COURSE



2nd sem.2023-2024

Taught by: Sorin HERLE

Contents:

- C1: Introduction to manufacturing (26.02.2024)
 C2: Manufacturing systems (04.03.2024)
- C3: Manufacturing operations (11.03.2024)
- C4: Material handling. Part 1: Transport systems (18.03.2024)
- C5: Material handling. Part 2: Storage systems (25.03.2024)
- C6: Group technologies (01.04.2024)
- C7: Flexible manufacturing systems (08.04.2024)
- C8: Process planning and Concurrent engineering (15.04.2024)
- C9: Production planning systems (22.04.2024)
- C10: Production control systems (13.05.2024)
- C11: Quality in manufacturing (20.05.2024)
- C12: Sustainable manufacturing (27.05.2024)
- C13: Revolutions and evolutions in production (03.06.2024)
- C14: Production systems Review (?.06.2024)

Bibliography

COURSE

- 1. Automation, Production Systems, and Computer Integrated Manufacturing (5th edition), Mikell P., Groover, Prentice Hall 2018
- 2. Gemba Kaizen: A Commonsense Approach to a Continuous Improvement Strategy 2/E autor Masaaki Imai, Hardcover: 448 pages, Publisher: McGraw-Hill Professional; 2 edition (May 23, 2012), ISBN-10: 9780071790352, ISBN-13: 978-0071790352
- 3. Manufacturing Planning and Control for Supply Chain Management , F. Robert Jacobs, William Berry, D. Clay Whybark, Thomas Vollmann, Publisher: McGraw-Hill Professional; 1 edition (March 29, 2011), ISBN-10: 0071750312, ISBN-13: 978-0071750318
- 4. Inventory Management by Steven M. Bragg, Publisher: Accounting Tools (October 4, 2013), ISBN-10: 1938910192, ISBN-13: 978-1938910197
- 5. Quality Control for Dummies, by Larry Webber, Michael Wallace, Publisher: For Dummies; 1 edition (March 27, 2012), ISBN-10: 0470069090, ISBN-13: 978-0470069097
- 6. Unlocking Lean Six Sigma: A Competency-Based Approach to Applying Continuous Process Improvement Principles and Best Practices (Competency Based Books for Structured Learning) Paperback January 18, 2021, by Dr. Wesley E. Donahue
- 7. Modern Manufacturing The Complete Series: Best Practices, Real-World Stories & Game-Changing Processes (Modern Manufacturing Case Studies) by Michelle Segrest | Mar 13, 2022
- 8. Industry 4.0: Managing The Digital Transformation (Springer Series in Advanced Manufacturing) 1st ed. 2018 by Alp Ustundag and Emre Cevikcan

LAB

- 1. / Computer Integrated Manufacturing, Sorin HERLE, UTPRESS 2017
- 2. rocon.utcluj.ro/sorin



Final grade components:



Written exam (120 questions and exercises, min 60 correct answers to pass the exam)

Conditions:

E- optional if $TP^* \ge 60$

 $E \ge 5$ if $TP^* < 60$

 $L \ge 5$ for each lab.

Assesment at the end of each lecture (a total of 120 questions and exercises)

L 50 %

Lab grade, at the end of each laboratory



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