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Cover Sheet for In-State Institutions
New Program or Substantial Modification to Existing Program

Institution Submitting Proposal	Notre Dame of Maryland University

Each action below requires a separate proposal and cover sheet.

- ○ New Academic Program
- ○ New Area of Concentration
- ○ New Degree Level Approval
- ◉ New Stand-Alone Certificate
- ○ Off Campus Program
- ○ Substantial Change to a Degree Program
- ○ Substantial Change to an Area of Concentration
- ○ Substantial Change to a Certificate Program
- ○ Cooperative Degree Program
- ○ Offer Program at Regional Higher Education Center

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Department Proposing Program	School of Education
Degree Level and Degree Type	Post-Baccalaurate Certificate
Title of Proposed Program	Leadership, Education, and Research in AI
Total Number of Credits	12
Suggested Codes	HEGIS: 829 CIP: 130301
Program Modality	○ On-campus ◉ Distance Education (fully online) ○ Both
Program Resources	◉ Using Existing Resources ○ Requiring New Resources
Projected Implementation Date (must be 60 days from proposal submisison as per COMAR 13B.02.03.03)	◉ Fall ○ Spring ○ Summer Year: 2025
Provide Link to Most Recent Academic Catalog	URL: https://catalog.ndm.edu/graduate-catalog
Preferred Contact for this Proposal	Name: Jonas Prida Title: Associate Vice President for Academic Affairs Phone: 410-532-5316 Email: jprida@ndm.edu
President/Chief Executive	Type Name: Dr. Marylou Yam Signature: [signature] President Date: 5/15/25
	Date of Approval/Endorsement by Governing Board: not applicable

Revised 4/2025

FOR DEGREE-GRANTING INSTITUTIONS AUTHORIZED TO OPERATE IN MARYLAND GUIDELINES FOR PROPOSING NEW ACADEMIC DEGREE PROGRAMS, NEW STAND-ALONE CERTIFICATE PROGRAMS, AND SUBSTANTIAL MODIFICATIONS

An institution submits a proposal using guidelines in accordance with State regulations found in **COMAR 13B.02.03.** Proposals shall be submitted electronically to **acadprop.mhec@maryland.gov**.

A. Centrality to Institutional Planning and Priorities

1. **Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.**

Graduate Certificate Proposal: LEARN-AI – Leadership, Education, and Research in AI for the Next Generation

Notre Dame of Maryland University (NDMU) School of Education proposes a new academic program: the **Graduate Certificate in Leadership, Education, and Research in AI for the Next Generation (LEARN-AI).** This post-baccalaureate certificate will be housed in and managed by the School of Education. The certificate program is designed to equip educators, administrators, and learning/instructional designers with the knowledge, skills, and competencies necessary to effectively integrate artificial intelligence technologies into educational settings. The program focuses on enhancing teaching, learning, and assessment practices while fostering ethical awareness of AI's implications in education.

Key areas of concentration within the program include:

1. **AI Tools and Applications in Education** – Understanding and leveraging AI tools to support instruction, personalize learning, and optimize student engagement.
2. **Ethics and Equity in AI** – Examining the ethical implications of AI in education, including issues of equity, bias, and accessibility.
3. **Data Literacy and Decision-Making** – Preparing educators to interpret and utilize AI-driven analytics to inform teaching practices and improve learning outcomes for students.
4. **Teaching the Digital Generations with AI and Digital Tools** – Developing innovative strategies for teaching today's digital-native learners by utilizing digital assistants, smart agents, AI-based platforms, and other emerging technologies. This concentration emphasizes best practices for integrating AI tools to meet the unique needs of digital generations and provide a personalized, engaging educational experience.
5. **Foundations in AI and Technology Use in Educational Contexts** – Offering a comprehensive overview of AI technologies and their practical applications in education. This concentration ensures that educators and educational leaders understand the theoretical and technical foundations of AI while fostering perspectives on its responsible use in educational environments.

The LEARN-AI Graduate Certificate aligns with NDMU's mission: to educate leaders to transform the world. Inspired by the vision of the School Sisters of Notre Dame, the University fosters intellectual and professional excellence, builds inclusive communities, and promotes service to others and social responsibility.
NDMU challenges women and men to:

- Strive for intellectual and professional excellence,
- Build inclusive communities,
- Engage in service to others, and
- Promote social responsibility.

This proposed program embodies NDMU's mission by preparing education professionals to lead in an era of rapid technological advancement. The focus on ethical decision-making, inclusivity, and service, equips graduates to promote equitable AI integration, addressing both the opportunities and challenges AI presents in education.

Intellectual and Professional Excellence

LEARN-AI emphasizes rigorous academic and professional training in key areas such as AI integration in pedagogy, data-driven decision-making, and ethical considerations in technology use. The program prepares educators, administrators, and learning designers to become leaders in educational innovation, equipping them with the tools and knowledge to reshape teaching and learning in diverse contexts. This focus on theory, practical application, and advanced technological expertise reflects NDMU's mission of challenging students to achieve intellectual excellence and become leaders in their fields.

Service and Social Responsibility

Artificial intelligence in education has the potential to enhance equity, improve access to learning, and address systemic challenges within education systems. Graduates of this program will contribute to the responsible and equitable use of AI, advancing educational outcomes for learners of all backgrounds. By educating professionals to thoughtfully implement AI technologies in ways that serve both individuals and society, the program aligns directly with NDMU's dedication to service and social responsibility. The program's emphasis on ethical decision-making ensures graduates are prepared to advocate for just and inclusive applications of AI in education.

Building Inclusive Communities

LEARN-AI aligns with NDMU's mission of building inclusive communities by fostering diversity and inclusivity in both its curriculum and its student body. The program is designed to attract a wide range of professionals from various educational, cultural, and technological backgrounds, creating an environment where diverse perspectives are valued and integrated. Through its commitment to promoting equity in education, the program empowers graduates to leverage AI tools to address the needs of underrepresented and marginalized groups, contributing to a more inclusive and equitable educational landscape. Its 100% online format will also provide the ability to attract educators from outside the Baltimore-Washington corridor.
This program not only equips students with advanced technical and pedagogical knowledge but also emphasizes the importance of community, ethical practices, and inclusivity in education.

Graduates will leave the program prepared to lead in the responsible use of AI, advancing both personal and academic growth and promoting a more just and equitable society.

Community Engagement
NDMU's mission emphasizes active engagement with the community, and the Graduate Certificate in Artificial Intelligence in Education upholds this commitment through meaningful collaboration and outreach. Students are encouraged to engage in practical, community-focused projects, such as creating AI-driven solutions to support underserved schools, developing resources to bridge the digital divide, and providing professional development for educators on the responsible use of AI. By addressing local and global educational challenges, students contribute to meaningful change, directly reflecting NDMU's commitment to intellectual achievement, ethical leadership, and social justice.

LEARN-AI serves as a platform for preparing education professionals to navigate the complexities of AI in learning. The program integrates advanced technological training, ethical leadership, and a commitment to service, creating a transformative educational experience aligned with NDMU's mission. By empowering graduates to become leaders in AI innovation, the program reinforces NDMU's vision of fostering a compassionate and inclusive learning environment dedicated to excellence and social good.

2. Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.

Alignment with Institutional Strategic Goals
The introduction of the **LEARN-AI graduate certificate** at Notre Dame of Maryland University (NDMU) strategically supports the University's five core goals:

1. **Advance Transformational Excellence**
   The Graduate Certificate in Artificial Intelligence in Education embodies NDMU's commitment to providing a transformative educational experience. As explored in NDMU's recent AI/LLM task force, it is crucial to offer cutting-edge knowledge in AI technologies, ethical considerations, and practical applications. The program fosters intellectual growth and empowers educators to be innovative in their teaching practices. Students will engage in experiential learning and enhance their critical thinking and problem-solving skills, equipping them to lead and transform education in diverse contexts. Graduates will be prepared to harness the power of AI to improve learning outcomes, equity, and access in education
2. **Drive Institutional Growth**
   Launching this certificate program creates new opportunities for enrollment by attracting educators, administrators, and learning/instructional designers from diverse professional and academic backgrounds. With the increasing demand for AI literacy and integration across educational systems, the program positions NDMU to meet this growing need, thereby drawing both local and global talent. The certificate aligns with NDMU's strategic focus on financial sustainability and growth by expanding its portfolio

to include a highly relevant program that addresses the rapidly evolving educational landscape.

3. **Expand Visibility**
   As one of the first programs in the region to focus specifically on the intersection of AI and education, the Graduate Certificate in Artificial Intelligence in Education enhances NDMU's visibility and reputation. Graduates of the program will serve as ambassadors for the University, applying their skills in K-12 schools, higher education, corporate training, and non-profit organizations. Participation in high-impact educational initiatives, AI-related research, and collaborations with educational technology companies will further elevate NDMU's presence nationally and internationally as a leader in educational innovation.
4. **Enhance a Culture of Innovation**
   Notre Dame's AI/LLM task force has indicated that artificial intelligence is at the forefront of educational transformation, requiring innovative solutions for teaching, learning, and assessment. This program cultivates a culture of innovation by empowering educators to implement AI-driven tools and strategies, engage in interdisciplinary collaboration, and explore creative approaches to address challenges in education. By integrating emerging AI technologies and pedagogical possibilities such as adaptive learning technologies, intelligent tutoring systems, and personalized feedback mechanisms. into its curriculum, the program positions NDMU as a leader in the education field, fostering creativity and forward-thinking approaches to teaching and learning.
5. **Enrich SSND Charism**
   The charism of the School Sisters of Notre Dame (SSND) emphasizes education for social justice, service to others, and community engagement. The Graduate Certificate in Artificial Intelligence in Education reflects this mission by promoting equitable and ethical uses of AI in education. The program prepares students to address disparities in educational access and resources, providing innovative solutions to bridge the digital divide and support underserved learners. By integrating social responsibility into its curriculum, the program advances NDMU's mission to educate leaders who transform the world through compassionate service and equitable practices.

3. Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation. (Additional related information is required in section L.)

This proposal emphasizes high-quality interdisciplinary education and practical training in leveraging artificial intelligence (AI) technologies for educational settings. LEARN-AI at NDMU will include one revised course and three newly-developed courses, drawing on resources and expertise from the School of Education, along with technology-focused contributions from other departments and outside global AI experts. Faculty members in the School of Education and collaborating professional schools and departments are

well-equipped to deliver the program content, and their collective expertise ensures the program's success with limited immediate staffing needs.

While the program requires the creation of three new courses and the revision of one existing course, these updates align with NDMU's commitment to offering cutting-edge, mission-driven programs. Implementation costs remain minimal due to the strategic use of existing faculty expertise and resources. As student enrollment grows, the program will contribute additional revenue to the University, offsetting initial development costs. Should enrollment meet projected growth targets, NDMU will evaluate the need for additional adjunct faculty or additional course sections to accommodate demand. This approach allows the University to strategically expand its program offerings while maintaining financial sustainability and operational efficiency.

Because most of the faculty for the proposed program is already part of NDMU, there will not be an initial incremental full-time equivalent (FTE) need, and the current resources, both from human capital and operational costs, can be leveraged. Funds for course development will require $7,950.00, $1,920 in AI tool subscriptions for faculty, $4,800.00 in AI tool subscriptions for students, and training will be $750.00 for a total cost of $15,420.00.

The financial model below assumes:
• the 12-credit hour total from the proposed curriculum
• a 10-student class for the first year of the program with a projected 15-20 students in the subsequent years.

The result is a total of $101,500 in tuition over a two-year period, with a total of $292,800 in tuition over the course of the next five-year period.

1. **Provide a description of the institution's commitment to:**

    a) ongoing administrative, financial, and technical support of the proposed program

The LEARN-AI Graduate Certificate program will be housed within the School of Education, which has an established administrative structure including a Dean, Associate Dean, advisors, and program coordinators. The Dean of the School of Education meets regularly with the Vice President for Academic Affairs (VPAA)/Provost, as well as participating in weekly Provost's Council meetings. This system ensures that any concerns regarding the new program can be addressed promptly. If necessary, issues can be escalated through the Provost's weekly meetings with the President, providing a direct line of communication to the University's leadership.

NDMU's financial support for this program is incorporated into its strategic budgeting process. The certificate program presents a minimal cost increase in its initial years, as development relies on existing resources and faculty expertise. The University's budget and staff can sustain

the program during its early stages. As enrollment grows, the revenue generated through tuition and fees will support any necessary expansion, such as hiring adjunct faculty or adding course sections. Excess revenue will contribute to the broader University budget, reinforcing NDMU's commitment to financial sustainability.

Technical support for the program is embedded within the University's existing infrastructure. The School of Education benefits from NDMU's Learning Management System (LMS), Canvas, which includes 24/7 technical support for all users. Since the program will be 100% online, the University's IT department provides dedicated support to faculty and students. The department's director reports to the Vice President of Finance and Operations, ensuring seamless handling of mechanical and support issues.

Through this comprehensive administrative, financial, and technical support structure, NDMU demonstrates its commitment to the success and sustainability of the Graduate Certificate in Artificial Intelligence in Education.

b) continuation of the program for a period of time sufficient to allow enrolled students to complete the program.

NDMU has committed the necessary resources for the administrative and financial management of the proposed **LEARN-AI Graduate Certificate**. Program-specific administrative support and faculty expertise are already in place to oversee the implementation and sustainability of the program. In addition to the University's existing business units (e.g., Human Resources, Registrar, Financial Aid), NDMU's Office of Information Technology and the Faculty Resource Center will provide technical guidance and support to both faculty and students. NDMU is fully committed to ensuring that students enrolled in the program have the opportunity to complete their certificate. If the program were ever to be discontinued, NDMU would implement a teach-out plan, providing all necessary courses and resources to allow enrolled students to complete the program on their expected timeline. Since the program leverages existing School of Education resources and faculty, students in a teach-out model would continue to receive the same high-quality teaching, support services, financial aid, and technical resources.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan:

1. Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:
a) The need for the advancement and evolution of knowledge
b) Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education
c) The need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs

The proposed Post-Baccalaureate **in Artificial Intelligence in Education (LEARN-AI)** aligns strongly with the 2022 *Maryland State Plan for Postsecondary Education*, particularly the goals of **innovation** and **success**, and more specifically with **Priority 7** and **Priority 8**. The program promotes **Priority 7 – Enhance the ways postsecondary education is a platform for ongoing lifelong learning** by providing flexible, graduate-level professional development for current educators and professionals seeking to build future-ready teaching and leadership skills. LEARN-AI empowers adult learners and working professionals to re-engage with formal education through a flexible, online credential in one of the fastest-evolving areas of technology and society. The 12-credit program provides a quick, affordable, and ideal instructional journey for educators currently in the field with little to no free time for extended higher education programs.

The program also reflects **Priority 8 – Promote a culture of risk-taking to support innovative ideas and programming** by embracing emerging technologies and preparing educators to critically and creatively apply artificial intelligence in learning environments. It is designed to foster innovation in teaching practice, curriculum design, and educational leadership, while also encouraging thoughtful experimentation with AI tools. By supporting faculty and students in navigating the challenges and opportunities of AI integration, the program cultivates a mindset of innovation and continuous improvement aligned with Maryland's postsecondary vision for bold, responsive, and inclusive educational models.

1. Demonstrating Demand and Need for the Program

The demand for a Graduate Certificate in Artificial Intelligence in Education is strongly supported by the growing need for AI technologies to transform educational practices across Maryland and beyond. As the U.S. Department of Education (2023) highlights, the rapid development of AI tools has created significant opportunities for improving educational outcomes, particularly through adaptive learning technologies, intelligent tutoring systems, and personalized feedback mechanisms. The need for this program also aligns directly with Maryland's growing focus on AI adoption, as outlined in Governor Wes Moore's Executive Order 01.01.2024.02. This order emphasizes the transformative role of AI in society, its impact on Maryland's residents and economy, and the necessity for responsible, ethical, and equitable integration of AI across sectors. By offering specialized training in AI for educators, the program addresses key statewide priorities in education and workforce development. The Maryland State Department of Education's Leading While Learning in an Age of AI report (2024) emphasized a commitment to fostering AI literacy and capacity in schools. These initiatives highlight the necessity for educators to receive professional development on AI, especially as 87% of educators report never having received training on incorporating AI into their work.

a) The Need for the Advancement and Evolution of Knowledge

Maryland's executive directive identifies the potential for AI to "unlock new opportunities" for innovation in public and private sectors while emphasizing the importance of preparing professionals who can ensure ethical, equitable, and effective AI deployment. This program will advance knowledge by training educators in the responsible use of AI tools, such as adaptive learning platforms and predictive analytics, to improve educational outcomes and equity in schools.

AI technologies provide new ways of addressing persistent challenges in education, such as personalizing instruction to meet diverse student needs. For instance, intelligent tutoring systems (ITS) have been found to enhance student learning outcomes significantly by providing real-time, adaptive feedback aligned with student performance. This program equips educators with the expertise to utilize such AI tools effectively, thereby advancing educational practices and outcomes.

b) Societal Needs: Expanding Educational Opportunities for Minority and Disadvantaged Students

NDMU has a strong commitment to serving a diverse student body. As of Fall 2024, the university enrolled approximately 1,788 students, with 1,433 or 80% being female, and a significant representation of minority groups and first-time degree seekers (NDMU, 2024). Maryland's AI ecosystem includes a rich network of academic, industry, and government partnerships designed to foster innovation and workforce development. The State of Maryland (2024) executive order encourages collaborative efforts across sectors to maximize AI's potential while safeguarding societal values. Maryland's educational landscape reflects the broader national imperative to promote equity in education. AI tools have been shown to support English language learners and students with disabilities through features like speech recognition real-time text-to-speech. By training educators to implement these technologies effectively, the program aligns with societal goals of reducing educational disparities and improving access for underrepresented groups.

Additionally, the certificate program supports the Department of Education's (2023) call to "advance digital equity for all" by ensuring that technology-empowered learning is accessible to diverse populations. NDMU's history of serving underrepresented students positions it uniquely to leverage this program in fostering diversity and inclusion in educational technology.

c) Strengthening and Expanding the Capacity of Institutions

Although NDMU is not a Historically Black Colleges and Universities (HBCU), the program's design includes partnerships with Maryland HBIs and other minority-serving institutions to ensure equitable access to AI education resources. These collaborations aim to enhance statewide efforts to build capacity in providing high-quality, technology-integrated education.

2. Addressing Maryland's Workforce and Educational Needs

LEARN-AI aligns directly with Maryland's growing focus on AI adoption (Maryland State Department of Education, 2024).

Maryland's status as a national leader in technology innovation underlines the need for educators skilled in AI applications (Maryland State Archives, (n.d.). The U.S. Department of Education identifies three critical reasons to prioritize AI in education: improving scalability, reducing costs, and addressing system-level disparities. This program prepares graduates to address these challenges by:

- Utilizing AI to personalize instruction for diverse learners,
- Enhancing teacher productivity through AI-powered planning and feedback tools, and
- Ensuring ethical and equitable applications of AI in education.

3. Societal Impact: Promoting Diversity, Equity, and Inclusion
The Graduate Certificate in Artificial Intelligence in Education addresses societal challenges by providing professional development opportunities to underrepresented educators, enabling them to lead the equitable implementation of AI technologies. Through targeted recruitment, scholarships, and flexible learning options, the program ensures access for working professionals and non-traditional students, addressing systemic barriers to participation in technology-focused education.

1. Provide evidence that the perceived need is consistent with the **Maryland State Plan for Postsecondary Education**.

> The LEARN-AI Graduate Certificate in Artificial Intelligence in Education aligns closely with the goals and strategic priorities outlined in the 2022 Maryland State Plan for Higher Education, particularly in the areas of Access, Success, and Innovation.

1. Access: Ensure Equitable Access to Postsecondary Education

The LEARN-AI program supports the strategic priority to "expand outreach to underrepresented, minority, and adult learners." Notre Dame of Maryland University has a strong track record of serving nontraditional and historically underrepresented students, and this program builds on that commitment. By offering online delivery formats and flexible scheduling, LEARN-AI lowers barriers for working educators—particularly those from underserved communities—to gain advanced credentials in a high-demand field. In doing so, the program supports the State Plan's call to provide "equitable access to quality postsecondary education for all Maryland residents."

2. Success: Strengthen Pathways from Education to Workforce

The program directly addresses the State Plan priority to "strengthen pathways from education to workforce by aligning academic programs with workforce needs." Maryland's growing AI ecosystem creates a pressing demand for educators who are AI-literate and capable of integrating intelligent systems into teaching and learning. LEARN-AI equips educators to apply AI tools in the classroom, analyze student data ethically, and implement adaptive technologies to improve learner outcomes. These skills prepare participants to meet the evolving demands of Maryland's workforce and advance the State Plan goal of "supporting student success through meaningful and career-relevant education."

3. Innovation: Promote Emerging Technologies and Educator Capacity

LEARN-AI exemplifies the strategic priority to "promote innovation in teaching and learning through emerging technologies." By introducing educators to generative AI tools, learning analytics, and AI-assisted instructional design, the program encourages the integration of cutting-edge practices into Maryland's education systems. Additionally, the

program advances the priority to "build educator capacity to deliver innovative, inclusive, and career-aligned instruction." Participants engage in project-based learning, tool experimentation, and interdisciplinary exploration—positioning them to lead institutional efforts that align education with Maryland's innovation economy and technological future.

2. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

4. Describe potential industry or industries, employment opportunities, and expected level of entry (*ex: mid-level management*) for graduates of the proposed program.

The **LEARN-AI Graduate Certificate Program** equips educators, administrators, and instructional designers with the skills to integrate AI technologies into educational practices, preparing graduates for impactful roles across education and related industries. Graduates will be positioned to enhance teaching, learning, and operational processes, contributing to the advancement of education in diverse settings.

1. **Potential Industries and Career Opportunities**
   Graduates of the program can expect opportunities in the following areas:
1. **K-12 Education**
   - **AI Curriculum Specialist:** Design and implement AI-driven curriculum tools to personalize instruction and improve student outcomes.
   - **Educational Technology Coordinator:** Manage the integration of AI tools such as adaptive learning platforms and analytics systems into schools.
   - **Instructional Coach:** Train educators on AI-driven teaching practices and provide ongoing professional development.
2. **Higher Education**
   - **Learning Analytics Specialist:** Analyze data using AI-powered tools to improve student retention, outcomes, and equity.
   - **Faculty Development Coordinator:** Develop training programs for university faculty in AI-powered teaching tools and pedagogical strategies.
   - **Learning Designer** or **Online Course Designer:** Build AI-enhanced online courses and modules for scalable, innovative education.
3. **Corporate Training and Professional Development**
   - **E-Learning Developer:** Create AI-driven personalized training modules for corporate clients and educational institutions.
   - **Training and Development Specialist:** Develop employee training programs using AI-based systems for efficiency and engagement.
4. **Nonprofits and Educational Organizations**
   - **Digital Equity Program Manager:** Lead initiatives focused on bridging the digital divide using AI tools to support underserved populations.
   - **Policy Analyst in Educational AI:** Develop and analyze policies for ethical and equitable AI adoption in education.

Expected Entry Levels and Salary Ranges
Most graduates will enter at mid-level roles, with salaries varying based on experience and industry:

Table 1: Expected Entry Levels and Salary Ranges for AI Jobs in Education

Industry	**Potential Role**	**Average Entry Salary Range**	**Projected Growth**
K-12 Education	AI Curriculum Specialist	$60,000–$75,000	High (2023–2030)
Higher Education	Learning Analytics Specialist	$70,000–$95,000	High (26% growth by 2033)
Corporate Training	E-Learning Developer	$65,000–$80,000	Moderate
Nonprofits	Digital Equity Program Manager	$60,000–$80,000	High

SOURCES: US. Bureau of Labor Statistics; Grand View Research; Indeed; PayScale

The data in Table 1 demonstrates robust career prospects in roles that integrate AI into education, training, and equity initiatives. With strong projected growth in most industries, graduates are well-positioned to secure impactful and lucrative mid-level roles in both public and private sectors.

Employment Outlook

- The **AI in education market** is expected to grow at a compound annual growth rate (CAGR) of 36% from 2023 to 2030 (Grand View Research, 2023).
- **Learning Analytics Specialists** can expect salaries ranging from $70,000 to $95,000 annually, reflecting high demand for data-driven decision-making in education (PayScale, 2023).
- The U.S. Bureau of Labor Statistics (2023) projects a 26% growth in jobs related to computer and information research, which includes AI-related roles.

2. Data and Analysis of Market Demands and Availability of Openings in Job Market to be Served.

Table 2: Projected Job Growth of AI, the Need for Educator Training, and the Projection of Job Openings

Category	Projected Numbers	Source
AI Job Growth 2025-2030	+78 million	World Economic Forum Future of Jobs Report (2025)
U.S. Teachers needing AI training	82% or 2.68 million	National Center for Education Statistics (2023); Dilberti et al., (2024)

Projected Educator openings per year (kindergarten and elementary only)	109,000	Bureau of Labor Statistics (2024)

As seen in Table 2, the projected growth of artificial intelligence (AI) in the workforce and its implications for the education sector highlight a critical need for targeted training and professional development. The *World Economic Forum's Future of Jobs Report (2025)* anticipates an increase of **78 million AI-related jobs globally by 2030**, signaling the rapid expansion of AI technologies across industries, including education. This surge in demand underscores the necessity of preparing professionals to effectively leverage AI in their fields.

In the U.S. education sector, the need for AI training is particularly acute. According to the *National Center for Education Statistics (2023)* and research by Dilberti et al. (2024), **82% of teachers**, representing approximately **2.68 million educators**, report lacking the necessary training to integrate AI into their teaching practices. This gap indicates the urgency of equipping educators with the skills to incorporate AI tools into classrooms effectively, addressing both instructional and operational challenges.

Additionally, the *Bureau of Labor Statistics (2024)* projects **109,000 annual job openings** for kindergarten and elementary school teachers in the U.S. alone. As these roles increasingly require familiarity with AI-enhanced teaching tools and personalized learning platforms, the demand for educators with AI expertise will continue to grow.

This data illustrates the transformative potential of AI in education and the significant opportunities for professionals with the skills to harness these technologies. Programs like the **Graduate Certificate in Artificial Intelligence in Education** are essential for preparing educators to meet the demands of a rapidly evolving workforce while addressing critical gaps in AI proficiency within the education sector. By doing so, these programs contribute to the advancement of teaching and learning practices in a world increasingly shaped by AI.

3. **Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.**

The integration of artificial intelligence (AI) into the education sector is accelerating, leading to a significant demand for professionals skilled in both AI and educational methodologies. Market analyses provide quantifiable data on the educational and training needs, as well as the anticipated number of vacancies expected over the next five years.

Market Growth in AI Education

The global AI in education market is experiencing substantial growth. According to Data Bridge Market Research, the market was valued at approximately USD 5.32 billion in 2024 and is projected to reach USD 53.34 billion by 2032, reflecting a compound annual growth rate (CAGR) of 33.51% during this period. (Data Bridge Market Research, 2024) This surge is driven by the

increasing adoption of AI tools, a growing demand for personalized learning experiences, and the digitization of educational content.

Educational and Training Needs
A significant portion of educators recognize the necessity for AI training to enhance their teaching methodologies. A survey commissioned by Samsung Solve for Tomorrow revealed that 88% of parents believe knowledge of AI is crucial for their children's future education and careers, indicating a parallel need for educators to be proficient in AI to meet these expectations (Gordon, 2024). This illustrates the critical need for professional development programs that equip educators with AI competencies.

Anticipated Vacancies and Employment Opportunities
The expansion of AI in education is expected to create numerous employment opportunities. While specific projections for AI-focused educational roles are limited, the overall growth in the education sector is promising. The World Economic Forum anticipates a 10% increase in education jobs by 2027, highlighting the sector's resilience and adaptability in the face of technological advancements. (World Economic Forum, 2023)

This growth is likely to include roles such as technology and computer science teachers, AI curriculum specialists, learning analytics professionals, and educational technologists.

2. Provide data showing the current and projected supply of prospective graduates.

Using information from DATA USA and IPEDS, and focusing on Private/Publics that are either within geographic proximity of NDMU or are in a similar Carnegie classification, the data suggest there is a strong demand for these programs. In total in 2022-23, there were roughly 800 graduates with AI or similar degrees, with the majority of these students graduating from Carnegie Mellon University, University of Pennsylvania, Penn State, and Boston University. However, NDMU does not anticipate any cross applications from these schools. Instead, its projected graduate numbers are based on geography, equity, and access.

School	Undergrad	Grad
University of Maryland, Eastern Shore	Computer Science: 151 Education: 284	42
Towson University	Computer Science: 397 Education: 273	71 59
Morgan State University	97	64

Capital Institute of Technology	33	81

C. **Reasonableness of Program Duplication**

1. Identification of Similar Programs in the State and Region

Artificial Intelligence in Education is still an emerging graduate focus. To date, no other Maryland institution of higher education (IHE) offers a graduate certificate specifically focused on AI in the field of education or educational technology. While many Maryland IHEs provide AI-related certificates and degree programs, these primarily address AI's applications in computing, business, or engineering rather than in PK-12 or higher education.

The closest comparable program found in the region is the Online Graduate Certificate in AI and Educational Technology Leadership at Elizabethtown College in Pennsylvania (EtownGPS, 2025). However, key differences distinguish the proposed LEARN-AI program at Notre Dame of Maryland University:

- The Elizabethtown College program includes a broad focus on educational technology, online learning, and cybersecurity, integrating AI into a single course (MED 587 – Inspiring Learning through Artificial Intelligence) rather than making AI the central focus.
- In contrast, LEARN-AI at Notre Dame of Maryland University consists of three newly developed courses and one revised course, all of which explicitly focus on AI's impact on technology, society, and learning in PK-12 and higher education settings.
- LEARN-AI's curriculum is specifically tailored for educators, instructional designers, and educational leaders, while the Elizabethtown program serves a broader audience with a general technology and leadership focus.

Comparison with Existing Maryland-Based Programs

Several Maryland institutions offer AI-related certificates or graduate programs, but none focus specifically on AI for education:

- University of Maryland (UMD): Offers interdisciplinary AI programs through the Artificial Intelligence Interdisciplinary Institute (AIM) in the UMD College of Information. According to the website, AIM is currently developing new programs but none are listed yet. It appears none involve AI in Education. (UMD AI Institute).
- Johns Hopkins University (JHU): Provides a Graduate Certificate in Artificial Intelligence through the Whiting School of Engineering, which focuses on AI's technical aspects rather than educational applications (JHU AI Certificate).
- University of Maryland, Baltimore County (UMBC): Offers an AI certificate program geared toward developing AI technical skills for computing professionals, not educators (UMBC AI Certificate).

- Capitol Technology Institute (CTU): Offers a post-baccalaureate certificate in applied artificial intelligence, focusing on graduates with a foundation knowledge in STEM fields and aimed at careers such as computer science, healthcare, and finance. (CTIA Certificate)
- University of Maryland Global Campus (UMCG): Offers an AI Foundations PBC program that is not geared towards education. (UMCG AI Foundations)

These Maryland-based AI programs primarily serve students in computing, engineering, and business fields, leaving a clear gap in AI-focused educational training for PK-12 and higher education faculty.

3. Unique Market Demand and Justification for LEARN-AI

Notre Dame of Maryland University's **LEARN-AI** program is distinct in its exclusive focus on AI in education**,** ensuring educators, administrators, and instructional designers gain the specialized knowledge needed to integrate AI into teaching and learning environments within the p-12 and higher educational spaces**.**

Unique Aspects of LEARN-AI:

- Directly addresses the role of AI in PK-12 and higher education, unlike any existing Maryland program.
- Provides a structured, four-course curriculum focused entirely on AI's educational integration and applications.
- Emphasizes ethical leadership, equity, and policy development in AI integration for schools and universities.
- Prepares teachers and education professionals to leverage AI for curriculum design, personalized learning, and data-driven decision-making.

Market Demand for LEARN-AI:

- As of October 2023, Maryland had 63,220 teachers in public schools (Maryland State Department of Education, 2024).
- In 2020, public colleges and universities in Maryland employed nearly 20,000 faculty members (Maryland Higher Education Commission, 2023).
- Maryland school districts and institutions are actively exploring AI solutions. Sanusi et al. (2024) identified investment in teacher professional development programs and access to AI-specific training platforms are necessary to address the market need for AI-trained educators.

2. Provide justification for the proposed program.

The LEARN-AI program at Notre Dame of Maryland University fills a critical gap in AI-related professional development for educators, offering a first-of-its-kind graduate certificate in Maryland focused specifically on AI in PK-12 and higher education.

While other AI programs exist, LEARN-AI is uniquely designed for teachers, instructional designers, and educational leaders, ensuring that AI is not only understood but effectively applied to teaching, learning, and institutional policy development. Given the significant pool of potential educators seeking AI training and the growing role of AI in education, the LEARN-AI program stands out as a timely and necessary addition to Maryland's higher education landscape.

Artificial Intelligence (AI) is rapidly transforming the education landscape, shaping how educators design instruction, assess student learning, and create inclusive and personalized learning environments. As AI-powered tools become more integrated into classrooms, there is an urgent need for educators, administrators, and instructional designers to develop expertise in leveraging AI responsibly and effectively. The LEARN-AI program at Notre Dame of Maryland University directly addresses this need, equipping education professionals with the skills, knowledge, and ethical leadership required to implement AI-driven innovations. Unlike existing AI programs that primarily focus on technical applications in computing and engineering, this certificate is purpose-built for educators, ensuring AI is applied meaningfully to teaching, learning, and education policy.

In the field of educational technology, AI is revolutionizing adaptive learning, predictive analytics, and automated assessment, yet many educators lack the professional training to use these tools effectively. Schools and institutions are adopting AI-powered platforms, from intelligent tutoring systems to generative AI lesson planners, yet faculty and administrators require a deeper understanding of AI's capabilities, limitations, and ethical implications. The LEARN-AI program ensures that educators not only understand AI's role in education but are also prepared to critically evaluate, implement, and lead AI-driven change. With a curriculum emphasizing personalized learning, data-driven decision-making, and ethical AI leadership, this program directly supports education professionals in preparing students for an AI-enhanced future.

From a learning sciences perspective, AI offers new opportunities to study cognition, engagement, and knowledge retention at scale. AI-powered learning environments can analyze student interactions, predict learning difficulties, and recommend tailored instructional strategies, supporting a more personalized and equitable approach to education. However, these advancements also introduce critical ethical and pedagogical challenges, such as algorithmic bias, data privacy, and the need for human oversight in AI-driven learning. The LEARN-AI program will bridge the gap between research and practice, empowering education professionals to apply AI-informed insights into real-world teaching and learning environments. By offering this first-of-its-kind graduate certificate in Maryland, Notre Dame of Maryland University is ensuring that educators are not just passive adopters of AI but active leaders in shaping its future in education.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

The research for this proposal found no similar programs at Historically Black Institutions (HBIs). Again, many colleges and universities are offering AI-centered certificates or degrees, none are focused on the field of education.

F. Relevance to the identity of Historically Black Institutions (HBIs)

Given that no HBIs currently offer this degree program, there is little to no impact on institutional identifies or uniqueness.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR13B.02.03.10)

Notre Dame of Maryland University (NDMU) has a long-standing commitment to academic innovation, equity, and excellence in education. Recognizing the growing impact of artificial intelligence (AI) on teaching, learning, and educational leadership, the School of Education identified a critical gap in AI-focused educator training within Maryland. Over the past several years, faculty members within the School of Education and the School of Arts, Sciences, and Business have engaged in research, scholarship, and professional development on the applications of AI in instructional design, assessment, personalized learning, and education policy. The LEARN-AI program was established to formalize these efforts into a structured graduate certificate that provides educators, instructional designers, and education leaders with specialized knowledge and practical AI applications tailored to PK-12 and higher education settings.

The development of LEARN-AI leverages existing expertise within the School of Education, which has a strong record of teacher preparation, instructional technology integration, and digital learning research. Additionally, the faculty involved in the program have collaborated with industry leaders and AI researchers to ensure that the curriculum aligns with emerging trends in AI, ethical considerations, and workforce needs. The increasing demand for AI-driven learning environments and data-informed decision-making in education, coupled with a lack of specialized AI training for educators, strongly supports the establishment of this program. Furthermore, market research and discussions with Maryland school districts, higher education institutions, and state education agencies have reinforced the need for AI literacy and leadership among educators and administrators.

Currently, the School of Education's faculty includes a diverse team of scholars and practitioners specializing in AI in education, technology leadership, instructional design, data analytics, and digital pedagogy. Faculty members leading this program have expertise in:

- AI-enhanced instructional design and assessment to support personalized learning**;**
- Machine learning applications in education and predictive analytics for student success**;**
- Ethical leadership in AI adoption, focusing on bias, equity, and data privacy**;**

- Emerging technologies in education**,** including adaptive learning systems, chatbots, and AI-powered tutoring**;**
- Policy and advocacy for AI in K-12 schools and higher education to ensure responsible implementation.

The LEARN-AI program will initially be supported by existing faculty within the School of Education and affiliated departments. Given the program's structure as a graduate certificate, no additional full-time faculty positions will be required in the initial launch phase. However, as the program grows and enrollment targets are met, the department will consider expanding faculty positions, engaging industry professionals as adjuncts, and developing research assistant roles to support AI-focused educational research and program development. In addition, COMAR 13B.02.02.17 states at least 50 percent of the total semester credit hours within the proposed program shall be taught by full-time faculty. Although there are more part-time faculty listed than full-time, the preparer is including the entire list of his associate faculty pool qualified to teach in the program with the courses they could teach. Preference will be given to full-time faculty, with part-time faculty teaching only as needed. The program will adhere to COMAR 13B.02.02.17.

NDMU is uniquely positioned to lead AI innovation in education through this program, given its historical focus on preparing highly skilled educators and its commitment to equity, technology, and educational leadership. By launching Maryland's first graduate certificate dedicated to AI in education, NDMU is ensuring that teachers, administrators, and education professionals are equipped to navigate, implement, and lead AI-driven innovations in the classroom and beyond.

Please note: The course designators **(**course prefix and subject codes**)** will be assigned at a later date after MHEC approval. For now, the courses will be identified by course title with EDU XXX. EDU 608 is a course currently part of the previously MHEC-approved Digital Leadership certificate program. It already has a designation in place.

Program Coordinator:
Faculty overseeing the **LEARN-AI** program: Dr. Ryan Schaaf, School of Education Chair and Associate Professor of Educational Technology

Roster of the LEARN-AI program faculty involved in instruction and delivery for the Graduate Certificate Program are listed below:

Dr. Ryan Schaaf
PhD in Educational Leadership
Associate Professor of Educational Technology and Chair in the School of Education
Full-Time, Tenured Faculty
rschaaf@ndm.edu
410-274-7814
Teaching EDU XXX: Foundations of AI in Education
Teaching EDU XXX: Designing AI-Driven Learning: Collaboration, Personalization, and Data-Informed Pedagogies

Dr. Ryan Schaaf is an expert in future-focused learning practices, online pedagogy, learning design, digital game-based learning, and the intersection of AI in education and society. He is the author of seven books on educational technology, has published numerous research studies on integrating technology into learning environments, and continues to serve as a licensed and practicing K-12 educator in Maryland. As the program coordinator for the Digital Leadership program, he leads efforts to develop technology leaders equipped to meet the evolving digital needs of schools and educational institutions. His work with the Master of Arts in Leadership in Teaching: Digital Technology Leadership specialization focuses on building both practical skill and theoretical perspectives in technology infrastructure management, strategic technology planning, and effective digital integration in learning environments. Through this program, he helps educators navigate the challenges of implementing innovative technology solutions while ensuring safe, equitable, and future-ready learning experiences.

Angela L. Snyder, PhD
Associate Professor of Educational Research
Full time, Tenured Faculty
asnyder@ndm.edu
804-307-1084
Teaching EDU XXX: Ethical Leadership, Research, and Policy in AI-Driven Education

Dr. Angela L. Snyder is an Associate Professor of Education at Notre Dame of Maryland University, where she has been a faculty member since 2009. She holds a Ph.D. in Educational Research and Evaluation from Virginia Commonwealth University, with a specialization in research methods and statistical analysis. Dr. Snyder is an expert in qualitative and quantitative research methodologies, serving as a dissertation chair and methodologist for numerous doctoral students. Her teaching portfolio includes courses in qualitative research methods, special education, and classroom management.

Beyond teaching, she has held leadership roles in academic committees, contributed to national and regional conferences, and published research on education, assessment, and classroom interventions. Dr. Snyder is also deeply engaged in exploring the role of artificial intelligence in education. As a member of the AI Taskforce at Notre Dame of Maryland University, she actively participates in AI-focused initiatives and has attended numerous AI webinars. She integrates a variety of AI tools into all her courses, leveraging technology to enhance student learning and research in innovative ways. In addition to her faculty role, Dr. Snyder has extensive experience as a research consultant and program evaluator, applying her expertise to diverse educational and social science projects.

Dr. Jonas Prida
Associate Vice President of Academic Affairs and Assessment
jprida@ndm.edu
410-532- 5316
EDU XXX: Ethical Leadership, Research, and Policy in AI-Driven Education

Dr. Jonas Prida is NDMU's Associate Vice President of Academic Affairs and Assessment since 2023. With his first administrative duties starting in 2012, he has served as an Assistant, Associate, and Provost/VPAA in addition to an earlier career as a faculty member. A long-time contributor to inquiry- based learning and culturally-responsible pedagogy, he has provided leadership and organizational guidance for a range of programs from TRIO to First Year Experiences to Honors Programs. He has also chaired dissertations in the field of community engagement and served on dissertation committees for education.

Other areas in Dr. Prida's portfolio are student retention, student advising, and responsible use of AI and LLMs in Academic Affairs. He was named by the President to lead NDMU's Academic Affairs Taskforce on AI and has works closely with staff, faculty, and students to ensure that policies around AI support students, their learning, and their success. He holds a Ph.D. in English from Tulane University with a specialization in American Literature, and continues to collaborate in multi-disciplinary research in popular culture.

Dr. Nicky Mohan
School of Education Associate Faculty
EdD in Educational Leadership
InfoSavvy Group, UNESCO Task Force Member (AI in Education)
nickymohan@me.com
+ 1 (604) 368-6619 CA; +64 (21) 446162 NZ

Teaching EDU XXX: Foundations of AI in Education
Teaching EDU XXX: Designing AI-Driven Learning: Collaboration, Personalization, and Data-Informed Pedagogies

Dr. Nicky Mohan is an internationally recognized expert in curriculum design and instructional innovation. Her career has spanned education, corporate training, and global consulting. With extensive experience designing and implementing curricula that integrate emerging technologies and AI-powered learning, she is well-positioned to contribute to Notre Dame University's AI curriculum development initiatives.

Dr. Mohan's professional journey includes roles as a classroom teacher, school administrator, university leader, corporate trainer, and business sector manager. She served as the Director of Curriculum for the 21st Century Fluency Project in Canada, where she developed forward-thinking teaching and learning approaches emphasizing digital fluency and modern educational strategies. In her current roles as Managing Partner of the InfoSavvy Group (Canada) and Director and Co-founder of SpringBoard21 (USA), she collaborates with global education leaders to enhance student learning through innovative curriculum design.

Her expertise in AI-driven learning is demonstrated through her work as Lead Consultant for UNESCO IITE, where she developed a digital citizenship education literacy framework and an evaluation system. She also played a pivotal role in designing a repository of open educational resources (OER) for ICT-integrated pedagogy to support global teacher professional development. Dr. Mohan is a core working group member of UNESCO's Teacher Task Force, focusing on 'The Role of AI in Education,' contributing to policy and implementation strategies

for AI-enhanced learning environments worldwide.

Dr. Mohan's ability to lead cross-functional teams and guide systemic transformation in educational institutions is reflected in her work as Co-Founder and Director of SpringBoard21. She spearheaded the development of the SB21 Diagnostic Solution, an AI-powered tool for evaluating and improving educational systems, earning global recognition. Additionally, her experience as Director of Professional Development at KPPUBU highlights her proficiency in designing AI-driven educational materials and courses tailored to modern learning needs.

Her contributions to educational literature further establish her thought leadership in the field. She has co-authored six books, including the award-winning "Reinventing Learning for the Always-on Generation" and the bestseller "LeaderShift2020: Renewing Our Schools For Modern Times." Her latest work, "Literacy is Still Not Enough," underscores her commitment to advancing educational methodologies in the digital age.

Dr. Mohan's qualifications extend beyond curriculum design to strategic leadership, product lifecycle management, and data-driven decision-making. She is adept at leveraging AI tools to enhance student engagement, optimizing educational frameworks through emerging technologies, and guiding institutions in adopting modern learning solutions. With a global perspective and a track record of pioneering curriculum innovations, she is uniquely equipped to contribute to Notre Dame of Maryland University's efforts in developing AI-centric academic programs.

Dr. James Culhane
Ph.D. in Pharmacology and Toxicology
Assistant Dean of Student Services, School of Pharmacy
Full-Time, Tenured Faculty
jculhane@ndm.edu
410-532-5040

Teaching EDU XXX: Designing AI-Driven Learning: Collaboration, Personalization, and Data-Informed Pedagogies

Dr. James Culhane earned a B.A. in Chemistry from Washington & Jefferson College and a Ph.D. in Pharmacology and Toxicology from West Virginia University School of Medicine. He began his academic career in the Department of Pharmaceutical Sciences at Wilkes University's Nesbitt School of Pharmacy and Nursing, serving for 10 years. In 2008, he joined Notre Dame of Maryland University School of Pharmacy as the founding Chair of the Department of Pharmaceutical Sciences and is now Professor and Associate Dean for Student Affairs and Academic Success.

An active member of the American Association of Colleges of Pharmacy and the American Society for Pharmacology and Experimental Therapeutics, Dr. Culhane holds an advanced academic coaching certification from the National Tutoring Association. He has received multiple AACP Teacher of the Year awards, the Wilkes University Carpenter Award for excellence in teaching, service, and scholarship (2007), and the Notre Dame of Maryland University Mullan Distinguished Teaching Award (2023).

Dr. Culhane speaks nationally on evidence-based learning strategies, metacognition, and academic coaching. His book, Evidence-Based Study Methods for Student Pharmacists (American Pharmacists Association), showcases his work in these areas.

Jim Fazzino, ABD
School of Education Associate Faculty
Supervisor of eLearning, Baltimore County Public Schools
jfazzinbo@ndm.edu
443-809-7515
Teaching EDU 608: Teaching the Digital Generations in a Globalized World

Jim Fazzino is a student-centered, values-driven educational leader and transformational change agent with 28 years of experience in a variety of K-12 and post-secondary educational settings. His unwavering belief that education needs to be meaningful for all learners has led him to reimagine virtual and distance learning for one of Maryland's largest school systems, design and advocate for alternative pathways for unique learners, serve on a local board of education to promote equity and access for all students, and oversee curriculum development and implementation in a variety of eLearning environments. Jim Fazzino earned his Bachelor of Education and Bachelor of Arts degrees from Bloomsburg University of Pennsylvania, a Master of Science in Education degree from The Johns Hopkins University, A&S certification through Loyola University, and is currently a Doctoral Candidate in the dissertation phase at Notre Dame of Maryland University. His professional experiences include multiple tenures teaching, department chairmanship, project management, public school administration, doctoral research, and program leadership. Jim Fazzino is currently an associate faculty member in the School of Education at NDMU and the Supervisor of the Online Learning Program with BCPS. His research interests include leadership in eLearning and online school spaces, student sense of belonging in virtual learning environments, student engagement in synchronous/ asynchronous/ blended learning models, the impact of AI on teaching and learning, and the role of ethics, morals, and values on the decision-making process in online education.

Carrie Trudden, M.Ed.
School of Education Associate Faculty
Instructional Technology Resource Teacher, Howard County Public School System
ctrudden@ndm.edu
410-313-7195
Teaching EDU 608: Teaching the Digital Generations in a Globalized World

Carrie Trudden is an instructor for this course and has over 20 years of experience in education. She has been an Associate Faculty Member at the University of Notre Dame in Maryland since 2019.

Currently, Carrie serves as a Resource Teacher in the Office of Instructional Technology with the Howard County Public School System, where she provides professional learning and support for K-12 curricular programs across the district.

She earned a bachelor's degree in elementary education from High Point University, a master's degree in educational technology from Loyola University, and holds an Admin I certificate. She is an active member of ISTE and MSET and regularly participates in professional organizations in the Baltimore/Washington, D.C. area. Additionally, she serves as the Secretary for the CSTA-MD Leadership Team.

Carrie is passionate about learning and leveraging technology to engage students, continuously seeking creative ways to enhance instruction through digital tools.

3. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.

Program Learning Objectives for the LEARN-AI Graduate Certificate

(Aligned with the International Society for Technology in Education (ISTE) Standards for Educators and Education Leaders)

Upon completion of the **LEARN-AI Graduate Certificate**, graduates will be able to:

1. AI Literacy and Integration *(ISTE Standard: Educator - Learner)*

- Demonstrate a foundational understanding of **artificial intelligence concepts, tools, and applications** relevant to K-12 and higher education settings.
- Evaluate and apply **AI-driven technologies** to enhance student learning, engagement, and academic success.

2. AI-Enhanced Instructional Design *(ISTE Standard: Designer)*

- Develop **instructional strategies** that incorporate AI-driven learning tools, adaptive learning systems, and data analytics to personalize instruction.
- Design and implement **AI-empowered assessments** that provide real-time feedback and support differentiated learning experiences.

3. Ethical and Responsible AI Use in Education *(ISTE Standard: Citizen & Facilitator)*

- Analyze the **ethical, legal, and social implications** of AI in education, including data privacy, algorithmic bias, and equity in access.
- Promote **digital citizenship** by guiding students in responsible AI usage and fostering critical thinking about AI-generated content.

4. AI for Data-Driven Decision Making *(ISTE Standard: Analyst)*

- Utilize **learning analytics and AI-powered data visualization** tools to assess student performance and inform instructional decision-making.
- Interpret **AI-generated insights** to identify learning trends, predict student needs, and support intervention strategies.

5. AI Leadership and Policy Advocacy *(ISTE Standard: Leader)*

- Advocate for **AI integration policies** that ensure equity, accessibility, and inclusivity in AI-enhanced learning environments.
- Lead **professional development initiatives** that equip educators and administrators with AI competencies to transform teaching and learning.

6. AI-Enabled Collaboration and Innovation *(ISTE Standard: Collaborator)*

- Engage in **cross-disciplinary collaborations** to explore emerging AI applications in education and professional development.
- Develop AI-driven **instructional innovations** that foster student creativity, collaboration, and problem-solving skills.

These **program learning objectives** align with **ISTE Standards** while ensuring that graduates of the **LEARN-AI Graduate Certificate** are well-equipped to navigate, implement, and lead AI-driven educational transformations.

3. Explain how the institution will:

a) Provide for assessment of student achievement of learning outcomes in the program

The **LEARN-AI Graduate Certificate** follows a structured assessment plan to ensure the program meets **institutional and accreditation** standards while tracking student success and learning outcomes. The assessment process includes:

a) Assessment of Student Achievement of Learning Outcomes

- **Course-Level Assessments** – Each course includes assessments such as projects, research assignments, AI tool evaluations, and discussions aligned with program learning objectives (PLOs). These assessments ensure students demonstrate competency in AI integration, instructional design, ethical considerations, and research methodologies.
- **Faculty Evaluations** – Faculty members are evaluated annually through the **NDMU faculty review process**, including **peer observations, student feedback, and instructional design best practices** in AI education.

- **Program-Based Review** – The program undergoes annual review to assess curriculum effectiveness, industry alignment, and student performance on key learning objectives. Adjustments are made based on feedback from faculty, students, and advisory board members.

b) Document student achievement of learning outcomes in the program

- Student Course Evaluations – At the conclusion of each course, students complete evaluations assessing course content, instructor effectiveness, and AI-related skill acquisition. Feedback is analyzed by faculty, department chairs, and program leadership to inform course improvements.
- Annual Student Learning Outcomes Assessment Report – The program submits an annual report to the University Assessment Committee, documenting student achievement data, curriculum effectiveness, and recommendations for improvements.
- Program Review and Accreditation Compliance – The LEARN-AI Certificate follows the University Assessment Plan and is included in NDMU's program review rotation every three to five years. Data from student achievement reports, faculty evaluations, and industry trends will guide future updates to the program.
- Resource Allocation and Continuous Improvement – All requests for resource allocation, faculty hiring, and curriculum enhancements must be supported by assessment data and student learning outcomes.
- University Assessment Committee (UAC) Review – All programs are required to submit their assessment results to the University Assessment Committee (UAC), chaired by the Associate Vice President of Academic Affairs. The UAC, comprised of faculty, administrators, and staff, meets monthly to provide holistic feedback on assessment activities and results. At the end of each academic year, the UAC produces a summary report available to all faculty, staff, administration, and NDMU's executive team. If major adjustments to learning objectives or assessment processes are needed, the UAC has the authority to meet with Deans and department chairs to discuss remediation strategies.

Through this rigorous assessment and documentation framework, NDMU ensures that the LEARN-AI Graduate Certificate remains a high-quality, evidence-based program that prepares educators and leaders for AI-driven transformation in education.

4. Provide a list of courses with title, semester credit hours, and course descriptions, along with a description of program requirements

LEARN-AI – Leadership, Education, and Research in AI for the Next Generation

Total certificate credits: 12 credit hours

Suggested Course Sequence

EDU 608: Teaching the Digital Generations in a Globalized World (3 credits) EDU XXX: Foundations of AI in Education (3 credits)
EDU XXX: Ethical Leadership, Research, and Policy in AI-Driven Education (3 credits)
EDU XXX: Designing AI-Driven Learning: Collaboration, Personalization, and Data-Informed Pedagogies (3 credits)
(The final two courses listed above can have their sequence switched if needed for scheduling purposes.)

Program Course Descriptions

EDU 608: Teaching the Digital Generations in a Globalized World (3 credits)

The evolution of information, communication, and artificial intelligence technologies has fundamentally transformed how people, big businesses, and governments communicate and operate. The modern world is experiencing disruptive innovation on an unprecedented scale, with AI driving advancements in automation, data analytics, and personalized services. However, schools have not experienced the same philosophical and technological shift as the rest of the world. Many pedagogical practices and instructional resources remain rooted in outdated methodologies, leaving learners ill-prepared for a future dominated by AI-driven industries and globalized workforces.
In essence, schools must prepare learners for their futures, not our past. In this course, learners will explore emerging issues related to teaching, learning, and assessment in the 21st century, with a particular focus on the role of AI in reshaping education and society. They will examine the pervasive nature of disruptive innovation, including AI-powered tools and platforms, and identify essential skills such as adaptability, critical thinking, and digital literacy that students need to thrive in the new workforce. By the end of the course, participants will be equipped to design learning experiences that embrace technological advancements and empower the digital generations to succeed in a rapidly evolving world.

EDU XXX: Foundations of AI in Education (3 credits)

Artificial intelligence (AI) is transforming education, shaping how students learn, educators teach, and institutions operate. This course provides a comprehensive introduction to the concepts, history, and transformative potential of AI in educational settings. Participants will explore foundational topics, including machine learning, natural language processing, and generative AI, while examining real-world applications such as adaptive learning platforms and personalized instructional systems.

Through case studies and practical examples, learners will analyze the profound implications of AI on teaching, learning, and assessment. Special emphasis will be placed on ethical considerations, such as bias, equity, and data privacy, to ensure responsible and inclusive use of AI in educational contexts. By the end of the course, participants will have the knowledge

and tools to critically evaluate AI technologies and design thoughtful strategies for integrating AI into learning environments.

Prepare to gain the insights and skills needed to lead the way in leveraging AI to enhance education and empower learners in a rapidly evolving digital age.

EDU XXX: Ethical Leadership, Research, and Policy in AI-Driven Education (3 credits)

As artificial intelligence reshapes education, ethical leadership and evidence-based research are essential to ensure its responsible and inclusive integration. This course prepares educators and leaders to navigate complex ethical, equity, and policy challenges posed by AI in education. Participants will explore algorithmic bias, accessibility for diverse learners, data privacy, and security.

Through research-driven inquiry and collaborative projects, learners will critically evaluate AI's impact on education, using AI-powered analytics and qualitative research methodologies. Participants will examine policy development processes, funding considerations, and advocacy techniques to champion ethical and equitable AI use in learning institutions. By the end of the course, students will conduct an AI-related research study and develop a policy proposal for AI integration in education.

EDU XXX: Designing AI-Driven Learning: Collaboration, Personalization, and Data-Informed Pedagogies (3 credits)

Artificial intelligence is revolutionizing teaching and learning, enabling educators to create dynamic, personalized, and data-informed experiences for every learner. This course equips educators with the knowledge and skills to design, implement, and collaborate with AI technologies to enhance instructional practices and student outcomes.

Participants will explore AI-powered tools for personalized learning, adaptive assessments, and differentiated instruction, emphasizing their practical application in real-world classrooms. They will also examine the role of educators as partners with AI, balancing human expertise with machine intelligence to foster student growth. The course includes hands-on practice with data analytics tools to identify learning gaps, predict outcomes, and make informed decisions to support diverse learners effectively. Special attention will be given to ethical and inclusive considerations, ensuring AI is used responsibly to promote equity, accessibility, and student success. By the end of the course, participants will have developed actionable strategies and AI-enhanced learning designs that empower learners and position educators as leaders in a data-driven educational landscape.

5 **Discuss how general education requirements will be met, if applicable.**

N/A

6. Identify any specialized accreditation or graduate certification requirements for this program and its students.

N/A

7. If contracting with another institution or non-collegiate organization, provide a copy of the written contract.
N/A

8. Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.

Curriculum

Total Program Credits: 12

YR 1
Fall Semester
EDU 608: Teaching the Digital Generations in a Globalized World (3 credits)
Spring Semester
EDU XXX: Foundations of AI in Education (3 credits)

YR 2
Fall Semester
EDU XXX: Ethical Leadership, Research, and Policy in AI-Driven Education (3 credits)
Spring Semester
EDU XXX: Designing AI-Driven Learning: Collaboration, Personalization, and Data-Informed Pedagogies (3 credits)

Faculty Interactions
The curriculum will be delivered in an online, asynchronous modality. The didactic portion of the curriculum will be delivered online, asynchronously via recorded content and curated resources uploaded in the learning management system. Faculty will schedule remote office hours via Zoom or Teams to discuss questions and provide guidance to learners. The program will rely heavily on project-based learning, case studies, experimentation & analysis, and constructing authentic learning artifacts. Course assessments will also be administered remotely, and the nature of such assessments will depend on the nature of the content of the courses.

Faculty will evaluate student success in this modality and delivery method using assessment results, course evaluations, and completer interviews. If any concerns arise regarding the program structure, coursework, or delivery, necessary revisions, and improvements will be made to enhance the learning experience. Since AI is a constantly evolving technological and societal area, courses will be monitored and revised using an accelerated schedule. After each course is delivered, the program coordinator and faculty member will discuss if any content must be revised for accuracy and timeliness.

Academic Infrastructure and Support
The University uses Canvas as its LMS and has sufficient IT and infrastructure support for the expected enrollment. Academic support is provided by the University's Academic Support Team. Students needing official accommodation are required to meet with the University's Director of Accommodations to determine their legally appropriate accommodations. NDMU provides all students with mental health support through its counseling office, where students are able to receive professional counseling free of charge with unlimited sessions.

The University's financial aid office is staffed by a Director of Financial Aid and two other staffers. The office is responsible for the accurate distribution of financial aid, aid appeals, and other student-facing financial aid decisions. The office reports to the Vice President for Enrollment

Management/Marketing & Student Services, allowing for the needed relationship between students' ability to access federal, state, and private funds and an institutional system that oversees the regulation of this aid.

All program costs and payment plans are reviewed by financial aid, the program director, the dean of the appropriate college, the CFO, and the VP of Student Services. Once costs are agreed upon, these plans are published on the University's website and the University's *Catalog*.

9. **Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.**

All advertising, recruiting, and admissions materials are evaluated for accuracy by the program chair, the Dean of the School, and the Vice President of Enrollment Management/Marketing for accuracy and clarity. Additionally, and fortuitously for this proposal, NDMU is undergoing its 8-year Middle States self-study; one of the criteria for re-accreditation is evidence of truthfulness and clarity in all recruiting and marketing documents. If errors are found, they are quickly fixed and an assessment is made to support institutional improvement.

H. Adequacy of Articulation (as outlined in COMAR 13B.02.03.19)
1. If applicable, discuss how the program supports articulation with programs at partner institutions. Provide all relevant articulation agreements. More information for Articulation Agreements may be found on the NDMU website.

N/A (no articulation agreements)

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11).

Notre Dame of Maryland has adequately trained and credentialed full-time and associate faculty to support the LEARN_AI program. Existing and any new faculty who teach online for this program will be required to comply with NDMU's online course design and delivery policy, which mandates Quality Matters criteria for all online courses and programs, and requires QM training for online faculty.

Faculty Resources

Faculty Name and Rank	**Terminal Degree**	**Full or Part-time**	**Courses Taught**
Ryan Schaaf, Associate Professor	Ph.D.	Full-time	EDU 608: Teaching the Digital Generations in a Globalized World EDU XXX: Foundations of AI in Education EDU XXX: Designing AI-Driven Learning: Collaboration, Personalization, and Data-Informed Pedagogies
Angela Snyder, Associate Professor	Ph.D.	Full-Time	EDU XXX: Ethical Leadership, Research, and Policy in AI-Driven Education
Jonas Prida, Associate Faculty (Associate VP of Academic Affairs and Assessment)	Ph.D.	Part-Time	EDU XXX: Ethical Leadership, Research, and Policy in AI-Driven Education
Nicky Mohan, Associate Faculty	Ph.D.	Part-Time	Teaching EDU XXX: Foundations of AI in Education Teaching EDU XXX: Designing AI-Driven Learning: Collaboration, Personalization, and Data-Informed Pedagogies
James Culhane, Assistant Dean	Ph.D.	Full-Time	EDU XXX: Ethical Leadership, Research, and Policy in AI-Driven Education
Jim Fazzino, Associate Faculty	M.S., ABD	Part-Time	EDU 608: Teaching the Digital Generations in a Globalized World

Carrie Trudden, Associate Faculty	M.Ed	Part-Time	EDU 608: Teaching the Digital Generations in a Globalized World

Faculty Qualifications

Ryan Schaaf, Ph.D.
Terminal Degree and Field: Ph.D. in Educational Leadership, Educational Technology Academic Title/Rank and Status: Associate Professor & Chair, Full-Time, Tenured *Teaching EDU 608: Teaching the Digital Generations in a Globalized World*
Teaching EDU XXX: Foundations of AI in Education
Teaching EDU XXX: Designing AI-Driven Learning: Collaboration, Personalization, and Data-Informed Pedagogies

Angela Snyder, Ph.D.
Terminal Degree and field: Ph.D. in Educational Research and Evaluation, Educational Research Academic title/Rank and Status: Associate Professor, Full-Time, Tenured
Teaching EDU XXX: Ethical Leadership, Research, and Policy in AI-Driven Education

Jonas Prida, Ph.D.
Terminal Degree: Ph.D. in American Literature, Academic Affairs & Assessment
Academic Title/Rank and Status: Associate Vice President for Academic Affairs and Assessment
Teaching EDU XXX: Ethical Leadership, Research, and Policy in AI-Driven Education

Nicky Mohan, Ph.D.
Terminal Degree: Ph.D. in Educational Leadership, A.I. Initiatives
Academic Title: Associate Faculty
Teaching EDU XXX: Foundations of AI in Education
Teaching EDU XXX: Designing AI-Driven Learning: Collaboration, Personalization, and Data-Informed Pedagogies

James Culhane, Ph.D.
Terminal Degree: Ph.D. in Pharmacology and Toxicology Academic Title: Assistant Dean in the School of Pharmacy
Teaching EDU XXX: Designing AI-Driven Learning: Collaboration, Personalization, and Data-Informed Pedagogies

Jim Fazzino, M.S., ABD
Terminal Degree: ABD in Educational Leadership Academic Title: Associate Faculty
Teaching EDU 608: Teaching the Digital Generations in a Globalized World

Carrie Trudden, M.Ed.

Terminal Degree: M.Ed. in Educational Technology and
Administration Academic Title: Associate Faculty
Teaching EDU 608: Teaching the Digital Generations in a Globalized World

2. Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:
a) Pedagogy that meets the needs of the students
b) The learning management system
c) Evidenced-based best practices for distance education, if distance education is offered.

A. Ongoing Pedagogy Training for Faculty in Evidence-Based Best Practices

Notre Dame of Maryland University (NDMU) is committed to ensuring that faculty members receive continuous professional development in pedagogy, technology, and instructional design to support high-quality teaching and learning experiences. The University provides structured training programs, workshops, and faculty development initiatives designed to enhance instructional effectiveness.

NDMU SOE prioritizes student-centered instructional strategies that are inclusive, equitable, and research-driven. The University and SOE faculty regularly participate in the following:

- **Workshops and Webinars** on differentiated instruction, universal design for learning (UDL), using AI for productivity, and culturally responsive teaching.
- **Faculty Learning Communities (FLCs)** that allow educators to collaborate on innovative teaching methods, including integrating AI to support personalized learning.
- **AI-Powered Teaching Innovations** that introduce educators to adaptive learning technologies, AI-driven assessment tools, and real-time student analytics for data-informed instruction.

B. **Learning Management System (LMS) Training**

To ensure faculty proficiency in utilizing technology to enhance teaching, NDMU provides comprehensive training in its **Learning Management System (LMS), Canvas**. Faculty development initiatives include:

- **Regular Training Sessions** covering LMS functionalities such as course design, content delivery, assessment tools, and grading features.
- **Self-Paced Online Modules** that provide on-demand support for faculty, enabling them to explore Canvas features and best practices at their convenience.
- **One-on-One Consultation and Support** through instructional designers who assist faculty in designing interactive, student-centered courses using LMS tools.

C. Evidence-Based Best Practices for Distance Education

For faculty teaching online or hybrid courses, NDMU ensures adherence to **Quality Matters (QM) Standards** and evidence-based best practices in online learning, including:

- **Faculty Certification in Online Teaching**, a structured program that equips educators with strategies for effective virtual instruction, student engagement, and assessment.
- **Best Practices in Online Pedagogy Workshops** focusing on instructional design principles, synchronous and asynchronous teaching strategies, and student-centered online learning.
- **Regular Course Audits and Peer Reviews** to ensure online courses meet instructional quality standards and foster an engaging digital learning experience.
- **AI and Distance Learning Innovations** workshops that guide faculty in leveraging AI tools for automated grading, adaptive content delivery, and virtual student support.
- **Course Evaluation**, a university-based course evaluation system allows learners to provide feedback in an anonymous fashion to ensure feedback in order to improve and refine course design and delivery.

By integrating these comprehensive faculty development initiatives, NDMU ensures that its educators remain at the forefront of pedagogical excellence, fostering an engaging, inclusive, and technologically advanced learning environment for students.

Students enrolled in online courses are provided information prior to enrollment about hardware, software, and IP provider issues. The orientation at the beginning of the program verifies student identity and provides student ID badges needed for course enrollment and participation. Students enrolled in online courses receive reasonable and adequate access to the range of student services and a 24-hour help desk to support their educational activities. All students, regardless of the modality of content delivery, have access to advisors to support clarity of curricular and online community expectations, access to library resources, e-books, and databases, and access to faculty, advisors, and support services.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12)

1. Library Resources and Measures to Ensure Adequacy

Since its opening in 1973, the **Loyola/Notre Dame Library (LNDL)** has been a vital resource for supporting teaching, research, and scholarship at Notre Dame of Maryland University (NDMU) and Loyola University Maryland. The library recently underwent a joint renovation and expansion project, resulting in:

- Increased use of technology for teaching and learning,
- Enhanced capacity to accommodate more students, faculty, and community patrons, and
- A dynamic and collaborative space for scholarly exploration and academic achievement.

The Loyola/Notre Dame Library is open seven days a week during the fall, spring, and summer semesters. Through the library's website, faculty, students, and staff can access a vast collection of books, journals, databases, and streaming media to support their academic and research needs.

Library Collections and Digital Resources

The library's holdings include:

- 455,000 volumes
- 1,421 print and 22,126 electronic periodical subscriptions
- 39,000 media items
- 120+ online databases, providing access to over 300,000 journals, magazines, and newspapers

Additionally, the library maintains substantial online journal holdings, including 143 peer-reviewed journal titles**.**

Access to External Library Collections

NDMU students and faculty benefit from access to partner library collections through the following collaborations:

- University System of Maryland and Affiliated Institutions (USMAI)**:** Provides access to over 9 million items across 17 member libraries.
- Eastern Academic Libraries Trust (EAST**)**: A print archive ensuring access to 6 million volumes via Interlibrary Loan.

Library Support Services

Students, faculty, and staff have access to a wide range of research and instructional support services, including:

- Multiple Assistance Options**:** In-person, email, instant messaging, and telephone support.
- 24/7 Online Chat Reference: Available anytime for research and technical support.
- Copyright Guidance: Resources, workshops, and consultations through the Copyright Information Center.

Library Facilities and Learning Spaces

The Loyola/Notre Dame Library offers 693 individual study seats, as well as collaborative and technology-enhanced learning spaces, including:

- A 100-seat auditorium
- Two computer labs:
    - Lab A (20 seats)
    - Lab B (30 seats)
- The Collaboratory: A flexible active learning space for up to 22 students
- A 24-seat screening room**,** cyber café, and multifunctional gallery used for study and events
- Multiple seminar rooms and group study areas
- 91 computers equipped with Microsoft Office and internet access
- Adaptive technology to support users with disabilities
- A Makerspace, fostering innovation, creativity, and hands-on learning
- VR and AR headsets and media room

Databases Supporting the LEARN-AI

The Loyola/Notre Dame Library provides extensive database access to support **LEARN-AI** and related disciplines. Available resources include:

General & Multidisciplinary Databases:

- Academic Search Complete
- EBSCO
- JSTOR
- Sage Journals
- Science Direct (Elsevier Journals)

Specialized Tools & Citation Management:

- Buros Mental Measurement
- CareNotes
- ERIC
- Lexis-Nexis
- Lexicomp
- Zotero

Additional Support for the LEARN-AI Program

The library is well-equipped with books, periodicals, and digital resources supporting SOE curricula. It also provides access to major education databases, including:

- ERIC
- EBSCO Host
- McGraw-Hill
- SAGE

- Slack
- Wiley
- Elsevier

Moreover, students have access to an extensive interlibrary loan system through USMAI and EAST, ensuring that additional specialized materials can be obtained as needed.

The Loyola/Notre Dame Library provides comprehensive resources, services, and partnerships that ensure adequate support for the proposed LEARN-AI program**.** With extensive digital and print collections, robust research assistance, cutting-edge technology, and access to vast interlibrary resources**,** NDMU is well-positioned to meet the academic and professional needs of students in education, educational technology, and related fields. Many of the research staff at LNDL are exploring ways to leverage AI tools for research and inquiry.

K. Assurance of Adequate Physical and Technological Infrastructure for the LEARN-AI Graduate Certificate

Notre Dame of Maryland University (NDMU) is fully equipped to support the LEARN-AI program as an online program. The University provides a robust digital infrastructure, faculty support, and instructional resources necessary to ensure high-quality, accessible, and engaging online learning experiences.

1. Online Learning Infrastructure

NDMU utilizes Canvas, a state-of-the-art Learning Management System (LMS), to deliver all online coursework. Canvas supports:

- Synchronous and asynchronous course delivery, enabling flexibility for students.
- AI-powered learning tools, such as adaptive assessments, discussion forums, and automated feedback systems.
- Integration with video conferencing platforms, including Zoom and Microsoft Teams, for live lectures, office hours, and collaboration.
- Mobile and cross-device compatibility, allowing students to access coursework from various devices.

2. Faculty and Staff Support

NDMU ensures that faculty have the necessary tools and training to deliver high-quality online instruction through:

- The Faculty Resource Center (FRC), which provides ongoing faculty development in online pedagogy and instructional technology.
- Regular Technology Training Workshops, ensuring faculty proficiency in AI-driven instructional strategies and online engagement methods.

3. Student Support Services for Online Learners

To promote student success in an online learning environment, NDMU offers:

- 24/7 Technical Support for Canvas and integrated learning tools.
- Online Library Access through the Loyola/Notre Dame Library, including electronic journals, AI research databases, and digital resources.
- Virtual Tutoring and Writing Assistance available through the university's academic support centers.
- Career and Professional Development Services, assisting students with AI-related career pathways in education.

4. Institutional Readiness for Online Graduate Programs

The necessary instructional, technological, and administrative infrastructure is already in place to support the Graduate Certificate in Artificial Intelligence in Education. The university's commitment to digital transformation in education aligns with this program's focus, ensuring seamless integration of AI-focused coursework into the existing online learning framework.

5. Assurance of Institutional Electronic Mailing System and Learning Management System

NDMU guarantees that all students and faculty participating in distance education have access to essential digital communication and learning platforms, including:

Institutional Email System:
All students and faculty at NDMU are provided an email and password through the University's secured, two-factor authentication cloud-based email system, provided by Microsoft Outlook. Students and faculty can access their institutional email account from any device through the University's website. Those who forget their password can change it through an automated system or contact the University's help desk for assistance.

- **Learning Management System (LMS):** NDMU utilizes **Canvas**, a fully supported LMS that facilitates course delivery, online discussions, assignments, and assessments. The system is backed by 24/7 technical support and integrated with video conferencing tools such as Zoom and Microsoft Teams to enhance the virtual learning experience.
- **IT Helpdesk and Technical Assistance:** Students and faculty have continuous access to IT support services, which provide troubleshooting, training, and assistance with digital tools needed for effective online learning.

NDMU's existing digital infrastructure, faculty expertise, and student support services provide an optimal environment for launching and sustaining the Graduate Certificate in Artificial Intelligence in Education. With robust learning management systems, faculty training, and online student services, the university is fully prepared to deliver a high-quality, engaging, and accessible online graduate certificate program.

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR13B.02.03.14)

TABLE 1: RESOURCES					
Resource Categories	**2024-2025**	**2025-2026**	**2026-2027**	**2027-2028**	**2028-2029**
1. Reallocated Funds	0	0	0	0	0
2. Tuition/Fee Revenue (c+g below)	36,600	54,900	54,900	73,200	73,200
a) # F/T Students	0	0	0	0	0
b) F/T Annual Tuition/ Fee Rate	0	0	0	0	0
c) Total F/T Revenue (a x b)	0	0	0	0	0
d) # P/T Students	10	15	15	20	20
e) Credit Hr. Rate	610.00	610.00	610.00	610.00	610.00
f) Annual Credit Hr.	6	6	6	6	6
g) Total P/T Revenue (d x e x f)	36,600	54,900	54,900	73,200	73,200
3. Grants, contacts, & other external sources	0	0	0	0	0
4. Other Sources	$0.00	$0.00	$0.00	$0.00	$0.00
TOTAL (add 1-4)	36,600	54,900	54,900	73,200	73,200

Budget Narrative:

The **LEARN-AI Graduate Certificate** is designed as a fully online, part-time program, generating revenue solely through tuition. The program does not require reallocated institutional funds, making it **self-sustaining** through student enrollment. Tuition revenue is based on a $610 per credit hour rate, with students taking six credit hours per year**.** The program is expected to start with 10 part-time students in the first year, generating $36,600**,** and grow to 20 students by year five, reaching $73,200 in annual tuition revenue. No full-time students are projected, as the program is tailored for working professionals in education and instructional design. At this time, no external grants, contracts, or additional funding sources are allocated, though opportunities for external support will be explored. The budget reflects a conservative, scalable model with low overhead due to its online structure, ensuring financial sustainability while meeting the increasing demand for AI-focused education.

TABLE 2: EXPENDITURES					
Expenditure Categories	**2024-2025**	**2025-2026**	**2026-2027**	**2027-2028**	**2028-2029**
1. Faculty (b + c below)	15,516	31,033	31,033	31,033	31,033
a. # FTE	0.25	0.50	0.50	0.50	0.50
b. Total Salary	11,936	23,871	23,871	23,871	23,871
c) Total Benefits	3,581	7,161	7,161	7,161	7,161
2. Admin. Staff (b + c below)	6,500	6,500	6,500	6,500	6,500
a. # FTE	0.10	0.10	0.10	0.10	0.10
b) Total Salary	5,000	5,000	5,000	5,000	5,000
c) Total Benefits	1,500	1,500	1,500	1,500	1,500
3. Support staff	0	0	0	0	0
4. Equipment	1,920	1,920	1,920	1,920	1,920
5. Library	0	0	0	0	0
6. New or Renovated Space	0	0	0	0	0
7.Other Expenses course development	2,650	5,300	0	0	0
8. TOTAL (add 1-7)	26,586	44,753	39,453	39,453	39,453
NET REVENUE	**10,014**	**10,147**	**15,477**	**33,747**	**33,747**

Budget Narrative:

a. Adjunct faculty are paid a stipend of $2,650 per course

b. Faculty are paid a course development stipend of $2,650 to develop new online courses.

c. Three new online courses will be developed in years one and two. One course is being revised by a full-time faculty member as a service project.

d. For equipment expenditure, the 1,920 per academic year is for faculty and student AI tool fees.

M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15).

1. **Discuss procedures for evaluating courses, faculty and student learning outcomes.**

The University Assessment Plan at NDMU guides the assessment of student learning outcomes at all levels of the institution. Every course syllabus must continue learning outcomes for the program and the course, and assess those outcomes every year. Departments prepare and submit an annual student learning outcomes assessment report, which is reviewed by the University Assessment Committee. Feedback for these reports are provided to the chairs and the faculty at department and individual meetings. All requests for resource allocation and budget change must be supported by assessment data, including course-based outcomes results.

2. **Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.**

The LEARN-AI program will be subject to the same requirements of all programs for course, faculty, and program evaluation. The program assessment plan is updated annually. Faculty are evaluated annually by their department chairperson as provided for in the NDMU faculty handbook. Adjunct faculty teaching at NDMU are evaluated through peer observation and feedback during their two semesters at the university using criteria for best practice in teaching and learning.

University Assessment of Satisfaction, Retention, and Resource Allocation
The University examines all programs' student satisfaction surveys in the same way. First, faculty are given access to their responses, along with program chairs and Deans. Faculty are asked in their yearly self-assessments to comment on trends they see in their student surveys; chairs and Deans see these self-assessments and provide formal and informal feedback. Deans, in turn, provide these assessments to the VPAA/Provost, where another series of oversight and feedback happens. It is not expected that the VPAA/Provost reads all student surveys; instead, the Deans and Chairs provide initial faculty feedback and the VP/Provost is engaged when more high-level discussion on pedagogical improvement is needed.

Student learning assessment follows a similar path of faculty to chair to Dean. After this assessment is collected, it is provided to the University Assessment Committee, where it can be further discussed. As seen in section 3, the UAC is made up of faculty, staff, and administrators

from all four Schools and has within its institutional charge the improvement of student learning across programming. If assessment data on any program show a need for remediation, the UAC can request follow-up from Deans, chairs, and faculty to better explain what is happening and put in methods for improvement.

Student retention falls under both the specific School for academic questions and Student Affairs for non-academic ones. While NDMU understands that retention is often a mix of academic and non-academic components, offering a decentralized approach to retention, especially in the graduate space, has been the historic model. There is also a student retention committee, chaired by the AVP of Student Life/Dean of Students and the AVP of Academics, that includes admissions, student success staff members, the VP/Provost, faculty, and other administrators. However, most of this committee's focus is on undergraduate retention.

The cost effectiveness of programs is assessed by the Vice President of Finance and the VPAA/Provost. Using a standard set of financial metrics such as cost per credit, revenue per student, enrollment projections, etc., programs are assessed financially. As befits the University's mission, cost-effectiveness is not the only metric to determine a program's importance to the institution. For example, programs that are essential to the undergraduate general education curriculum may operate at a loss. This dynamic occurs less frequently at the graduate level, especially in the University's professional programs.

N. Consistency with the State's Minority Student Achievement Goals
(as outlined in COMAR 13B.02.03.05).

1. Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.

The proposed LEARN-AI serves the University's mission of providing transformational educational experience for underserved populations. The University has a long history of providing access, opportunity, and success to minority students.

Any student meeting the admissions requirements can apply to the LEARN-AI program. The program will use a holistic admissions process that supports a diverse student body. The program will work to help all accepted students improve their workplace competitiveness and professional goals; an aim consistent with the State's minority student achievement goals.

In addition, Notre Dame of Maryland University is proud to have a significant number of minority students. At present over 52% of the graduate student population identifies as a minority student. The University continues to support historically under-represented groups in its recruiting, its financial aid packages, and its highlighting of student success.

O. Relationship to Low Productivity Programs Identified by the Commission:
1. If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.

N/A

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)
   1. Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.

Notre Dame of Maryland University has been approved by Middle States Commission on Higher Education, its regional accreditor, to offer distance education. Distance education supports the NDMU mission of empowering leaders from historically underrepresented communities, as well as its focus on providing professional education to a variety of students. The MSCHE website affirms these statements, with the approval of program through Distance Education listed under
Alternative Delivery Methods

Since 2014, NDMU has participated in NC-SARA, allowing it to offer online courses in most states. The authorization to provide distance education is found at nc-sara.org.

NDMU, a member of Maryland Online, has adopted the Quality Matters standards as the guidelines for design, development and delivery of all online courses and programs at Notre Dame. Courses are developed under the criteria outlined in the QM rubric, and go through an internal peer review process (QM qualified reviewers) prior to delivery. Faculty wishing to teach online are required to complete two QM courses that review best practice in design and delivery of online courses and programs.

2. Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.

Prior to January 1, 2018, Notre Dame of Maryland was approved by the Commission to offer distance education programs. Per COMAR 13B.02.03.22B, Notre Dame of Maryland University is an institution eligible to provide distance education.

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