Industrialization and Ramp-up in Industry 4.0

You will learn methods, tools, and strategies for your company to gain a world class competence in the industrialization of new products and production technologies. If you are involved in the activities of industrialization, product or process introductions, and integration of new products and/or production technologies, then this course is for you.

You will acquire knowledge about planning and implementing industrialization activities for achieving a faster time-to-market and time-to-volume with higher quality. During the course you will work on one of your company's industrialization challenges as a "project case" and analyse ways to tackle them in an efficient way. The course focuses on R&D-manufacturing interface, managing novelty and feedback loops, TRL and MRL, production processes, start of production and ramp-up. In addition, the course provides insights on how Industry 4.0 or digitalization technologies can support your company's industrialization activities.

YOU WILL LEARN TO

- Describe the industrialization process and various activities, methods and tools used to reduce disturbances, time-to-market and time-to-volume.
- Demonstrate skills in analyzing how different industrialization activities and decisions affect start of production and full-scale production volume.
- Demonstrate skills in describing various factors that affect industrialization and time-to-volume, and in analyzing and comparing the overall performance.
- Demonstrate the ability to perform and relate a company's practical work to the theories of industrialization and production ramp-up.
- Analyze the limitations and opportunities for improvement of current industrialization process with regard to the potential of Industry 4.0 technologies.

TEACHER

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Koteshwar Chirumalla is an Associate Professor in Product and Process development, having a multi-disciplinary background in the combinations of engineering, management and business. His research focus is on industrialization of new products and process technologies, process innovation, knowledge management, business models and digital transformation.

DETAILS

STUDY PERIOD: January 17, 2022 – March 27, 2022
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/*

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 qualifications required, you can have your eligibility evaluated based on knowledge acquired in other ways, such as work experience, other studies etc.

PREMIUM

The course is included in the Premium project, which is partly funded by the Knowledge Foundation. You can find more information about Premium at *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.

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STAY AHEAD.

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