



## CHIANG MAI UNIVERSITY

Department of Mechanical Engineering Faculty of Engineering Chiang Mai University



### International Partnerships:

The Department has collaborative agreements for student/staff exchange and research with a number of overseas institutions.

These currently include:

- Institut Francais de Mecanique (IFMA), France
- University of Montpellier, France
- Royal Melbourne Institute of Technology, Australia
- University of Bath, UK
- Mie University, Japan
- Kagawa University, Japan

### Department Credentials:

- High staff quality
  - 80% of lecturers educated to PhD level,
  - 75% of those at overseas, universities
  - 2 Professors, 9 Associate Professors,
  - 23 Assistant Professors, 13 Lectures
- ISO 9001:2001 Certified Quality Management System
- 10 Teaching laboratories
- 11 Research laboratories
- CAD-CAM training facilities and workshop
- Dedicated Faculties of Engineering Library
- World renowned Energy Engineering curriculum



# FACULTY OF ENGINEERING

Chiang Mai University, Thailand

## STUDY PLAN

### Bachelor of Engineering Program in Mechanical Engineering

The Engineering curriculum is designed to give students the knowledge, skills and character required of a professional engineer. It also gives special emphasis on business and communication skills, as well as experience of international and multi-cultural environments. This is achieved through co-operative education within the workplaces, overseas placements and a number of specially devised activities and courses.

#### Cost:

Tuition Fee: 70,000THB (~ 2,000 USD) per semester

#### Career Opportunities For Graduates:

Mechanical engineering graduates are in high demand by employers in all sections of industry such as Aerospace, Automotive, Medical, Energy industry and etc.

Their work ranges from research and development to design and manufacture, working all around the world.

#### Contact:

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CMUIC

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| Study Program: First Year   |                  |                  |
|---|------------------|------------------|
| First Semester  | Total 20 Credits |                  |
| 236161- CALCULUS FOR ENGINEERING 1                                      | 3                | 1                |
| 237165- PHYSICS FOR ENGINEERING AND AGRO-INDUSTRY STUDENTS 1            | 3                | 2                |
| 237165- PHYSICS LABORATORY FOR ENGINEERING AND AGRO-INDUSTRY STUDENTS 1 | 1                | 1                |
| 236162- ENGINEERING MATERIALS   | 3                | 1                |
| 236163- ENGINEERING DRAWING   | 3                | 2                |
| 236164- LANGUAGE AND COMMUNICATION HUMANITIES AND SOCIAL SCIENCES I     | 3                | 3                |
| 236164- LEARNING THROUGH ACTIVITIES                                     | 1                | 1                |
| Second Semester   |                  | Total 20 Credits |
| 236162- GENERAL CHEMISTRY FOR ENGINEERING STUDENTS                      | 3                | 1                |
| 236167- GENERAL CHEMISTRY LABORATORY FOR ENGINEERING STUDENTS           | 1                | 1                |
| 236169- CALCULUS FOR ENGINEERING 2                                      | 3                | 2                |
| 237166- PHYSICS FOR ENGINEERING AND AGRO-INDUSTRY STUDENTS 2            | 3                | 1                |
| 237166- PHYSICS LABORATORY FOR ENGINEERING AND AGRO-INDUSTRY STUDENTS 2 | 1                | 1                |
| 236167- ENGINEERING MECHANICS I   | 3                | 2                |
| 236167- LANGUAGE AND COMMUNICATION HUMANITIVES                          | 3                | 2                |

| Study Program: Second Year   |                  |                  |
|--|------------------|------------------|
| First Semester   | Total 15 Credits |                  |
| 236201- CALCULUS FOR ENGINEERING 3   | 3                | 1                |
| 232205- FUNDAMENTALS OF ELECTRICAL ENGINEERING FOR MECHANICAL ENGINEERS            | 3                | 3                |
| 232206- FUNDAMENTALS OF ELECTRICAL ENGINEERING LABORATORY FOR MECHANICAL ENGINEERS | 1                | 1                |
| 236205- ENGINEERING DYNAMICS 1   | 3                | 3                |
| 236215- MECHANICS OF SOLIDS 1  | 3                | 3                |
| 236231- ENGINEERING THERMODYNAMICS I   | 3                | 3                |
| 236231- LANGUAGE AND COMMUNICATION   | 3                | 3                |
| Second Semester  |                  | Total 20 Credits |
| 236206- MECHANICAL DRAWING   | 2                | 2                |
| 236216- MECHANICS OF SOLIDS 2  | 3                | 3                |
| 236222- MECHANICS OF MACHINERY 1   | 3                | 3                |
| 236222- ENGINEERING THERMODYNAMICS 2   | 3                | 3                |
| 236225- AUTOMOTIVE TECHNOLOGY  | 2                | 2                |
| 236221- COMPUTER PROGRAMMING FOR ENGINEERS   | 3                | 3                |
| 236221- LANGUAGE AND COMMUNICATION LEARNING THROUGH ACTIVITIES                     | 3                | 1                |

| Study Program: Third Year                                  |                  |                  |
|--|------------------|------------------|
| First Semester   | Total 15 Credits |                  |
| 236362- APPLIED DIFFERENTIAL EQUATION FOR ENGINEERS        | 3                | 3                |
| 254362- MECHANICAL ENGINEERING COMPUTATIONAL METHODS       | 4                | 4                |
| 236374- MATHEM DESIGN 1                                    | 3                | 3                |
| 236375- FLUID MECHANICS                                    | 3                | 3                |
| 236377- INSTRUMENTATION SCIENCE AND MATHEMATICS            | 3                | 3                |
| Second Semester  |                  | Total 20 Credits |
| 254374- HEAT TRANSFER                                      | 3                | 3                |
| 254374- MANUFACTURING PROCESSES FOR MECHANICAL ENGINEERING | 3                | 3                |
| 254371- MECHANICAL ENGINEERING LABORATORY 1                | 1                | 1                |
| 254371- SYSTEM ANALYSIS AND CONTROL                        | 3                | 3                |
| 254409- RESEARCH METHODOLOGY IN MECHANICAL ENGINEERING     | 1                | 1                |
| 254405- HUMANITIES AND SOCIAL SCIENCES                     | 3                | 3                |
| 254405- COMBUSTION   | 3                | 3                |
| 254461- POWER PLANT ENGINEERING                            | 3                | 3                |
| Summer Session   |                  | Total 3 Credits  |
| 254499- SPECIAL STUDY FOR COOPERATIVE EDUCATION            | 3                | 3                |

| Study Program: Fourth Year   |                 |                  |
|--|-----------------|------------------|
| First Semester   | Total 6 Credits |                  |
| 254886- CO-OPERATIVE EDUCATION   | 6               | 6                |
| Second Semester  |                 | Total 15 Credits |
| 254405- HUMANITIES AND SOCIAL SCIENCES ROYINOT AND MATHEMATICS LEARNING THROUGH ACTIVITIES | 3               | 1                |
| 254401- MECHANICAL VIBRATION   | 3               | 3                |
| 254461- REFRIGERATION  | 3               | 3                |
| 254461- FREE ELECTIVE  | 3               | 3                |

