

2024–2025
CATALOG
UPDATE

umgc.edu



UNIVERSITY OF MARYLAND
GLOBAL CAMPUS

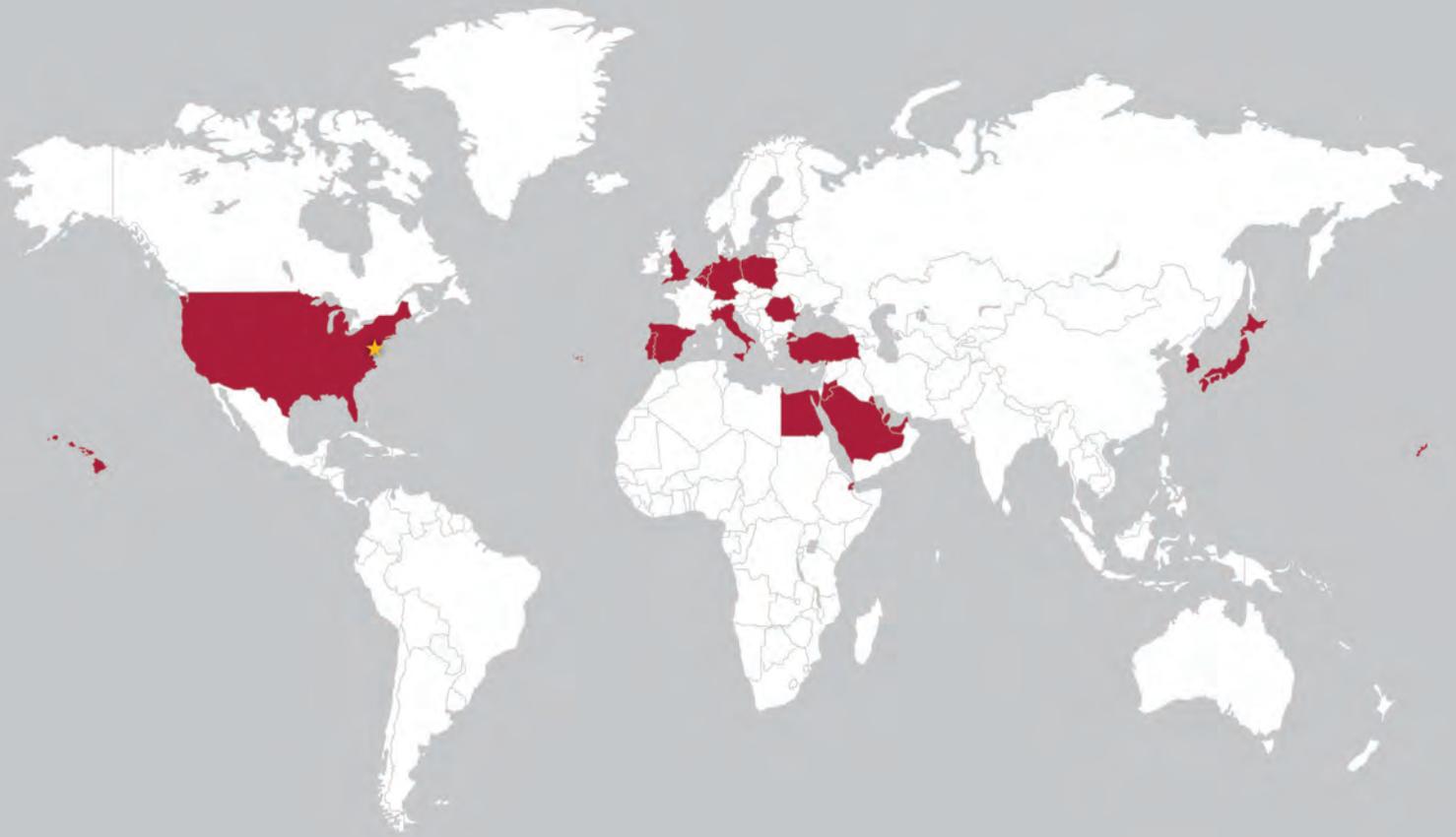


Table of Contents

CERTIFICATE PROGRAMS: UNDERGRADUATE

1

Artificial Intelligence Foundations

COURSE INFORMATION

2

The following information is an update to the 2024–2025 UMGC catalog and represents changes and additions made after original publication. Refer to the 2024–2025 catalog for information on all other programs, services, and policies.

MISSION

The mission of UMGC is to inspire hope, empower dreams, and transform lives . . . one student at a time. We accomplish this by

- Operating as Maryland’s open university, serving working adults, military servicemen and servicewomen and their families, and veterans who reside in Maryland, across the United States, and around the world
- Providing our students with affordable, open access to valued, quality higher education
- Serving as a recognized leader in career-relevant education, embracing innovation and change aligned with our purpose, and sharing our perspectives and expertise

VISION

The vision of UMGC is to be the school of choice for adults and business because we are learner-centric, data-driven, and skills-based.

VALUES

The core values of UMGC support its institutional vision for the future of learning and ensure the fidelity of the university’s commitment to its learners and community.

- **Celebrate Diversity:** Our welcoming of diverse perspectives and ideas differentiates us and drives innovation
- **Optimize Agility:** Curiosity and adaptability—informed and guided by data—drive continuous improvement and transformation
- **Reach Beyond:** Courage and willingness to challenge boundaries lead to transformative solutions, for our institution and our learners alike
- **Embrace Collaboration:** Teamwork, effective communication, and clarity of purpose drive success

CERTIFICATE PROGRAMS

UNDERGRADUATE

Artificial Intelligence Foundations

AVAILABLE SPRING 2025

The following degree requirements and recommended curriculum apply to students who begin continuous study on or after January 1, 2025.

The certificate program in Artificial Intelligence Foundations is designed to equip you with the knowledge and skills needed to lead AI initiatives within your organizations, regardless of your particular field. Specifically tailored for nontechnical professionals and managers, the program helps prepare you to navigate the evolving landscape of artificial intelligence in your respective industry. You'll attain a comprehensive understanding of AI, from introductory concepts to practical AI tools and applications, ethical considerations, and broader implications for both the workplace and society.

REQUIRED COURSES

- DATA 200 Data Literacy Foundations (3)
- ARIN 310 Introduction to Artificial Intelligence (3)
- CMSC 307 AI Applications (3)
- ARIN 340 Generative AI (3)
- ARIN 350 Responsible AI (3)
- ARIN 410 Artificial Intelligence in the Enterprise (3)

Total credits for undergraduate certificate in Artificial Intelligence Foundations: 18

COURSE INFORMATION

UNDERGRADUATE COURSE DESCRIPTIONS

Artificial Intelligence

ARIN 310 Introduction to Artificial Intelligence (3)

A comprehensive introduction to the basic principles and terminology of the field of artificial intelligence (AI). The aim is to use a solid understanding of AI concepts to facilitate informed decision-making and collaboration with technical teams. Topics include various subfields of AI, such as machine learning, natural language processing, and computer vision, as well as real-world applications of AI in areas such as recommender engines, supply chains, fraud detection, and customer service.

ARIN 340 Generative AI (3)

A comprehensive introduction to generative artificial intelligence models, a cutting-edge area of AI that focuses on creating content such as images, music, and text. Topics include the underlying principles and techniques behind generative models, e.g., large language models. Emphasis is on practical applications that demonstrate how generative AI is revolutionizing industries such as art, music composition, and content creation. Discussion covers the creative potential of AI generative pretrained transformers. Hands-on experience with generative tools is provided.

ARIN 350 Responsible AI (3)

An in-depth examination of the ethical considerations, societal impact, and responsible use of AI. The goal is to navigate the ethical landscape of AI, make informed decisions, and promote responsible AI practices within one's organization. Topics include bias and fairness in AI algorithms, transparency, privacy concerns, and the ethical implications of generative AI models. Real-world examples of AI-related ethical challenges are explored through case studies and discussions.

ARIN 410 Artificial Intelligence in the Enterprise (3)

A project-based examination of the practical application of AI, transforming sectors such as finance, healthcare, marketing, and supply chain management. The aim is to identify opportunities for AI adoption in one's organization and leverage AI for strategic advantage. Topics include predictive analytics, recommendation systems, automated decision-making, and the integration of AI into business processes.

Computer Science

CMSC 307 Artificial Intelligence Applications (3)

(No programming or math background required.) An interactive, hands-on study of current artificial intelligence (AI) applications spanning multiple disciplines and domains, including business, science, communications, and computing. The goal is to use data sets with AI and machine learning applications from leading cloud vendors, including Amazon and Microsoft. Projects and laboratory exercises show how AI can solve problems across many disciplines.

Data Analytics

DATA 200 Data Literacy Foundations (3)

An introduction to data and data literacy designed to enhance one's ability to understand and work in today's data-driven world. The aim is to collect, manage, evaluate, and apply data in a critical manner and examine the role, significance, and implications of data, including ethical issues within a society, in organizations, or for individuals. Focus is on developing skills in data manipulation, analysis, and visualization to generate insights from data, build knowledge, and make decisions. Topics include the effective use of cloud-based data storage, collaboration, and communication techniques.



UMGC is a constituent institution of the University System of Maryland and is governed by the USM Board of Regents.

ACCREDITATION

University of Maryland Global Campus (UMGC) is accredited by the Middle States Commission on Higher Education (MSCHE). MSCHE is recognized by the U.S. Secretary of Education to conduct accreditation and pre-accreditation activities for institutions of higher education, including distance, correspondence education, and direct assessment programs, throughout the United States. MSCHE's most recent action for UMGC was a reaffirmation of accreditation status on June 23, 2015.

ABOUT UMGC

University of Maryland Global Campus was founded more than 75 years ago specifically to serve the higher education needs of working adults and military servicemembers. Today, UMGC is the largest provider of postsecondary education in Maryland and continues its global tradition with online and hybrid courses, more than 175 classroom and service locations worldwide, and more than 135 degrees and certificates backed by the reputation of a state university and the University System of Maryland. For more information, visit umgc.edu.

Visit UMGC on the web at umgc.edu.

To speak with an advisor or a success coach, call **800-888-8682** or send an email to studentsfirst@umgc.edu.



**UNIVERSITY OF MARYLAND
GLOBAL CAMPUS**

3501 University Boulevard East
Adelphi, MD 20783 USA