



Rensselaer

why not change the world?®

Education for Working Professionals

Machine Learning and AI Graduate Certificate

The truth is in your data. The challenge is actually finding it.

Leading organizations are increasingly turning to machine learning and artificial intelligence to mine their data to provide insights – insights that may not yet be apparent. Machine learning can lead to recommendation engines and streamlined operations. Artificial intelligence can serve as true decision augmentation and implementation. As a leader in your organization, you can harness the power of machine learning and artificial intelligence to greatly enhance your ability to make agile and critical decisions. Rensselaer's Machine Learning and AI Graduate Certificate prepares you to identify problems before they are apparent, get even closer to your customers' true needs, and move far more quickly than competitors.

The Machine Learning and AI Certificate consists of three courses:

- **ENGR 6220: Data Architecture**

Design and deploy systems that serve as the basis for the analysis, processing, storage and interface of the machine learning process. Choose appropriate learning models to achieve the result desired, using decision tree, Bayesian, neural network and vector machine approaches. Use multiple statistical approaches to evaluate output that leads to best results.

- **ENGR 6221: Machine Learning Frameworks**

Develop predictive models that illustrate the least likelihood of unintended variance and build natural language and recommendation engines for common applications such as sales enhancement engines. Survey results and tune recommendation models to achieve more accurate predictions and determine best next steps.

- **ENGR 6222: Deep Learning in AI Systems**

Working directly with a faculty member, build machine learning systems that can be used as the foundation for decision making intelligence, where learning systems transition from recommendations to decision capacities. Over the semester, propose the model, develop the model, and train the system to improve performance.

Quick Facts

Begin the certificate in January, May, or August.

Certificate can be completed in 7 months or at a pace that suits you.

Each course is 3 credit hours and the certificate totals 9.

The certificate's blended online delivery reflects today's dynamic workplace.

Experienced practitioner faculty guide the completion of project work related to your career objectives.

The outcomes of your projects will highlight your expertise in business intelligence.

Work and learn with other professionals from a wide variety of industries in the certificate program.

Certificates can count towards the completion of graduate degrees designed for your specific needs.

Application details and important dates can be found at:
ewp.rpi.edu

You're invited to explore this and other Rensselaer graduate programs and certificates for working professionals. Please let us know your interest via email at ewp@rpi.edu or phone at 860.548.2403. You're also welcome to join Dean Aric Krause for an Informational Webinar of your choice. Find the webinar schedule at ewp.rpi.edu. We look forward to meeting you!