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**Faculty of
Industrial
Management**
UNIVERSITI MALAYSIA PAHANG



Course Information

Industrial Engineering

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Course Introduction

Course : BPN2023-Industrial Engineering

Credit hour : 3 hours

Contact hour : 3 x 14 weeks

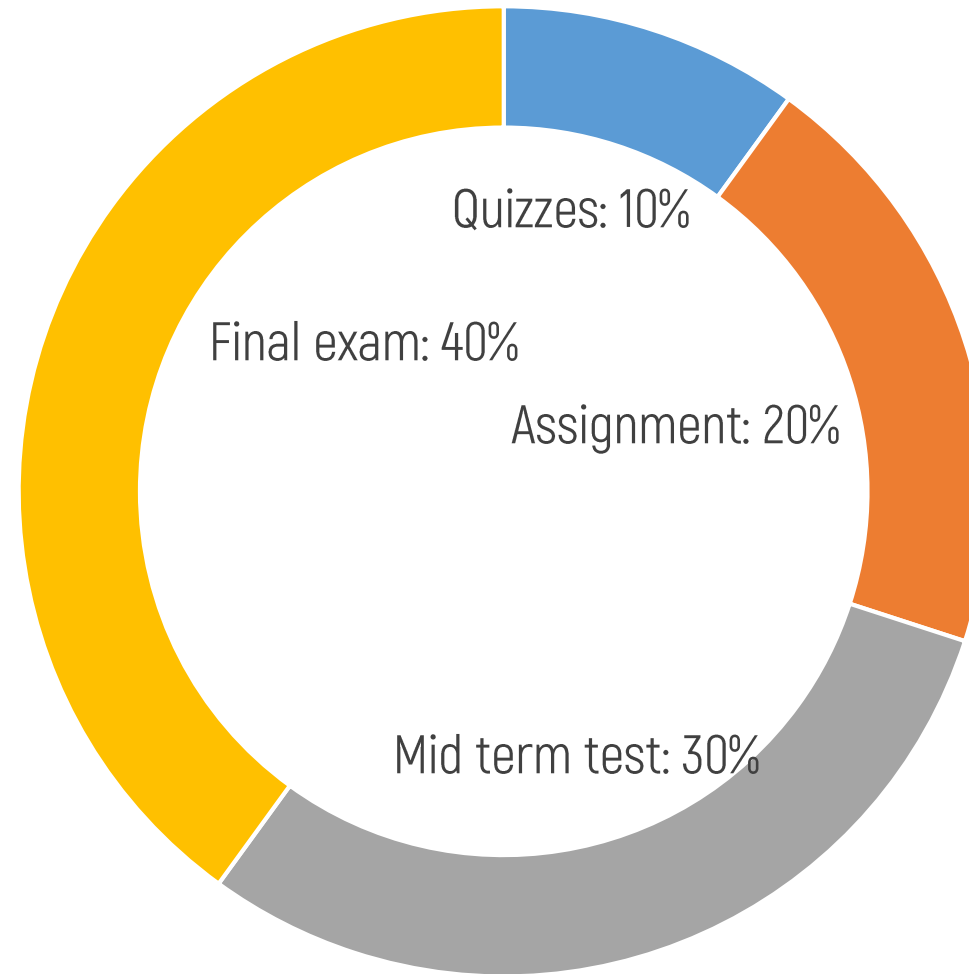
Pre-requisite : None

What will be learnt?

The concrete principles & practical techniques to design, install, and improve the integrated systems of people, material, information, equipment, & energy.

Course Outcome

- C01: Point out the principles of industrial engineering in designing, installing, and improving an integrated system.
- C02: Synthesize an integrated system of people, material, information, equipment, and energy in problem solving and decision making.
- C03: Practice industrial engineering principles for continuous improvement.



Assessment

Week	Topics
1	Chapter 1: Introduction to Industrial Engineering
2	Chapter 2: System: The focal point of IE
3	Chapter 3: Organization and Manpower Management
4	Chapter 4: Work study
5	Chapter 5: Methods study
6	Chapter 6: Work measurement
7	Chapter 7: Ergonomics
8	Mid Term Test
9	Chapter 8: Designing Processes
10	Chapter 9: Facility and Capacity Planning
11	Chapter 10: Aggregate planning
12	Chapter 11: Material requirement planning
13	Chapter 12: Inventory management
14	Submission of group assignment and presentation

Course Planning

References

- Greene, J. (2013). *Industrial Engineering: Theory, Practice & Application: Business and Production Management, Productivity and Capacity*. South Caroline, USA: Jackson Productivity Research Inc.
- Heizer, J., & Render, B. (2017). *Operations management: Sustainability and Supply Chain Management*, 12th ed. Singapore: Pearson Education, Inc.
- Russell, R. S., & Taylor, B. W. (2014). *Operations management and supply chain management*, 8th ed. Singapore: John Willey & Sons, Inc.
- Salvendy, G. (2001). *Handbook of industrial engineering: technology and operations management*. Canada: John Wiley & Sons.
- Turner, W. C., Mize, J. H., Case, K. E., & Nazemtz, J. W. (1993). *Introduction to Industrial and Systems Engineering*. New Jersey: Prentice Hall.



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Engineering • Technology • Creativity

Thank You

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