In the future, the choice for leaders is clear: either use data effectively in forming strategy, solving problems, and supporting decisions or do not lead.

It is 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 Graduate 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; validate results and develop algorithms for recommendations and forecasts.

- **ENGR 6215: Business Intelligence Analysis**
  Use visualization and cluster analysis to gain insights into complex problems like pricing, customer and competitive analyses, financial forecasts, decision models, and organizational performance dashboards; then tune and adjust as underlying assumptions change.

- **ENGR 6216: Modeling Business Decisions**
  Working with a faculty member/mentor, develop a big data inquiry model for a complex business issue of your choice. Over the semester, frame the question, collect and prepare data, perform the analysis and present results and recommendations to your employer.

Explore Rensselaer’s Education for Working Professionals program at a 30-minute Informational Webinar or schedule a Professional Consultation at [ewp.rpi.edu/contactus](http://ewp.rpi.edu/contactus). You can also reach us by email at ewp@rpi.edu or by phone at 860.548.2403.

---

**Education for Working Professionals**

All courses are delivered using Rensselaer’s digital classroom – the Rensselaer Studio.

Certificates are 9 credit hours and can be completed in a year or less.

Complete projects that address real-world business challenges.

Master new tools and techniques that can be leveraged to elevate your role at work.

Projects involve the context of your work, helping you to perfect your abilities while simultaneously providing value back to your employer.

Faculty Practitioners provide industry expertise, advice, mentorship, and encouragement.

Students have the option of completing just one certificate or combining multiple certificates into a customized master’s degree.

All certificates are offered for graduate-level credit and require admission to Rensselaer’s graduate programs.

Certificates are designed so that you can fully participate in classes from anywhere in the world.
Business Intelligence is one of eight graduate certificates that allow you to develop in-depth expertise quickly in a mission-critical area.

Visit [ewp.rpi.edu](https://ewp.rpi.edu) for an updated listing of certificates offered and program course descriptions.

Business Intelligence

Take control of the flood of data from across the enterprise by mastering data-driven decision making, business intelligence analysis, while modeling findings you and your employer can rely on.

Production Analytics

Model your production accurately using data, logistics analysis and modeling decisions to differentiate true intelligence from ‘hunches’, unknowns into knowns, and make the best use of data possible.

Machine Learning and A.I.

A massive competitive advantage, develop expertise in data architecture, machine learning frameworks, and deep learning in AI systems to identify problems before they appear and get closer to your customers.

Supply Chain and Logistics

Empower your operation by ensuring suppliers are capable, inventory is managed, distribution and warehousing logistics are in order, and the software integrating planning and operations works harmoniously.

Systems Engineering

See the ‘whole picture’ of your organization, develop skills to optimize systems and processes to bring costs and inventory under control, and enhance your role in moving the organization forward.

Lean Quality in Production

Design and optimize complex systems and upgrade your credentials as a Lean Six Sigma I and Lean Six Sigma II practitioner who replaces slow, outdated processes with an approach you can count on.

Graduate Certificates can be stacked to form custom Rensselaer master’s degrees.

Rensselaer offers two master’s degrees that can be customized with your choice of certificates.

Explore Rensselaer’s Education for Working Professionals program at [ewp.rpi.edu](https://ewp.rpi.edu).

Master of Science in Engineering Science

Stack any three certificates of your choice to complete a Master of Science in Engineering Science degree with a final, integrative project.

Systems Engineering and Technology Management

The Systems Engineering and Technology Management degree includes two certificates of your choice and four core courses to complete the degree.