

MATERIALS SCIENCE AND NANO ENGINEERING

BACHELOR OF SCIENCE (MATERIALS SCIENCE & NANO ENGINEERING)

Course length *4 years*

THIS COURSE....

- > *provides you with the knowledge and skills in Materials Science and Nano Engineering through exceptional teaching research and industry partnerships.*
- > *leading industry-linked program*
- > *internship training in leading industries e.g. Western Digital (Thailand) Co., Ltd. and Siam Cement Group*

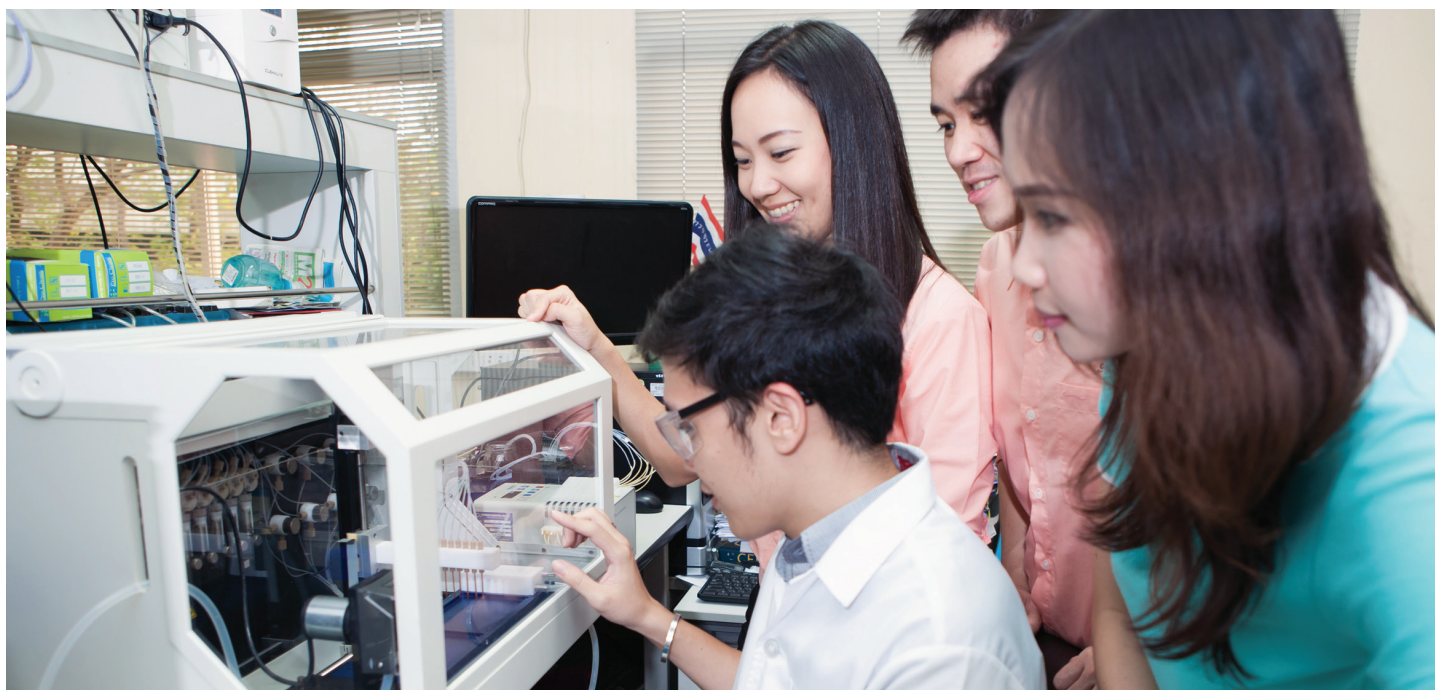
MATERIALS SCIENCE AND NANO ENGINEERING @MUSC (INTERNATIONAL PROGRAM)

The Bachelor of Materials Science and Nano Engineering is designed to prepare graduates for science-based industries with understanding of insightful theories and applications of frontier materials science and nano engineering together with innovation perspectives.

Three choice modules are

- **Functional and Electronic Materials**
- **Biomedical Materials**
- **Materials in Chemical Industries**

The program is an industrial-linked curriculum to support the relevant industrial needs. The strong collaborations have been well-established with renowned organizations such as National Nanotech Center (NANOTEC), National Metal and Materials Technology Center (MTEC), Western Digital (Thailand) Co., Ltd. and Siam Cement Group.



MUSC: a good start for your world-class education and research careers

STUDY PROGRAM

First year

Fundamental basic science including Chemistry, Physics, Biology and Mathematics together with Nanotechnology Concept and Engineering Drawing.

Second year

Basic Knowledge in Materials; e.g. Ceramics, Metallurgy, Materials for Biological and Medical Applications, Thermodynamics, Engineering Mechanics, Molecular Quantum Mechanics.

Third and fourth years

Materials Science and Engineering core subjects; e.g. Polymer, Solid State Physics, Semiconductor and Nanoelectronics, Industrial Processes, Marketing and Entrepreneurship, Internship, Senior Project, Seminar.

Selected courses in three choice modules; e.g. Magnetic and Electronic Materials, Thin Film Technology and Nanofabrication, Nanotechnology in Drug Delivery, Nanotechnology in Polymer Science.

ACADEMIC OPPORTUNITIES

The program offers an opportunity to extend your study in College of Management, Mahidol University for 1 year MBA program. The additional MBA degree will help student to be a specialist in both scientific research and organization management. The graduated students in both fields have a very high opportunity to work in a very high rank company or build up their own entrepreneurship.



CAREER OPPORTUNITIES

Your final year will include an internship in a leading company which enhances a chance for the future career. However students are free to choose a job in the technological companies worldwide.

EXTENDED STUDIES

- 1 Year MBA with College of Management, Mahidol University
- Master/ Ph.D. degree in NanoPhysics and Nano materials program, Universite du Maine. Le Mans, France
- Master/Ph.D. degree in Materials Science and Engineering program, Mahidol University

STUDY LOCATIONS

- Mahidol University, Salaya Campus, Nakhon Pathom, Thailand

STUDY FEES

Tuition fee and major fee per semesters are approximately 85,000 THB or 2,500 USD

