-to-face)
NIC	Machine & CNC Technology	48.0501	ATC	Trades and Industry	Coeur d'Alene	Hybrid Online Traditional (face-to-face)
NIC	Precision Machining	48.0501	ITC	Trades and Industry	Coeur d'Alene	Hybrid Online Traditional (face-to-face)
NIC	Welding Technology	48.0508	AAS	Trades and Industry	Coeur d'Alene	Hybrid Online Traditional (face-to-face)
NIC	Welding Technology	48.0508	ATC	Trades and Industry	Coeur d'Alene	Hybrid Online Traditional (face-to-face)
NIC	Welding Technology	48.0508	ITC	Trades and Industry	Coeur d'Alene	Hybrid Online Traditional (face-to-face)

WORK SESSION

AUGUST 12-13, 2026

SUBJECT

Work Session: Ready for AI: Preparing Postsecondary Students for an AI-Integrated World

BACKGROUND

Recent advances in artificial intelligence (AI) have reshaped all aspects of higher education. AI models continue to evolve quickly, and AI tools have become far more accessible to students and faculty alike. At the same time, the complex ethical considerations surrounding the use of AI platforms have led to ongoing discussions about the responsible and transparent use of this emergent technology in educational settings.

This work session centers on how generative and agentic AI (tools that can act on their own rather than simply answer questions) are changing the student learning experience across Idaho's public colleges and universities. It also examines how institutions are responding with intentional teaching approaches that keep student growth and development at the forefront.

Faculty and institutional leaders will share how they integrate AI into learning environments from a student's first days on campus. They will describe how they intentionally engage students with AI throughout their degree experience. Additionally, they will also explain how they help graduating students effectively navigate the demands of a rapidly-changing workforce.

PROPOSAL

The session highlights important systemwide initiatives alongside specific examples of how individual institutions are teaching students to use AI well throughout their time earning a degree. Institutions are reimagining how students learn, practice, and demonstrate mastery in a time when generative and agentic AI tools are widely available. Throughout this work, institutions remain focused on preserving the core outcomes that define a high-quality higher education experience, such as critical thinking, effective communication, and discernment.

IMPACT

As AI continues to evolve, it is crucial for educational institutions to embrace its potential while carefully navigating its challenges. This work session provides an opportunity for Board members to learn more about how college students are being introduced to AI while also being prepared for an AI-infused workplace.

BOARD STAFF COMMENTS AND RECOMMENDATIONS

Board staff are leading the 4-year, \$4 million FIPSE grant, Accelerate Idaho, and are actively engaged with the Statewide AI Alliance. This group engages key stakeholders from each institution in sharing strategies and information. The purpose of this work session is to update the Board on the institutions' continued and evolving engagement with AI instruction over the course of students' degree experiences.

WORK SESSION
AUGUST 12-13, 2026

ATTACHMENTS

Attachment 1 – Ready for AI: Preparing Postsecondary Students for an AI-Integrated World

BOARD ACTION

No action needed; this agenda item is for informational purposes only.

APPLICABLE STATUTE, RULE OR POLICY

Not applicable.

REFERENCE

February 2024	The Board held an initial work session on generative artificial intelligence to learn about and discuss basic principles of this emerging technology and its applications in educational contexts.
October 2024	The Board held a second work session on generative artificial intelligence to learn about the impacts of this emerging technology on teaching and learning in higher education.
April 2025	The Board held a third work session on generative artificial intelligence focused on impacts of AI in K-12 contexts as well as in teacher preparation programs.

Ready for AI

Preparing Postsecondary Students for an AI-Integrated World

August 13, 2026 · Idaho State Board of Education
Instruction, Research, and Student Affairs

Our Presenters



Liza Long

Director of Digital Learning and AI
Idaho State Board of Education



Kevin Rank

Department of Information Technology Management
Boise State University



Joel Gladd

Department Chair of Integrated Studies
College of Western Idaho



AI Literacy

Foundational Competencies that enable individuals to use and evaluate AI technologies responsibly, with a primary focus on generative AI.

1. **Understand** AI Principles
2. **Explore** AI Uses
3. **Direct** AI Effectively
4. **Evaluate** AI Outputs
5. **Use** AI Responsibly ([U.S. Department of Labor](#))



AI Fluency

Understand the fundamentals of how AI works; critically **evaluate** the application of AI tools in teaching, learning, scholarship, and the management of educational priorities; and **maintain vigilance** in evaluating tools and techniques to protect against bias, misuse, and misapplication. ([EDUCAUSE](#))

AI Fluency means interacting with AI systems in ways that are **effective, efficient, ethical and safe** ([Anthropic](#))

AI Ready

Eight Institutions. Eight Paths. One Destination

*AI-ready students can **understand, use, evaluate, and responsibly direct** AI tools in academic and workplace contexts, while maintaining **human judgment, ethical accountability, and disciplinary expertise.***

Accelerate Idaho: Statewide AI Ready Teaching and Learning

About the FIPSE grant

- \$4M over four years (2026-2029)
- Absolute Priority 1: “Advancing the Understanding and Use of AI in Postsecondary Education” ([FIPSE](#))
- Pass through grants to 8 Idaho IHEs
- Teaching and Learning with Technology Committee (TLTC)
- Funds student facing AI technology at all 8 IHEs

Idaho is a national leader in AI education

AI Catalysts

- 2 faculty AI champions at each institution
- Create statewide programming including webinars and trainings
- Annual Digital Learning Institutes (2027-2029) to replace virtual statewide AI Conference

Faculty champions share best practices and collaborate systemwide

GEM microgrants for assignment/course redesign

- Faculty stipends for assignment or course redesign to incorporate AI literacy/fluency
- Includes statewide AI training (developed by AI Catalysts)
- Shared through statewide Pressbooks and Canvas Commons (open education resources)

Students and faculty benefit from thoughtful AI integration

AI Innovation Awards

- Competitive grant process managed by TLTC
- Each institution may have up to 3 concurrent awards
- \$2.3 million total funding available over four years
- [Call for Proposals](#) sent 6/3; 15 LOIs received 7/10

Researchers and institutions push boundaries

AI Ready at 4-Year Institutions

Case Study 1: Opportunities and Challenges at Boise State
University

DESIGN PRINCIPLE

AI fluency has to show up more than once

Students need repeated, context-specific encounters with AI across their coursework.

1

ENTRY

boisestate.ai access from day one • AI Literacy and Student Success online course • UF 123 (AI as a Social Disrupter) • LIBR140 (AI & information literacy)

2

MID-PROGRAM

Ethics: UF 232, UF 233, PHIL 123 • Writing: WRITE 229 • Workplace application: INVN 325, ITM 310 / ITM 370, CS 432 • Discipline courses in nursing, health, design, cybersecurity

3

THROUGH-LINE

GenAI policy and student data guidance • AI Liaisons in every department • faculty AI toolkit and white papers • supported tools instead of unmanaged consumer accounts

AI literacy is discipline-specific. What a nursing student needs differs from writing, cybersecurity, or design.

Required Degree Courses Create Broad AI Touchpoints

Standard Nursing and COBE pathways give all students an AI touchpoint. These are not dedicated AI courses.

100%

NURSING

All standard Nursing pathways include NURS 224 Healthcare Technology and Informatics. It is not a dedicated AI course, but it creates a common touchpoint.

100%

BUSINESS (COBE)

All standard COBE pathways include ITM 310, where GenAI is introduced or discussed. It is a core business course, not a dedicated AI course.

4+

OTHER MAJORS

Required AI or AI related courses appear in Digital Innovation, Health Data Analytics, public health, and MS Data Science.

Faculty

CROSS CAMPUS AI

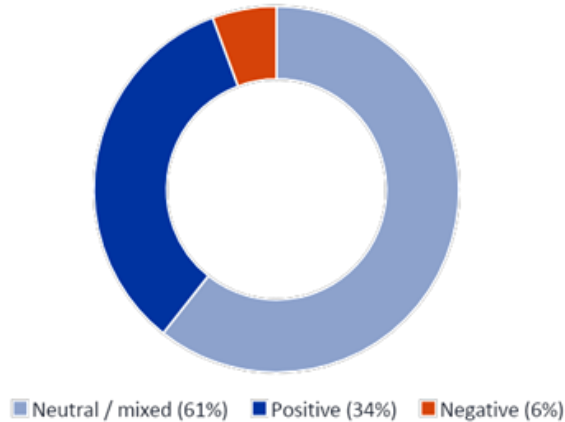
COBE's AI community includes Nursing and other units, creating a cross campus conversation about curriculum and practice.

Caveat: Standard pathways are shown. Transfer credit, substitutions, or other routes may meet requirements differently.

STUDENT VOICE

Students are pragmatic but unsure where the line is

SENTIMENT TOWARD GENAI (915 comments)



Students see practical value and real limits.

Directional classroom-response data (Fall 2024–Spring 2026); not a campus-wide misconduct rate.

"HAVE YOU USED AI TO CHEAT?" (317 classroom responses)



"Maybe" is the most important finding: 38% can't tell where legitimate AI support for activities like checking work, revising writing, tutoring, or brainstorming ends and misconduct begins.

CHALLENGES

Resource constraints (and a moving target)

CAPACITY CONSTRAINTS

- Protected faculty time to build AI literacy into courses
- Instructional design support and staffing capacity
- Tool access, licensing cost, privacy, and procurement
- Course-revision cycles are slower than tool releases
 - In my AI class, I update slides the day of class many times.

PACE OF CHANGE (MAY 2025 – MAY 2026)

100+

public ChatGPT / OpenAI product updates

200+

public Google / Gemini ecosystem updates

Counted from official release notes and changelogs.

Hard problem: Beyond teaching AI, we need to be giving students access to the agentic AI they will encounter in the workplace. Access to this form of AI is still rare across higher education.

AI Ready at 2-Year Institutions

Case Study 2: Opportunities and Challenges at the College of
Western Idaho

AI fluency has to show up more than once

Students need repeated, context-specific encounters with AI across their time at CWI

1

ENTRY

Baseline AI literacy for student success and ethical use.

2

EARLY/MID-PROGRAM

Information & digital literacy, ethics, writing, disciplinary application

3

THROUGH-LINE

Standing student support (e.g., tutoring), policy guidance, faculty and staff capacity

AI literacy is discipline-specific. What students need in writing is different from ethics, healthcare, or cybersecurity.

Fostering AI Readiness at CWI



SUPPORTS ALREADY IN MOTION

- **Writing & AI Literacy Center** — standing student support
- **CWI 101** — strong baseline for students who take it
- **PHIL 123** — deep AI integration within Ethical Reasoning Gen Ed & GEM 5 (Integrative Learning)
- **AI Studies emphasis** inside General Studies AA (2nd largest major, Fall 2027)
- **Digital Literacy Gen Ed** — updated Information and Digital Literacy competency integrated within ENGL & COMM
- **AI policy** — [CW 110](#), annual AI / emerging technologies training
- **FIPSE grant** — faculty development, initial focus on ENGL & COMM



STILL UNEVEN

- Program and course-level AI assessment practices *outside the existing or planned touchpoints*
- Dual / concurrent reach (*in progress with Stephen Crumrine*)
- CTE/AAS program-level integration outside the 4 listed AAS programs
- Consistency of expectations and assessment across instructors

ENGL/COMM can provide a broad foundation while CTE adds depth

Projected structural reach | 2026-2028

BROAD FOUNDATION

~97%

projected non-dual structural reach through direct AI instruction in ENGL/COMM.

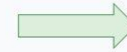


13,573 / 14,050 non-dual students

FIPSE-supported ENGL/COMM course redesign

DEEPER CTE INTEGRATION

~12%



**up to
~23%**

CWI 101 in four AAS programs

with CSEC + SWDV course integration

ADDITIONAL PATHS IN PLANNING

**General Studies
AI Pathway**

**Workforce
microcredentials**

**Concurrent CWI 101
bridge**

Projection uses Fall 2025 + Spring 2026 enrollment as a proxy; structural reach is not measured completion.

Challenges at CWI



CAPACITY CONSTRAINTS

- **Faculty development time** — protected time to develop AI literacy
- **Instructional design support**
- **Tool access and cost**
- **Pace of change** — tools shift faster than course-revision cycles



TECHNOLOGY-ACCESS CHALLENGE

- CWI uses **Microsoft Copilot / enterprise access** for baseline tool access
- Copilot appropriate for baseline; piloting other tools where needed
- Advanced courses (future AI and Work) will need **agentic-workflow**, but **agentic access** is currently rare across higher education

Hard problem: giving access to the AI students will encounter in workplace practice

Questions and Discussion

What new questions do you have about AI at our institutions?

What else would you like to learn more about AI Readiness?