

Faculty of Engineering

Doctor of Philosophy Program in Materials Processing Technology and Manufacturing Innovation

This program aims at producing graduates with specific knowledge in materials processing technology and manufacturing innovation in order for them to be able to work in academic, research, and technology development and problem-solving in industrial factories to produce quality products, to increase value and to save resources and energy.

Applicant Qualifications

Plan 1.1

A candidate must hold a master's degree in science, engineering, industrial education, industrial science or equivalent with a GPA not less than 3.5 and the faculties members who are responsible for the Ph.D. program have considered and agreed to accept the candidate into the program, or a candidate has at least two years' experience in industry and with recognized works or inventions or has published research in materials processing technology or related fields, and is considered by the academic committee of the department to be appropriate for the program.

Plan 2.2

A candidate must hold a bachelor's degree from universities accredited by the Office of the OCSC with a GPA not less than 3.25 or equivalent or the faculty members responsible for the Ph.D. program have considered it appropriate to accept the candidate into the program, for example, with research publications and/or development that meets the standards.

Professions after Graduation

1. Research and develop personnel in the automotive parts industry, manufacturing industry, electronic components industry, gem and jewelry industry, packaging industry, medical industry, related specialized research centers, and others.
2. Teachers/lecturers in science and technology educational institutions

Curriculum

Plan 1.1 for student with Master degree	48 Credits
Plan 2.2 for student with Bachelor degree	73Credits

Curriculum Components

Plan 1.1 for student with Master degree		
● Dissertation	48	Credits
Plan 2.2 for student with Bachelor degree		
● Compulsory	4	Credits
● Prescribed Elective	18	Credits
● Elective Course	3	Credits
● Dissertation	48	Credits

COURSE STRUCTURE

Plan 1.1 for student with Master degree

First Year

First Semester

TME 701 Dissertation

Credits

6(0-12-24)

Total

6(0-12-24)

Second Semester

Credits

TME 701 Dissertation

9(0-18-36)

Total

9(0-18-36)

Second Year

First Semester

Credits

TME 701 Dissertation

9(0-18-36)

Total

9(0-18-36)

Second Semester

Credits

TME 701 Dissertation

9(0-18-36)

Total

9(0-18-36)

Third Year

First Semester

Credits

TME 701 Dissertation

9(0-18-36)

Total

9(0-18-36)

Second Semester

Credits

TME 701 Dissertation

6(0-12-24)

Total

6(0-12-24)

Plan 2.2 for student with Bachelor degree

First Year

First Semester

Credits

TME 601 Mathematics for Materials Processing

3(3-0-9)

Technology and Manufacturing Innovation

TME 602 Research Methodology

1(0-3-3)

TME xxx Elective Course 1

3(3-0-9)

TME xxx Elective Course 2

3(3-0-9)

Total

10(9-3-30)

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Second Semester	Credits
TME xxx Elective Course3	3(3-0-9)
TME xxx Elective Course4	3(3-0-9)
TME xxx Elective Course5	3(3-0-9)
TME xxx Elective Course6	3(3-0-9)
Total	12(12-0-36)
Second Year	
First Semester	Credits
TME 701 Dissertation	9(0-18-36)
TME XXX Elective Course	3(3-0-9)
Total	12(3-18-45)
Second Semester	Credits
TME 701 Dissertation9(0-18-36)	
Total	9(0-18-36)
Third Year	
First Semester	Credits
TME 701 Dissertation	9(0-18-36)
Total	9(0-18-36)
Second Semester	Credits
TME 701 Dissertation	9(0-18-36)
Total	9(0-18-36)
Forth Year	
First Semester	Credits
TME 701 Dissertation	6(0-12-24)
Total	6(0-12-24)
Second Semester	Credits
TME 701 Dissertation	6(0-12-24)
Total	6(0-12-24)