

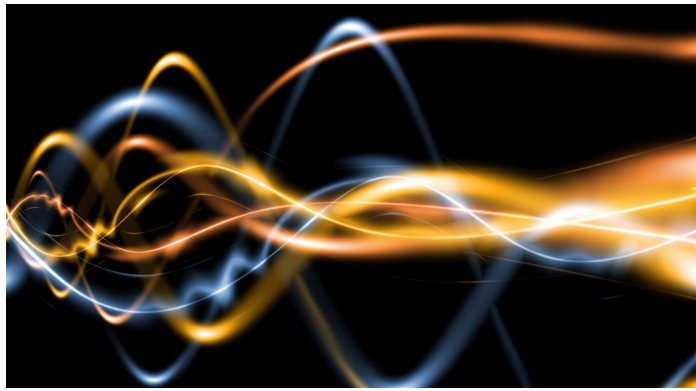


Rensselaer

why not change the world?®

Education for Working Professionals

Lean Quality in Production Graduate Certificate



Innovative processes can deliver growth and profit, but what about the outdated processes that slow you down?

Process is the lifeblood of business. When results aren't satisfactory, change is required. The powerful, proven tools of lean and six sigma help diagnose and fix issues and create new, innovative processes. Rensselaer's Graduate Certificate in Lean Quality in Production prepares you with these methodologies to fix existing processes and create new ones.

The Lean Quality in Production Certificate consists of three courses:

- **ENGR 6230: Lean Six Sigma I**

Learn the fundamentals of lean and six sigma philosophies and gain experience with a toolkit by applying them to a relevant workplace process. The Define, Measure, Analyze, Interpret, and Control (DMAIC) improvement cycle is used along with multiple tools for each step, including voice of customer (VOC), quality functional deployment (QFD), 5S, Kaizens, and plan-do-check-act (PDCA).

- **ENGR 6231: Lean Six Sigma II**

Building on your DMAIC experience, identify new, high-value processes and learn to create them with the Define, Measure, Analyze, Design, Optimize and Verify (DMADOV) approach. Build on prior experience in Lean Six Sigma 1, in the context of creating new processes, developing an elevator speech, data collection and statistical methods for design of experiments (DOE), root cause analysis, and developing key performance indicators (KPIs) and dashboards.

- **ISYE 6970: Professional Project**

Continue with the DMADOV approach to create new processes, with a set of unique and powerful tools to Design a new process, Optimize it, and Verify (DOV) so that the design meets quality standards. Learn and gain experience using factorial design, optimization with robust design principles and the Taguchi loss function, and verification of process performance with functional degradation testing and development of a control plan.

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!