



## Industrial Maintenance Development

Do you want to deepen your knowledge about maintenance and dependability? Then this course is for you.

The course focuses on the value of dependability in production systems and how maintenance contributes to the achievement of optimal dependability. A well-designed maintenance programme starts with the design of the production system, from the procurement of new equipment, to system service life.

In the course, we look at maintenance as a value adding activity, analyse maintenance data and apply different types of analysis, such as Life Cycle Cost (LCC) and Root Cause Failure Analysis. We also learn about maintenance management concepts, early equipment management as well as maintenance economy, planning and scheduling. In addition, future trends and challenges in the maintenance domain are part of the course.

### YOU WILL LEARN TO

- Describe the value of maintenance and relate maintenance activities to the cost categories they are associated with.
- Apply simple LCC analysis for comparison of different solutions for achieving dependable production systems.
- Apply Root Cause Failure Analysis to poor dependability in production systems.
- Analyse and evaluate maintenance and dependability data from production equipment and based on such analysis, describe the resulting dependability of production systems.
- Understand and describe the principles of the most common maintenance concepts.

### TEACHER

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Antti Salonen works as a senior lecturer, combining education and research within industrial maintenance management. He has 12 years' experience of industrial maintenance work and 10 years' of maintenance research.

### DETAILS

**STUDY PERIOD:** Nov 9, 2020 – Jan 17, 2021

**STUDY PACE:** 33% (approx. 13 hours/week)

**CREDITS:** 5

For more information about the course and how to apply, visit

[mdh.se/en/malardalen-university/education/further-training/smart-production](https://mdh.se/en/malardalen-university/education/further-training/smart-production)

### ENTRY REQUIREMENTS

40 credits in Engineering/Technology and at least two years' experience in full-time employment in a relevant area within industry. Since the course is given in English, you need knowledge of the English language. If you do not have the formal academic qualifications required, you can have your eligibility evaluated based on knowledge acquired in other ways, such as work experience, other studies etc.

### PREMIUM

This course is part of the Premium project, which is co-funded by the Knowledge Foundation. Learn more about Premium at [mdh.se/premium](https://mdh.se/premium)

### MÄLARDALEN UNIVERSITY

Mälardalen University (MDH) is one of Sweden's largest HEIs, with 16 000 students reading courses and programmes in Business, Health, Engineering and Education. At MDH, research is conducted within all areas of education. MDH's close cooperation with the private and public sectors enables us to help people feel better and the earth to last longer.

**GET AHEAD.  
STAY AHEAD.**