

1796: ARTIFICIAL INTELLIGENCE AND EDUCATIONAL TECHNOLOGY LEADER CERTIFICATE

In Workflow

1. TCH Approval (susan.keesey@wku.edu; josiah.super@wku.edu)
2. ED Dean (corinne.murphy@wku.edu; jennifer.klemm@wku.edu)
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7. Provost (rob.hale@wku.edu)
8. Board of Regents (all)
9. CPE (rob.hale@wku.edu)
10. Program Inventory (jennifer.hammonds@wku.edu; jessica.dorris@wku.edu)

Approval Path

1. Wed, 26 Feb 2025 17:44:46 GMT
Josiah Super (josiah.super): Approved for TCH Approval
2. Wed, 26 Feb 2025 18:42:40 GMT
Jennifer Klemm (jennifer.klemm): Approved for ED Dean
3. Tue, 04 Mar 2025 22:54:43 GMT
Jennifer Klemm (jennifer.klemm): Approved for ED Curriculum Committee
4. Thu, 03 Apr 2025 20:12:04 GMT
Whitley Stone (whitley.stone): Approved for Graduate Curriculum Committee
5. Wed, 16 Apr 2025 20:42:16 GMT
Jeremy Logsdon (jeremy.logsdon): Approved for Graduate Council
6. Fri, 16 May 2025 12:18:32 GMT
Gordon McKerral (mac.mckerral): Approved for University Senate
7. Fri, 16 May 2025 18:25:59 GMT
Robert Fischer (robert.fischer): Approved for Provost

New Program Proposal

Date Submitted: Wed, 26 Feb 2025 17:33:09 GMT

Viewing: 1796 : Artificial Intelligence and Educational Technology Leader Certificate

Last edit: Fri, 25 Jul 2025 15:08:40 GMT

Changes proposed by: and85146

Proposed Action

Active

Contact Person

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Term of Implementation

2025-2026

Academic Level

Graduate

Program Type

Certificate - Graduate

Department

Teacher Education, School of

College

Education & Behavioral Science

Program Name (eg. Biology)

Artificial Intelligence and Educational Technology Leader Certificate

CIP Code

13.0501 - Educational/Instructional Technology.

Will this program lead to teacher certification?

No

Does the proposed program contain 25% or more new content not previously taught in another course at WKU? If yes, contact the Office of the Provost for additional SACSCOC proposal requirements

No

Catalog Content**Program Overview (Catalog field: Overview tab)**

The Graduate Certificate in Artificial Intelligence and Educational Technology Leader is a comprehensive program that prepares candidates for excellence in roles as a leader within K-12 education, educational technology, higher education, training and development, and interdisciplinary industries. The certificate is designed to support aspiring leaders with the essential knowledge and skills to provide effective implementation and use of artificial intelligence (AI), educational technology, best practices in online learning, and cybersecurity in education.

In addition, this certificate can be completed in less than a year and all credits can be stacked into the MAE (0500) and Gifted Education/Talent Development & Advanced Instructional Practice, EDS (0503), providing a streamlined pathway to a master's degree and beyond.

Admission Requirements (Catalog field: Program Admission)

Students may complete this program without seeking teacher certification if they intend to seek employment in a setting other than public education (where teacher certification is required). This program does not provide initial teacher certification.

Admission requirements:

- Submission of graduate application to Graduate Studies
- Submission of official transcripts of all college work
- GPA of 2.75 in previous program or 3.0 in last 30 hours of previous program.

The admission decision by program faculty is based on a review of the full set of admission documents. Applicants should strive to provide evidence of potential for completion of the degree and success.

Curriculum Requirements (Catalog field: Program Requirements)**Program Requirements (15 hours)**

Code	Title	Hours
Required Courses		
ID 585	Distance Education Opportunities and Challenges	3
LITE 537	Educational Technology Management	3
LITE 550	Emerging Technology in Education	3
LITE 737	Educational Technology Leadership	3
EDU 501	Designing Learning through Artificial Intelligence	3
Total Hours		15

Will this program be managed or owned by more than one department?

No

Does this program include courses from outside your department?

No

Relation to Mission and Strategic Plan**Explain how the proposed program relates to the institutional mission and academic strategic plan.**

The Artificial Intelligence and Educational Technology Leader Certificate at Western Kentucky University would be aligned with the institution's mission and strategic goals. As WKU strives to prepare students to become engaged, socially responsible leaders in a global society, this certificate would provide cutting-edge tools and knowledge essential for success in the evolving educational

landscape. By supporting aspiring leaders with the essential knowledge and skills to provide effective implementation and use of artificial intelligence (AI), educational technology, best practices in online learning, and cybersecurity in education, this program would not only support individual participant growth but also contribute to the university's broader commitment to regional and global impact. This alignment underscores WKU's dedication to lifelong learning, accessibility, and transformative educational experiences for our students, our hill, our community and beyond. The Artificial Intelligence and Educational Technology Leader Certificate aligns with the WKU mission to address, Our Students, Our Hill, as well as Our Community and Beyond.

Supporting Student Success and Engagement (Our Students)

Personalized Learning: AI-driven tools can tailor educational content to individual student needs, fostering deeper engagement and improving academic outcomes.

Lifelong Learning: A certificate like this would provide current students and alumni with cutting-edge skills, fostering a culture of continuous education.

Enhancing Faculty & Staff Excellence (Our Hill)

Empowering Educators: Training faculty to integrate AI and ed-tech tools into their teaching methods can lead to innovative course delivery and improved learning outcomes.

Research Opportunities: Faculty and students can collaborate on AI-related research projects, positioning WKU as a leader in educational technology innovation.

Regional and Global Impact (Our Community & Beyond)

Community Engagement: AI and ed-tech leaders can partner with regional K-12 schools and local businesses to improve educational practices and workforce readiness.

Economic Development: Graduates equipped with AI and educational technology skills can contribute to local and regional economic growth, fostering innovation in education and beyond.

Innovation in Teaching and Learning

Supporting Curriculum: Incorporating AI tools like adaptive learning platforms, virtual reality, and data analytics into the classroom can redefine the educational experience.

Future-Ready Graduates: By offering this graduate certificate, WKU ensures its students are competitive in a rapidly evolving job market where AI literacy is increasingly essential.

In summary, the AI and Educational Technology Leader Certificate would directly support WKU's mission and strategic goals by enhancing student success, faculty development, community engagement, and global leadership.

Explain how the proposed program addresses the state's postsecondary education strategic agenda

Kentucky's 2022-2030 Strategic Agenda for Postsecondary Education aims to elevate the state's educational attainment and economic prosperity. The primary objective is to increase the percentage of Kentuckians holding a high-quality postsecondary degree or certificate to 60% by 2030. This initiative is designed to accelerate job creation, stimulate economic growth, and expand the tax base through a more skilled and productive workforce.

The agenda outlines five strategic priorities to guide innovation and improvement through 2030:

Affordability: Ensuring that postsecondary education is financially accessible to all residents.

Transitions: Facilitating seamless transitions into and through postsecondary education for students of all ages and backgrounds.

Success: Providing comprehensive support and resources to help students achieve their educational goals.

Talent: Aligning educational programs with workforce needs to develop a skilled and adaptable talent pool.

Value: Demonstrating the return on investment of postsecondary education to individuals and society.

By focusing on these priorities, Kentucky aims to create a more inclusive and innovative higher education system that serves students of all ages, backgrounds, and beliefs, ultimately enhancing the state's economic growth and vitality.

An Artificial Intelligence and Educational Technology Leader Certificate program would directly support Kentucky's 2022-2030 Strategic Agenda for Postsecondary Education in several key ways:

Affordability: By leveraging AI and educational technology, institutions can develop cost-effective learning solutions such as online courses and adaptive learning platforms, making education more accessible and affordable for all students.

Transitions: AI tools can streamline the transition process for students by offering personalized guidance, predictive analytics for academic success, and seamless integration of prior learning assessments, helping students of all backgrounds navigate their educational journeys more effectively.

Success: The program would equip educators with AI-driven tools to provide tailored support, identify at-risk students early, and enhance student engagement, thereby increasing retention and graduation rates.

Talent: By aligning the curriculum with the latest advancements in AI and educational technology, the certificate would prepare graduates to meet current and future workforce demands, creating a highly skilled and adaptable talent pool in Kentucky.

Value: Graduates of the program would not only gain valuable, in-demand skills but also contribute to the broader economy by fostering innovation in education and beyond, demonstrating a strong return on investment for both individuals and society.

In summary, the AI and Educational Technology Leader Certificate would directly support both WKU's mission and Kentucky's strategic goals by enhancing student success, faculty development, community engagement, and workforce readiness, ultimately contributing to the state's economic growth and vitality.

Program Quality and Demand

Provide justification and evidence to support the need and demand for this proposed program. Include any data on student demand; career opportunities at the regional, state, and national level; and any changes or trends in the discipline that necessitate a new program.

Please insert one Learning Outcome per box. Click green plus sign for additional LO boxes

Learning Outcomes and Measurement Plan

	List all student learning outcomes of the program.	Measurement Plan
SLO 1	Apply artificial intelligence as a leader to the educational environment	In-class project analysis of artifacts collected in LITE 550 and ID 585.
SLO 2	Apply educational technology as a leader to the educational environment	In-class project analysis of artifacts collected in LITE 537 and LITE 550.
SLO 3	Apply cybersecurity as a leader to the educational environment	In-class project analysis of artifacts collected in LITE 737 and EDU 501.

Assessment Template: https://www.wku.edu/academicaffairs/ee/assurance_learning_resources.php

Upload Assessment Plan

AI&EDTECH new_program_2020-21_asl.docx

AI&EDTECH new_program_2024-2025.docx

Change in Discipline (If the program is being proposed to meet changes in the academic discipline, please outline those changes and explain why they necessitate development of a new program.)

Artificial Intelligence is a fast moving and growing part of the educational landscape. Having the opportunity to develop knowledge and leadership in the area of Artificial Intelligence would be positive for the field.

Specify any distinctive qualities of the program.

In Kentucky, several postsecondary institutions offer certificates related to artificial intelligence (AI) and educational technology:

University of Kentucky: Offers an Artificial Intelligence Certificate for undergraduate students, focusing on AI technologies from multiple perspectives.

University of Kentucky

University of the Cumberlands: Provides a 12-credit hour Graduate Certificate in Artificial Intelligence, covering AI fundamentals such as machine learning, natural language processing, deep learning, and data science.

University of the Cumberlands

Western Kentucky University (WKU): Offers a 12-hour Artificial Intelligence and Analytics Certificate, introducing key concepts in AI fundamentals, machine learning, applied data analysis, visualization, and AI ethics.

WKU Catalog

Additionally, WKU provides an Instructional Computer Technology Endorsement (P-12), preparing teachers to integrate technology into teaching and leadership in educational technology. This program is entirely online and requires a teaching certificate.

Western Kentucky University

While these programs cover aspects of AI and educational technology, a specific Artificial Intelligence and Educational Technology Leadership Certificate program, as described, is not currently offered by Kentucky's postsecondary institutions. However, institutions

like Elizabethtown College have launched such programs, indicating a growing recognition of the need for leadership in integrating AI into educational settings.
 Etown News

Does the proposed program differ from existing programs in terms of curriculum, focus, objectives, etc.?

Yes

Please explain

Yes, this program is aimed at all educational settings with both andragogical and pedagogical needs.

Does the proposed program serve a different student population (i.e., students in a different geographic area, non-traditional students) from existing programs?

No

Is access to existing programs limited?

No

Describe how the proposed program will articulate with related programs in the state. It should describe the extent to which students transfer has been explored and coordinated with other institutions.

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Additionally, WKU provides an Instructional Computer Technology Endorsement (P-12), preparing teachers to integrate technology into teaching and leadership in educational technology. This program is entirely online and requires a teaching certificate.

While these programs cover aspects of AI and educational technology, a specific Artificial Intelligence and Educational Technology Leadership Certificate program, as described, is not currently offered by Kentucky's postsecondary institutions. Given the increasing importance of AI in education, Kentucky institutions may consider developing specialized programs to prepare leaders in this emerging field.

Describe student demand data for this program.

The demand for programs like an Artificial Intelligence and Educational Technology Leadership Certificate is on the rise, driven by the increasing integration of AI in various sectors and the growing need for educational technology expertise.

Artificial Intelligence (AI):

Student Interest: Research indicates that the supply of AI programs at both bachelor's and master's levels is lagging behind a surge in interest from students.

The PIE News

Employer Demand: Employer demand for AI-related skills is rising across industries, and community colleges are stepping up to meet that need.

New America

Educational Technology:

E-Learning Growth: In the fall of 2018, approximately 6.9 million college students were enrolled in distance education courses, reflecting the growing popularity of e-learning in postsecondary education.

Research.com

Career Opportunities: A digital learning certificate opens doors to a myriad of career opportunities in education, training, and development.

College of Education

Given these trends, institutions offering specialized programs that combine AI and educational technology are well-positioned to meet the evolving demands of both students and employers.

Growth in Certificate Program Enrollment:

Undergraduate certificate program enrollment increased by 9.9% in fall 2024, marking the fourth consecutive year of growth and bringing enrollments to 28.5% above 2019 levels.

Clearinghouse Research Center

Graduate certificate programs also saw a 4.6% increase in enrollment from spring 2022 to spring 2023.

Gray Decision Intelligence

Degrees Awarded in Educational Technology:

In 2022, U.S. institutions conferred approximately 9,224 degrees in Educational and Instructional Technology, reflecting a 6.08% growth from the previous year.

Data USA

AI Program Enrollment Trends:

While specific enrollment numbers for AI certificate programs are limited, institutions like Carnegie Mellon University awarded 185 degrees in Artificial Intelligence in 2022, indicating a strong interest in AI-focused education.

Data USA

These trends suggest a growing student interest in certificate programs that combine artificial intelligence and educational technology, highlighting the relevance and potential demand for such specialized educational offerings.

The integration of artificial intelligence (AI) into various sectors has led to a significant demand for professionals skilled in both AI and educational technology. A certificate program in Artificial Intelligence and Educational Technology Leadership can address this need by preparing individuals to lead and innovate in educational settings.

Workforce Demand for AI Skills:

Growing Need for AI Proficiency: The global workforce increasingly requires employees with technical skills in data analysis, AI, and machine learning. Workers lacking these competencies may find themselves at a disadvantage in the evolving job market.

SHRM

Reskilling and Upskilling Imperative: A comprehensive industry report highlights that 92% of technology roles are evolving due to AI advancements, underscoring the necessity for reskilling and upskilling initiatives to keep pace with technological changes.

Cisco Investor Relations

Educational Technology Leadership Needs:

Transforming Workforce Development: AI is not only reshaping jobs but also revolutionizing workforce development itself. AI-powered tools are enhancing training and education programs, making them more effective and personalized.

Apolitical

Preparing for Future Workforce Dynamics: Experts anticipate that AI adoption will impact the broader workforce by altering or eliminating certain jobs while creating new ones. Maintaining global leadership in AI requires education and training pathways to prepare and upskill workers for AI and AI-adjacent roles.

Oversight Committee

Conclusion:

A certificate program in Artificial Intelligence and Educational Technology Leadership is well-positioned to meet the current and future demands of the workforce. By equipping professionals with the necessary skills to integrate AI into educational contexts, such a program addresses the critical need for leadership in this rapidly evolving field.

Will this program replace or enhance any existing program(s) or concentration(s) within an existing program?

No

Program Demand Data and Support Documents

Demand.docx

Delivery Mode

Is 25% or more of this program offered at a location other than main campus?

No

Is 50% or more of this program offered by distance education (online asynchronous, online synchronous, connected classrooms, etc.)?

Yes

Do you plan to offer 100% of this program online?

Yes

Do you plan to offer 100% of this program face-to-face?

No

If no, enter the percentage of the program that is taught face-to-face

0

Do you plan to offer at least 25% of this program as a direct assessment competency-based educational program?

No

See the SACSCOC Policy on Direct Assessment Competency-based Educational Programs.
<https://www.sacscoc.org/pdf/081705/DirectAssessmentCompetencyBased.pdf>

Rationale for the program proposal?

The integration of an Artificial Intelligence and Educational Technology Leadership Certificate into Western Kentucky University's offerings represents a strategic advancement aligned with both institutional and state-wide educational goals. As WKU prepares diverse students to become engaged, socially responsible leaders in a global society, this certificate program will provide cutting-edge knowledge and practical skills essential for navigating and leading in the evolving educational landscape. By fostering innovation in teaching practices, enhancing expertise, and strengthening community engagement, this program will not only support individual growth but also contribute to WKU's broader mission of regional and global impact. Furthermore, it positions WKU as a forward-thinking institution ready to meet the challenges of the future through technology-driven solutions, emphasizing lifelong learning, accessibility, and transformative educational experiences.

Kentucky's 2022-2030 Strategic Agenda for Postsecondary Education aims to elevate the state's educational attainment and economic prosperity by increasing the percentage of Kentuckians holding a high-quality postsecondary degree or certificate to 60% by 2030. This initiative is designed to accelerate job creation, stimulate economic growth, and expand the tax base through a more skilled and productive workforce.

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Value: Graduates of the program would not only gain valuable, in-demand skills but also contribute to the broader economy by fostering innovation in education and beyond, demonstrating a strong return on investment for both individuals and society.

The workforce demand for professionals skilled in artificial intelligence and educational technology is rapidly increasing. According to recent data, undergraduate certificate program enrollment rose by 9.9% in fall 2024, and graduate certificate programs saw a 4.6% increase from spring 2022 to spring 2023. The field of Educational and Instructional Technology alone saw 9,224 degrees awarded in 2022, reflecting a 6.08% growth from the previous year. Additionally, 92% of technology roles are evolving due to AI advancements, emphasizing the need for reskilling and upskilling initiatives to keep pace with these changes. By offering this certificate, WKU can address both the growing student interest in AI and educational technology and the pressing workforce needs, positioning graduates as leaders in integrating AI into educational settings.

In summary, the Artificial Intelligence and Educational Technology Leadership Certificate will directly support WKU's mission and Kentucky's strategic goals by enhancing student success, faculty development, community engagement, and workforce readiness, ultimately contributing to the state's economic growth and vitality.

Key: 407