

Quality Assurance

Master of Science

1. Apply advanced principles and tools from quality and measurement science to problem solving and measuring reliability and performance in production and service industries
2. Demonstrate the ability to communicate problems processes and solutions to management and external audiences using technical and business communications
3. Evaluate complex, integrated organizational systems and processes in order to recognize and measure system failures scientifically, synthesize data and form solutions
4. Explain (in technical and non-technical terms) measurement uncertainty and errors by using advanced methods from dimensional, electrical and physical metrology and develop solutions to minimize these errors
5. Demonstrate the ability to conduct independent research using primary and secondary sources, analyze information, interpret data, draw conclusions
6. Demonstrate an understanding of the roles and responsibilities of a Quality professional, including staying abreast the ASQ Body of Knowledge and industry standards
7. Demonstrate advanced knowledge of mathematics, probability and statistics, science and quality concept to solve problems.
8. Design a quality system, component, experiment, or process to meet industry standards
9. Identify, formulate and solve quality problems involving physical, human, and economic parameters.