

# PROGRAM STRUCTURE

**LEVEL** : Graduate  
**SCHOOL** : School of Science  
**PROGRAM** : 605110802 : Master of Science Program in Materials Innovation Plan A 2  
**PROGRAM YEAR** : 2560

## PHILOSOPHY

This programme aims at developing knowledge of materials innovation and skills in conducting relevant research, so that its graduates will possess solid foundations of material science and the ability to initiate applied existing research studies to creating concretely practical innovations.

## PURPOSE

1. Strong foundations and profound understanding of material science, creativity, and skills in conducting research to create new bodies of knowledge;
2. Inspiration to be modern entrepreneurs who can apply research outcomes to creating innovations that have both economic and social contributions.

### 1 Required Course MINIMUM CREDIT : 15

Course Code	COURSE	CREDIT
<a href="#"><u>1108761</u></a>	Research Methodology and Ethics	3 (3-0-6)
<a href="#"><u>1108762</u></a>	Development of Innovative Materials	2 (2-0-4)
<a href="#"><u>1108763</u></a>	Advanced Materials	3 (3-0-6)
<a href="#"><u>1108764</u></a>	Properties and Testing of Materials	3 (2-3-5)
<a href="#"><u>1108765</u></a>	Materials Characterization	4 (3-3-7)

### 2 Elective Course MINIMUM CREDIT : 9

Course Code	COURSE	CREDIT
<a href="#"><u>1108771</u></a>	Eco-materials	3 (3-0-6)
<a href="#"><u>1108772</u></a>	Trends in Materials Innovation	3 (3-0-6)
<a href="#"><u>1108773</u></a>	Nanomaterials	3 (3-0-6)
<a href="#"><u>1108774</u></a>	Materials for Energy Storage	3 (3-0-6)
<a href="#"><u>1108775</u></a>	Emerging Construction Materials	3 (3-0-6)
<a href="#"><u>1108776</u></a>	Biomedical Materials	3 (3-0-6)

3 Thesis MINIMUM CREDIT : 12

Course Code	COURSE	CREDIT
<u>1108900</u>	Thesis	12 (0-36-12)

4 Seminar Course MINIMUM CREDIT : -

Course Code	COURSE	CREDIT
<u>1108781</u>	Seminar in Materials Innovation 1	0 (0-3-1)
<u>1108782</u>	Seminar in Materials Innovation 2	0 (0-3-1)

**REMARKS**

P : Prerequisite Course

E1 : One-way Equivalent

E2 : Two-way Equivalent

รายวิชา 1006393 Principles of Translation 3(3-0-6) ในกรณีที่นักศึกษาไม่สามารถใช้ภาษาไทยได้ ให้เรียนรายวิชา 1006382 Directed Studies แทน

รายวิชา 1006397 Comparative Study of English and Thai 3(3-0-6) ในกรณีที่นักศึกษาไม่สามารถใช้ภาษาไทยได้ ให้เรียนรายวิชา 1006381 Selected Reading แทน