



# MATERIAL ENGINEERING

## International Program (Bachelor of Engineering)



### General Description

The 4-year Bachelor degree of Materials Engineering courses provides the fundamental of materials science and engineering whilst still giving the opportunity for specialization in the final year. Materials science deals with the structural analysis of materials, the discovery of new material substances and their application to various industries. The materials engineering field looks into properties of materials and selecting the material which suitable for production and engineering application. Beside, Materials Engineering provides the necessary knowledge, skills and understanding to pursue successful careers in both industrial and research environments.

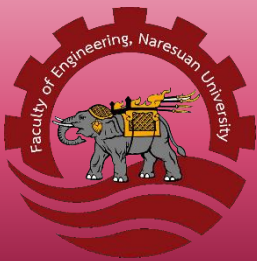
The keys objectives of our program in Materials Engineering are to prepare students to have the following attributes:

- The skills to work, develop, and design the processes of materials.
- The abilities to operate materials researches.
- The abilities to learn, transfer and improve materials technology.
- The abilities to integrate the knowledge of materials to increase product value for the purpose of sustainable development

### Career Opportunities

After successfully completing your studies, you will be able to work as a materials engineer as ceramics, polymer, production engineer and metallurgist, within innovation and new product development, quality management or something else entirely. Materials Engineering graduates are highly sought after by employers, and all of our graduates either find employment in industry or go on to higher level study at the end of their degree. Careers include research and development, management positions, and technical roles within both large multinationals and smaller businesses.





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### Curriculum Structure

Requirements	Credits
<b>1. General Education Courses</b>	<b>30</b>
<b>2. Specialized Courses:</b>	<b>108</b>
2.1 Core Courses	99
2.2 Major Elective Courses	6
2.3 Undergraduate Thesis	3
2.4 Non-Credit Courses	7
<b>3. Free Elective Courses</b>	<b>6</b>
<b>Total</b>	<b>144</b>

#### General Education Courses

Students has to take General Education Courses of 30 credits.

#### Core Courses

: choose 99 credits from the following courses

Physical Metallurgy, Polymeric Materials, Ceramics Materials, Mechanical Behavior of Materials, Thermodynamics of Materials, Materials Characterization Deterioration of Materials Electrical, Optical and Magnetic Properties of Materials, Materials Selection and Design, etc.

#### Major elective courses

: choose 6 credits from the following courses

Corrosion in Metals, Surface Engineering, Solidification and Casting, Ceramics Processing, Advanced Ceramics, Rubber Technology, Composite Materials, Nanomaterials, Special Problems in Materials Engineering, etc.

#### Non-Credit Courses

Students have to take 7 credits or not less than 270 hours from Training in Materials Engineering.

#### Free Elective Courses

Students can take Electives of 6 credits from any faculty in Naresuan University.

#### Degree Information

- Duration: 4 Years (8 Semesters)
- Tuition Fee: 16,000 Bath/Semester