

**GRADUATE PROGRAM**  
**College of Science**  
**University of the Philippines Diliman**

**MASTER OF SCIENCE IN MATERIALS SCIENCE AND ENGINEERING**  
**(Thesis Option)**

Every student under the Thesis Option shall be required to complete the following twenty four (24) units of graduate core courses in MSE.

|   |                        |
|---|------------------------|
| MSE 201 – (Fundamentals of Materials Science & Engineering) | 3 units                |
| MSE 211-219 – (Combination of Laboratory Modules in MSE)    | 6 units                |
| MSE 225 – (X-Ray Crystallography and Spectrography)         | 3 units                |
| MSE 231 – (Thermodynamics of Materials)                     | 3 units                |
| MSE 233 – (Kinetics of Materials)                           | 3 units                |
| MSE 241 – (Physics of Solids)                               | 3 units                |
| MSE 251 – (Mechanical Properties of Solids)                 | <u>3 units</u>         |
| <b>TOTAL</b>  | <b><u>24 units</u></b> |

The laboratory Modules in MSE consist of the following:

|   |                        |
|---|------------------------|
| MSE 211 (Laboratory Module in Transmitted Light Microscopy)     | 1 unit                 |
| MSE 212 (Laboratory Module in Mineragraphy)                     | 1 unit                 |
| MSE 213 (Laboratory Module in Crystallography)                  | 1 unit                 |
| MSE 214 (Lab. Module in Vacuum Tech & Thin Film Deposition)     | 1 unit                 |
| MSE 215 (Lab. Module in Electronic & Magnetic Measurement)      | 1 unit                 |
| MSE 216 (Lab. Module in Ceramics processing & Characterization) | 2 units                |
| MSE 217 (Laboratory Module in Scanning Electron Microscopy)     | 1 unit                 |
| MSE 218 (Laboratory Module in Metallography)                    | 1 unit                 |
| MSE 219 (Laboratory Module in Thermal Analysis)                 | <u>1 unit</u>          |
|   | <b><u>10 units</u></b> |

**Graduate Seminar**

|                            |        |
|----------------------------|--------|
| MSE 296 – Graduate Seminar | 1 unit |
|----------------------------|--------|

**Graduate Thesis**

|         |                |
|---------|----------------|
| MSE 300 | <u>6 units</u> |
|---------|----------------|

**TOTAL MINIMUM UNITS REQUIRED     31 units**

\*Students who have taken courses equivalent to the core courses will be required to complete 24 units by taking specialization courses.

Deadline of submission of Application:

1<sup>st</sup> Semester – April 30

2<sup>nd</sup> Semester – September 30

Application fee – Php 500.00