ARTIFICIAL INTELLIGENCE FOR ENGINEERING DATA ANALYTICS, GRADUATE/ PROFESSIONAL CERTIFICATE

The Artificial Intelligence for Engineering Data Analytics graduate certificate comprises courses from the College of Engineering's online Master of Engineering in Data Analytics (MEDA) program and the Department of Industrial and Systems Engineering's graduate curriculum. This certificate equips graduate students with specialized expertise in Aldriven data analysis, as well as the design, development, and deployment of Al applications. The nine-credit graduate certificate is designed to integrate with all online graduate programs offered by the College of Engineering and the professional Master of Science programs within the Department of Industrial and Systems Engineering.

ADMISSIONS

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This certificate is open to College of Engineering students enrolled in the following programs:

- Civil and Environmental Engineering: Environmental Engineering, MEng (https://guide.wisc.edu/graduate/civil-environmentalengineering/civil-environmental-engineering-meng/civilenvironmental-engineering-environmental-engineering-meng/)
- Electrical and Computer Engineering: Power Engineering, MS (https:// guide.wisc.edu/graduate/electrical-computer-engineering/electricalcomputer-engineering-ms/electrical-computer-engineering-powerengineering-ms/)
- Engineering Management, MS (https://guide.wisc.edu/graduate/ engineering-college-wide/engineering-management-ms/)
- Industrial Engineering: Systems Engineering and Analytics, MS (https://guide.wisc.edu/graduate/industrial-systems-engineering/ industrial-engineering-ms/industrial-engineering-systemsengineering-analytics-ms/)
- Industrial Engineering: Human Factors and Health Systems Engineering, MS (https://guide.wisc.edu/graduate/industrial-systemsengineering/industrial-engineering-ms/industrial-engineeringhuman-factors-health-systems-engineering-ms/)
- Manufacturing Systems Engineering, MS (https://guide.wisc.edu/ graduate/engineering-college-wide/manufacturing-systemsengineering-ms/)
- Engineering: Engineering Data Analytics, MEng (https:// guide.wisc.edu/graduate/engineering-college-wide/engineeringmeng/engineering-engineering-data-analytics-meng/)

• Engineering: Engineering Management, MEng (https:// guide.wisc.edu/graduate/engineering-college-wide/engineeringmeng/engineering-engineering-management-meng/) 1

- Engineering: Polymer Engineering, MEng (https://guide.wisc.edu/ graduate/engineering-college-wide/engineering-meng/engineeringpolymer-engineering-meng/)
- Engineering: Sustainable Systems Engineering, MEng (https:// guide.wisc.edu/graduate/engineering-college-wide/engineeringmeng/engineering-sustainable-systems-engineering-meng/)

All Graduate School students must utilize the Graduate Student Portal in MyUW to add, change, or discontinue any graduate/professional certificate. To apply to this certificate, log in to MyUW, click on Graduate Student Portal, and then click on Add/Change Programs. Select the information for the certificate for which you are applying. Professional students in the careers of Law, Medicine, Pharmacy, and Veterinary cannot add the certificate in the Graduate Student Portal and should contact the program for more information.

Graduate students who have additional questions about the Artificial Intelligence for Engineering Data Analytics certificate should contact studentservices@interpro.wisc.edu.

REQUIREMENTS

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Code	Title	Credits
Core		
I SY E 521	Machine Learning in Action for Industrial Engineers	3
E P D 522	Generative Artificial Intelligence for Engineering Applications	3
Elective		
Students must complete one of the following courses.		3
E P D 416	Engineering Applications of Statistics	
I SY E 516	Introduction to Decision Analysis	
Total Credits		9

LEARNING OUTCOMES

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- 1. Understand the foundations of artificial intelligence (AI).
- 2. Analyze and interpret data using artificial intelligence (AI).
- 3. Demonstrate the ability to utilize AI methods to solve complex engineering problems.
- 4. Design, develop, and deploy AI applications using current technologies and platforms.