



# Rensselaer

why not change the world?®

Education for Working Professionals

## Business Intelligence Graduate Certificate

**Engineering and business leaders must use data effectively to form strategy, solve problems, and support key decision making.**

It's no longer an option. Operating conditions change quickly while intelligence accumulates mostly unused in every part of an organization. Now is the time to construct strategy around informed decisions you champion. The Business Intelligence Graduate Certificate prepares you to model the operation accurately, differentiate true intelligence from "hunches", turn unknowns into knowns, and make the best use of data possible.

**The Business Intelligence Certificate is comprised of three courses:**

- **ENGR 6200: Data-Driven Decision Making**

Frame questions and resolve problems using data wrangling tools; employ models using linear/nonlinear multivariate methodologies using R, Python and Excel; validate results and develop algorithms that can be used to make recommendations and forecasts; and work with stakeholders to scope and frame questions and problems for actionable results.

- **ENGR 6215: Business Intelligence Analysis**

Use visualization and cluster analysis to gain deeper insights into complex business relationships; apply data analytic processes to real-world business problems and questions, including pricing, customer and competitive analyses, financial forecasts, customer decision models, and organizational performance dashboards; and tune models to represent current-state and adjust them as underlying assumptions change.

- **ENGR 6216: Modeling Business Decisions**

Working with a faculty member as your mentor, develop a big data inquiry model for a complex business issue, question or problem of your choice. Over the semester, frame the question to be analyzed, collect and prepare business data for analysis, perform the analysis and present actionable results and recommendations back to your employer.

### 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](http://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](mailto: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](http://ewp.rpi.edu). We look forward to meeting you!