

Doctor of Philosophy Program in Industrial and Manufacturing Systems Engineering

This program aims at producing researchers with high knowledge and competencies at the doctoral level to conduct research in new bodies of knowledge and technological innovations in production technology and management in metallurgy, metal casting, welding of metals and plastics, inspection without destroying, quality control and production system in response to the needs of the industrial, government and private sectors.

Applicant Qualifications

1. A candidate must hold a bachelor's degree with honors in production engineering, chemical engineering, electrical engineering, computer engineering, mechanical engineering, instrumentation and control system, tools and materials engineering, or equivalent from higher education institutions accredited by Office of the Civil Service Commission (OCSC), depending on the consideration of the academic committee of the department or
2. A candidate must hold a master's degree or a master 's degree in Engineering with a GPA of not less than 3.5 from the 4.0 system in production engineering, welding engineering, metallurgy engineering, manufacturing system engineering, chemical engineering, electrical engineering, computer engineering, mechanical engineering, control system and instrumentation engineering, tools and materials engineering, or equivalent from higher education institutions accredited by Office of the Civil Service Commission (OCSC), depending on the consideration of the academic committee of the department or
3. A candidate must hold a master's degree in any of the same fields as stated in no. 1 and 2 with at least two years' working experience in an industrial sector with recognized work or invention or has research work in related fields under the consideration of the academic committee of the department.

Professions after Graduation

1. Researcher
2. Engineer in industrial plants
3. Expert or lecturer in production and systems in the industry
4. Lecturer in educational institutions

Curriculum

Plan 1.1 for student with Master degree	48 Credits
Plan 1.2 for student with Bachelor degree	72 Credits
Plan 2.1 for student with Master degree	48 Credits
Plan 2.2 for student with Bachelor degree	72 Credits

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Curriculum Components

Plan 1.1 for student with Master degree

- Dissertation 48 Credits

Plan 1.2 for student with Bachelor degree

- Dissertation 72 Credits

Plan.2 1 for student with Master degree

- Major Course 6 Credits
- Elective Course 6 Credits
- Dissertation 36 Credits

Plan 2.2 for student with Bachelor degree

- Major Course 6 Credits
- Elective Course 18 Credits
- Dissertation 48 Credits

COURSE STRUCTURE

Plan 1.1 for student with Master degree

First Year

First Semester Credits

ISE 792 Dissertation 6 (0-12-24)

Total 6 (0-12-24)

Second Semester Credits

ISE 792 Dissertation 6 (0-12-24)

Total 6 (0-12-24)

Second Year

First Semester Credits

ISE 792 Dissertation 12 (0-24-48)

Total 12 (0-24-48)

Second Semester Credits

ISE 792 Dissertation 12 (0-24-48)

Total 12 (0-24-48)

Third Year

First Semester Credits

ISE 792 Dissertation 6 (0-12-24)

Total 6 (0-12-24)



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Second Semester	Credits
ISE 792 Dissertation	6 (0-12-24)
Total	6 (0-12-24)

Plan 1.2 for student with Bachelor degree

First Year

First Semester	Credits
ISE 791 Dissertation	9 (0-18-36)
Total	9 (0-18-36)

Second Semester	Credits
ISE 791 Dissertation	9 (0-18-36)
Total	9 (0-18-36)

Second Year

First Semester	Credits
ISE 791 Dissertation	9 (0-18-36)
Total	9 (0-18-36)

Second Semester	Credits
ISE 791 Dissertation	9 (0-18-36)
Total	9 (0-18-36)

Third Year

First Semester	Credits
ISE 791 Dissertation	9 (0-18-36)
Total	9 (0-18-36)

Second Semester	Credits
ISE 791 Dissertation	9 (0-18-36)
Total	9 (0-18-36)

Forth Year

First Semester	Credits
ISE 791 Dissertation	9 (0-18-36)
Total	9 (0-18-36)

Second Semester	Credits
ISE 791 Dissertation	9 (0-18-36)
Total	9 (0-18-36)

Plan 2.1 for student with Master Degree

First Year

First Semester	Credits
ISE 701 Advanced Topics in Experimental Design	3 (3-0-9)

MTH 665 Mathematical Techniques 3 (3-0-9)

Total 6 (6-0-18)

Second Semester Credits

XXX xxx Elective 3 (3-0-9)

XXX xxx Elective 3 (3-0-9)

Total 6 (6-0-18)

Second Year

First Semester Credits

ISE 796 Dissertation 9 (0-18-36)

Total 9 (0-18-36)

Second Semester Credits

ISE 796 Dissertation 9 (0-18-36)

Total 9 (0-18-36)

Third Year

First Semester Credits

ISE 796 Dissertation 9 (0-18-36)

Total 9 (0-18-36)

Second Semester Credits

ISE 796 Dissertation 9 (0-18-36)

Total 9 (0-18-36)

Plan 2.2 for student with Bachelor degree

First Year

First Semester Credits

XXX xxx Elective 3 (3-0-9)

XXX xxx Elective 3 (3-0-9)

XXX xxx Elective 3 (3-0-9)

Total 9 (9-0-27)

Second Semester Credits

XXX xxx Elective 3 (3-0-9)

XXX xxx Elective 3 (3-0-9)

XXX xxx Elective 3 (3-0-9)

Total 9 (9-0-27)

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Second Year	Credits
ISE 701 Advanced Topics in Experimental Design	3 (3-0-9)
MTH 665 Mathematical Techniques	3 (3-0-9)
ISE 794 Dissertation	3 (0-9-18)
Total	9 (6-9-36)
First Semester	Credits
Second Semester	Credits
ISE 794 Dissertation	9 (0-18-36)
Total	9 (0-18-36)
Third Year	
First Semester	Credits
ISE 794 Dissertation	9 (0-18-36)
Total	9 (0-18-36)
Second Semester	Credits
ISE 794 Dissertation	9 (0-18-36)
Total	9 (0-18-36)
Forth Year	
First Semester	Credits
ISE 794 Dissertation	9 (0-18-36)
Total	9 (0-18-36)
Second Semester	Credits
ISE 794 Dissertation	9 (0-18-36)
Total	9 (0-18-36)