

# RELIABILITY ENGINEERING CERTIFICATION

## ASSET AND CAPACITY RELIABILITY THROUGH PREDICTIVE MAINTENANCE

The Reliability Engineering Certification (REC) prepares reliability professionals to achieve maximum results in this strategic business role. The program is designed for people who are responsible for improving asset and capacity reliability and creating a culture of continuous improvement. This four-course program prepare participants to:

- Build and sustain a strategic reliability engineering program
- Prepare control strategies that reduce risk and improve asset utilization
- Determine predictive strategies and build an effective predictive maintenance program
- Establish a root cause analysis program that will lead to reduced downtime, increased production and a culture of continuous improvement
- Complete a work project and achieve the REC



## FOUR-COURSE PROGRAM

### Risk-Based Asset Management: January 24-26, 2017

Risk-Based Asset Management takes a holistic approach that addresses not only infrastructure needs, but also the supporting people, business processes, data, and enabling technologies critical to success. This course steps you through the fundamental building blocks to create a strategy for implementing a successful asset management program. Receive hands-on instruction while preparing control strategies that ultimately help you reduce risk and achieve the greatest asset utilization at the lowest total cost of ownership.

### Root Cause Analysis: March 21-23, 2017

Root Cause Analysis (RCA) is more than learning the right tools to determine the underlying cause of failures. True root cause focuses on continuous improvement and identifying the latent and human causes of recurring failures. In this course you will learn how to develop and implement an RCA program, thus leading your organization to reduce downtime, increase production, and to become a more proactive culture.



### Predictive Maintenance Strategy: May 16-18, 2017

Predictive maintenance (PdM) is not a tool, technique or certification. It is the philosophy that uses the equipment's operating condition to make data-driven decisions and improve quality. This course focuses on establishing, managing, and sustaining results from a comprehensive PdM program. Learn the theory and application of multiple PdM technologies, which to use, how to set goals for your program, track progress, and practice how to communicate results to different stakeholders.

### Reliability Engineering Excellence: October 18-20, 2016, and October 17-19, 2017

The Reliability Engineer (RE) is the business advisor to facility maintenance and production. The RE mitigates the risks associated with managing assets by encouraging interdepartmental partnerships focused on the goal of reliable production. In this course you will learn what it means to be a Reliability Engineer, how to build and sustain a strategic Reliability Engineering program, and how to gain support from other departments to achieve your facility's reliability goals.

## COMMENTS FROM PAST PARTICIPANTS

- "I plan to apply the skills learned this week at my job. I have been pleased with the course and want to take the balance of the certificate program. The Ohio State campus was a very nice learning environment."
- "Very well covered. I attended the class to obtain everything offered but also to review it to see if my company can benefit from sending other managers and supervisors to the course. I will be signing up others that work under me to attend future classes."
- "The facilitator kept the class engaged and made it very interesting by discussing our problems and how we can go about solving them."
- "Very good informative course. Mike is very knowledgeable with a lot of practical real-world experience. Excellent instructor skills."





## RELIABILITY ENGINEERING CERTIFICATION

The final step in achieving your Reliability Engineering Certification (REC) is completing the work product. The work product component allows you to demonstrate to yourself, your organization and your peers your competency in the real-world application of reliability engineering principles.

**Using the tools and templates provided by the Life Cycle Institute you will choose a system in your facility and perform the following activities:**

1. A criticality ranking on at least 10 system assets.
2. A Failure Modes and Effects Analysis (FMEA) for one critical system asset's primary function.
3. Root cause analysis (RCA) on one failure mode to determine all of the possible causes. You must defend your RCA tool of choice.
4. Propose a predictive maintenance technology approach that could predict or mitigate deterioration.

You will compile the results of these activities into a comprehensive report and present your work product to a qualified reliability engineer for review and scoring.

Following successful completion of the work product you will be able to use the REC title designation after your name.

## CERTIFICATION REQUIREMENTS

Work products will only be accepted after all required coursework is complete. Work products are reviewed twice per year, in February and September. A candidate will have until the first review period following his one-year anniversary of completing the coursework to submit his work product.

## PRICING

Each course: \$1,495

Reliability Engineer Certification: \$2,495

The price for each 3-day course includes a comprehensive active learning manual, lunch, and morning and afternoon refreshments. Classes are held at The Ohio State University College of Engineering campus.

Each completed course will earn 2.1 CEUs with a total of 8.4 CEUs for the certificate program.

## REGISTER

To register visit: [go.osu.edu/REC](http://go.osu.edu/REC)

This program is offered through a partnership between The Ohio State University College of Engineering and Life Cycle Engineering, the leader in Reliability Excellence.

## ABOUT LIFE CYCLE® INSTITUTE

The Life Cycle Institute designs, develops and delivers learning solutions that change behavior to produce desired results. When the Institute is engaged, learning is not an event but an active learning experience where proven adult learning methods are applied to ensure on-the-job application of new knowledge and skills.

## ABOUT OHIO STATE'S PROFESSIONAL PROGRAMS

The Ohio State College of Engineering is committed to providing life-long learning for individuals in the fields of engineering and architecture. Through professional education, adult learners can engage with world-class faculty to increase their knowledge, expand upon their expertise, and build their careers. The College of Engineering's Professional Programs Office (PPO) provides learning opportunities from innovative leaders in engineering and architecture education. The PPO has professional degrees, certificate programs, and other courses in distance learning format to meet the needs of busy working professionals.

## CONTACTS

### Professional Programs

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