

# Doctor of Philosophy in Materials Science & Engineering

College of Engineering

MS Degree Holder = 36 units

## FIRST YEAR

1st Semester	12 Units	Grade	2nd Semester	12 Units	Grade
MSE 225 <sup>1</sup>	3		MSE 243 <sup>1</sup>	3	
MSE 231 <sup>1</sup>	3		MSE 245 <sup>1</sup>	3	
MSE 241 <sup>1</sup>	3		MSE 282 <sup>1</sup>	3	
MSE 251 <sup>1</sup>	3		MSE 285 <sup>1</sup>	3	

## SECOND YEAR

1st Semester	3 Units	Grade	2nd Semester	3 Units	Grade
Candidacy Examination			MSE 400	3	
MSE 400	3				

## THIRD YEAR

1st Semester	3 Units	Grade	2nd Semester	3 Units	Grade
MSE 400	3		MSE 400	3	

<sup>1</sup>Specialization Courses: MSE 243, MSE 243.1, MSE 245, MSE 245.1, MSE 253, MSE 255, MSE 265, MSE 266, MSE 267, MSE 268, MSE 271, MSE 271.1, MSE 271.2, MSE 275, MSE 276, MSE 281, MSE 282, MSE 283, MSE 283.1, MSE 285, MSE 286, MSE 2987, MSE 287.1, MSE 298

**College of Engineering**

**BS Degree Holder = 58 units**

FIRST YEAR					
1st Semester	12 Units	Grade	2nd Semester	12 Units	Grade
MSE Core Course <sup>1</sup>	3		MSE Core Course <sup>1</sup>	3	
MSE Core Course <sup>1</sup>	3		MSE Core Course <sup>1</sup>	3	
ES 201 <sup>2</sup>	3		MSE Core Course <sup>1</sup>	3	
MSE Core Course <sup>1</sup>	3		MSE Core Course <sup>1</sup>	3	

SECOND YEAR					
1st Semester	12 Units	Grade	2nd Semester	10 Units	Grade
MSE Core Course <sup>1</sup>	3		MSE Core Course <sup>1</sup>	3	
MSE Core Course <sup>1</sup>	3		MSE Core Course <sup>1</sup>	3	
MSE Core Course <sup>1</sup>	3		MSE Core Course <sup>1</sup>	3	
MSE Core Course <sup>1</sup>	3		MSE 296	1	

THIRD YEAR					
1st Semester	3 Units	Grade	2nd Semester	3 Units	Grade
Qualifying Examination			MSE 400	6	
Candidacy Examination					

FOURTH YEAR					
1st Semester	3 Units	Grade	2nd Semester	3 Units	Grade
MSE 400	3		MSE 400	3	

<sup>1</sup>Core Courses: \*MSE 201, MSE 225, MSE 231, MSE 233, MSE 241, MSE 251, MSE 211, MSE 212, MSE 213, MSE 214, MSE 215, MSE 216, MSE 217, MSE 218, MSE 219

Students who have taken courses equivalent to the core courses will be required to complete the minimum twenty-four (24) units by taking **specialization courses**.

\*Students with metallurgical engineering background must take a three (3) unit specialization course instead of MSE 201.

Students with geology or engineering background are required to take at least an additional three (3) units of Advanced Mathematics (ES 201, ES 202, ES 204 or equivalent).

<sup>2</sup>Applied Mathematics: ES 202, ES 204

**Specialization Courses:** MSE 243, MSE 243.1, MSE 245, MSE 245.1, MSE 253, MSE 255, MSE 265, MSE 266, MSE 267, MSE 268, MSE 271, MSE 271.1, MSE 271.2, MSE 275, MSE 276, MSE 281, MSE 282, MSE 283, MSE 283.1, MSE 285, MSE 286, MSE 2987, MSE 287.1, MSE 298