



Master of Professional Studies in Artificial Intelligence



PennState
World Campus

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“The CEO of Google regards artificial intelligence as more profound than electricity and the internet. It will enable every aspect of our lives, from making us coffee in the morning to driving us home at the end of the day. Between the explosion of data and the power of contemporary computing, we are at a point in time where we can build computing

systems that can perceive their environment, reason about it, and make decisions that would otherwise require our attention and intellect.

Our program examines the technologies and theories at the heart of such systems and explores new ways to leverage them for competitive advantage and social benefit. This high-quality program is delivered by outstanding faculty engaged in the research and application of AI and machine learning who have a proven track record of teaching in top-ranked online graduate programs.”

—Dr. Colin J. Neill
Director, Artificial Intelligence program

Earn a Master of Professional Studies in Artificial Intelligence—Online

With recent advances in computing power and communications bandwidth and the ubiquity of internet-connected devices, artificial intelligence (AI) has emerged as an important discipline, driven heavily by the commercial availability of “smart” technologies and services. These advances correspond with the need for educated, qualified professionals who are capable of developing intelligent systems and exploring new frontiers in AI and machine learning.

The 33-credit master’s degree in artificial intelligence offered entirely online through Penn State World Campus provides a professional, technical education in developing and deploying AI and machine learning. This interactive program is designed to be a challenging, engaging, and collaborative learning experience, shared with expert faculty and motivated peers.

Students in the program will:

- › learn the three types of machine learning algorithms used to evaluate data: supervised learning, unsupervised learning, and reinforcement learning
- › explore natural language processing, the area of study concerning how machines comprehend and synthesize speech and text
- › gain knowledge of machine vision, which is how computers can perceive their visual environment and perform automatic inspections and analyses

Full-time Penn State professors, whose teaching and research combine academic expertise and industry experience, teach the courses and serve as advisers for the students. They are leaders in their fields and experts in the subjects they teach, and are instrumental in research in machine vision, deep learning, natural language processing, and AI security.

Career Opportunities

Earning this degree can help graduates obtain employment in multiple fields—including business, technology, finance, government, and manufacturing—holding positions such as:

- › software analyst and developer
- › computer science and AI researcher
- › AI application engineer
- › AI data scientist
- › machine learning engineer
- › natural language processing expert
- › software engineer
- › user experience specialist and designer

Curriculum

The curriculum for the Master of Professional Studies in Artificial Intelligence is designed to help students engage and develop knowledge in numerous areas of AI, including:

- › natural language processing
- › machine learning
- › deep learning
- › neural network architecture
- › computer vision
- › reinforcement learning

Students in this innovative program will use state-of-the-art tools and relevant data sets to solve real-world problems, building knowledge and experience that can be used immediately in the workplace.

As a capstone experience, students will apply the knowledge, theories, methods, and processes learned throughout the program and use an AI learning technique to train and test a prototype to determine if it could be deployed as a working system.

Because many of our students are working professionals who have other commitments, the curriculum is designed to provide the flexibility needed to balance both personal and professional schedules. You can finish the program in as little as two years, based on the successful completion of two courses each semester.





Why Penn State World Campus?

Penn State World Campus is an industry leader in online education, delivering more than 150 undergraduate and graduate degree and certificate programs to adult learners. Our mission is to provide the real Penn State educational experience, focused on convenience, flexibility, and quality. We have teams of professionals focused solely on providing students with the custom academic and support services they need to succeed.

› **Reputation of excellence**

Putting a Penn State degree or certificate on your résumé is a great way to broaden your career options and prove to employers that you are a well-educated professional.

› **Flexibility and convenience**

Penn State knows that adults need flexible and convenient learning options in order to continue meeting their professional and personal commitments. You can study when and where you please, earning your credential at the pace that makes sense for you.

› **Student support services**

As a Penn State World Campus student, you will be supported by a

team of knowledgeable and caring staff who understand the unique challenges of balancing work and personal responsibilities while learning online. You will have access to traditional student support services, such as 24/7 technical support, career services, and a dedicated student affairs team, along with access to the University Libraries system and the opportunity to join online clubs and organizations.

› **Military and veteran students**

We have aligned our online programs, student support services, policies, and procedures to support military personnel, veterans, and military family members.

Frequently Asked Questions

Is this the real Penn State?

Yes. Penn State World Campus was launched in 1998 as Penn State's virtual campus administered online. It has since grown into one of the most highly regarded online campuses—extending Penn State's long-standing reputation as a leader in higher education to students around the world.

How much is tuition?

Tuition is based on cost-per-credit and is associated with your program of study. Tuition rates are assessed every semester of enrollment, giving you the flexibility to pay as you move through the program. Please visit our website for the most up-to-date tuition rate.

How do online learners network?

In your courses, you will interact with peers from around the world. As you communicate regularly with classmates and faculty members, you'll gain insights that you can immediately apply to your job. As a Penn Stater, you will also have access to a proud network of more than 700,000 alumni, and upon your graduation, you can choose to join the Penn State Alumni Association—the largest dues-paying alumni association in the world, with chapters offering social and networking events in most metropolitan areas.

What does the online classroom look like?

Our philosophy for designing online courses is to use the latest technology to best deliver the content in the most flexible way. We use a single centralized platform where you can log in to your classroom to get assignments, interact with faculty and peers, reply to message boards, and more.

What will my diploma look like?

Your diploma will be the same one earned by resident students at Penn State. There is no indication on your transcripts or diploma that you earned your degree online. Upon completion of the program, you will be invited to walk with other graduates during commencement at Penn State's University Park campus in State College, Pennsylvania.



Begin Your Application Today

To be considered for admission, prospective students should submit an online application form and a complete application portfolio. Admissions decisions for the Master of Professional Studies in Artificial Intelligence are based on a review of your complete application portfolio and the quality of your credentials relative to those of other applicants.

Your master's degree application portfolio must include:

- › application form (completed and submitted online)
- › copy of official transcripts from each undergraduate and graduate institution attended
- › references
- › statement of purpose
- › résumé
- › TOEFL or IELTS score, if applicable

Official GRE/GMAT test scores will be considered if submitted but are not required.

For application deadlines and up-to-date details about the program and admissions process, visit: worldcampus.psu.edu/ai

Did You Know?

- › Penn State World Campus is consistently ranked as a top provider of online education by *U.S. News & World Report*.
- › Penn State World Campus has enrolled students from all 50 states and all 7 continents.
- › Our online courses involve frequent interactions among students and faculty.

Contact Us

Admissions Questions

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Program Questions

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