

**Bachelor of Engineering Program 工程学士课程**  
**Department of Mechanical Engineering 机械工程系**  
**Revised curriculum 2013 修订课程 2013**

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<b>Name of a higher education institution</b> 高等教育机构名称	Bangkok Thonburi University 曼谷吞武里大学
<b>Campus/Faculty/Department</b> 校园/学院/部门	Faculty of Engineering 工程学部 Department of Mechanical Engineering 机械工程系

**Part 1 Name of degree and field of study**

**第 1 部分 学位名称和研究领域**

**1. Course code and name 课程代码和名称**

**1.1 Course code 科目编号**

25561131100918

**1.2 Course name 课程名**

中文: 机械工程学士学位课程

English language: Bachelor of Engineering Program in Mechanical Engineering

**2. Degree name and field of study 学位名称和研究领域**

中文: 全名 Engineering 工程学士学位 (机械  
工程)

缩写 B.Eng. (机械工业)

English: Full name : Bachelor of Engineering ( Mechanical Engineering )

Abbreviation: B . Eng . ( Mechanical Engineering )

**3. Major subject 主修科目**

do not have 没有

#### 4. Format of the course 课程形式

##### 4.1 Type 类型

It is a bachelor's degree level course. 这是学士学位课程。

- Academic 学术的
- Professional 专业的
- Operation 手术

#### 1. Structure of the course 课程结构

##### 1.1 Course 课程

<b>1.1.1 Total number of credits throughout the course</b> 整个课程的总学分	<b>138</b>	<b>Credits</b> 学分
<b>1.1.2 Course structure 课程结构</b>		
1. General education subjects 通识教育科目	<b>24</b>	<b>Credits</b> 学分
2. Specialized subjects 专业科目	<b>108</b>	<b>credits</b> 学分
2.1 Basic Mathematics and Science subject group 基础数理学科组	27	credits 学分
2.2 Basic engineering subject groups 基础工程学科组	26	credits 学分
2.3 Specialized vocational group 特殊职业组	55	credits 学分
2.3.1 Required professional groups 所需专业团体	42	credits 学分
2.3.2 Elective Vocational Group 选修职业组	6	credits 学分
2.3.3 Experience-enhancing subjects, 增强经验的科目	7	credits 学分
<b>3. Free elective courses</b>	<b>6</b>	<b>credit</b>

### 3. Free elective courses 。 免费选修课

6 credits 学分

Students can choose to study any subject in the bachelor's degree program as specified by the university and have a number of credits not less than 6 credits. Students can choose to study in all subjects offered at the bachelor's degree level at Bangkok Thonburi University.

学生可以选择学习学校规定的学士学位课程中的任意科目，且学分不少于6学分。学生可以选择学习曼谷吞武里大学学士学位级别的所有科目。

In the case that students choose to study subjects at higher education institutions both domestically and abroad at the Ministry of Higher Education, Science, Research and Innovation. Certification at the student's own expense.

如果学生选择在高等教育、科学、研究和创新部的国内外高等教育机构学习科目。认证费用由学生自费。

Or practice experience in an establishment of the student's choice, both domestically and abroad, with the student being responsible for the expenses incurred in the course.

或在学生选择的国内外机构中的实践经验，学生负责课程中产生的费用。

ME 403 Free experience in a workplace 免费工作场所体验 6 (270 hours 小时)

(Independent training in the workplace) (职场独立培训)

#### 1.1.4 Study plan 学习计划

##### Year 1 , Semester 1 第一学年第一学期

Course code 科目编号	Course name 课程名	Credit (Theory - Practice - Self-study) 信用 (理论-实践-自学)
GE 103	English for communication 沟通英语	3 (2 - 2 - 5)
EI 101	Calculus 1 微积分 <sub>1</sub>	3 (3 - 0 - 6)
EI 103	General Physics 1 普通物理 <sub>1</sub>	3 (3 - 0 - 6)
EI 104	Physics Lab 1 物理实验室 <sub>1</sub>	1 (0 - 2 - 1)
ME 101	Engineering drawing 工程制图	3 (2 - 2 - 5)
ME 105	Engineering materials 工程材料	3 (3 - 0 - 6)
ME 106	Production process 生产流程	3 (3 - 0 - 6)
Total 全部的		19 (16 - 6 - 35)

**Year 1, Semester 2 第一年第二学期**

<b>Course code</b> 科目编号	<b>Course name</b> 课程名	<b>Credit</b> (Theory - Practice - Self-study) 信用 (理论-实践-自学)
GE 104	Reading English for life 终生阅读英语	3 (2 - 2 - 5)
EI 102	Calculus 2 微积分 <sub>2</sub>	3 (3 - 0 - 6)
EI 105	General Physics 2 普通物理 <sub>2</sub>	3 (3 - 0 - 6)
EI 106	Physics Lab 2 物理实验室 <sub>2</sub>	1 (0 - 2 - 1)
EI 107	General Chemistry 普通化学	3 (3 - 0 - 6)
EI 108	Chemistry lab 化学实验室	1 (0 - 2 - 1)
ME 103	Computer programming for engineers 工程师的计算机编程	3 (2 - 2 - 5)
ME 104	Engineering Mechanics 1 工程力学 <sub>1</sub>	3 (3 - 0 - 6)
<b>Total 全部的</b>		<b>20 (16 - 8 - 36)</b>

**1st year, Summer semester 第一年, 夏季学期**

<b>Course code</b> 科目编号	<b>Course name</b> 课程名	<b>Credit</b> (Theory - Practice - Self-study) 信用 (理论-实践-自学)
GE 102	Thai language for careers 泰语职业	3 (2 - 2 - 5)
GE 105	Leadership and anti-corruption education 领导力和反腐败教育	3 (2 - 2 - 5)
<b>Total 全部的</b>		<b>6 (4 - 4 - 10)</b>

**Year 2, Semester 1 第二年, 第一学期**

<b>Course code 科目编号</b>	<b>Course name 课程名</b>	<b>Credit (Theory - Practice - Self-study) 信用 (理论-实践-自学)</b>
EI 201	Calculus 3 微积分3	3 (3 - 0 - 6)
EI 202	Linear Algebra for Engineers 工程师线性代数	3 (3 - 0 - 6)
ME 102	Basic engineering practice 基础工程实践	2 (0 - 4 - 2)
ME 201	Thermodynamics 热力学	3 (3 - 0 - 6)
ME 204	Engineering Mechanics 2 工程力学2	3 (3 - 0 - 6)
ME 205	Basics of electrical engineering and digital technology 电气工程和数字技术基础	3 (2 - 2 - 5)
<b>Total 全部的</b>		<b>17 (14 - 6 - 31)</b>

**Year 2, Semester 2 第二年第二学期**

<b>Course code 科目编号</b>	<b>Course name 课程名</b>	<b>Credit (Theory - Practice - Self-study) 信用 (理论-实践-自学)</b>
GE 112	Principles of Statistics 统计学原理	3 (2 - 2 - 5)
EI 203	Numerical Methods for Engineers 工程师数值方法	3 (3 - 0 - 6)
ME 202	Fluid Mechanics 流体力学	3 (3 - 0 - 6)
ME 203	Mechanics of Materials 材料力学	3 (3 - 0 - 6)
ME 206	Mechanical Engineering Lab 1 机械工程实验室1	1 (0 - 2 - 1)
ME 207	Computer-Aided Design for Mechanical Engineering 机械工程计算机辅助设计	3 (2 - 2 - 5)
<b>Total 全部的</b>		<b>16 (13 - 6 - 29)</b>

**Year 2, summer semester 二年级, 夏季学期**

<b>Course code 科目编号</b>	<b>Course name 课程名</b>	<b>Credit (Theory - Practice - Self-study) 信用 (理论-实践-自学)</b>
GE 106	Psychology, ethics, and life skills 心理学、伦理学和生活技能	3 (2 - 2 - 5)
GE 109	General law and human rights principles 一般法和人权原则	3 (2 - 2 - 5)
<b>Total全部的</b>		<b>6 (4 - 4 - 10)</b>

**Year 3, Semester 1 第三年, 第一学期**

<b>Course code 科目编号</b>	<b>Course name 课程名</b>	<b>Credit (Theory - Practice - Self-study) 信用 (理论-实践-自学)</b>
ME 301	Automatic Control 自动控制	3 (3 - 0 - 6)
ME 302	Heat Transfer 传播热量	3 (3 - 0 - 6)
ME 305	Mechanical Mechanics 机械力学	3 (3 - 0 - 6)
ME 307	Mechanical Engineering Lab 2 机械工程实验室2	1 (0 - 2 - 1)
ME 308	Mechanical Design 机械设计	3 (3 - 0 - 6)
xx xxx	Elective Professional Group 选修专业组	3 (x - x - x)
<b>Total全部的</b>		<b>16 (x - x - x)</b>

**Year 3, Semester 2** 第三年第二学期

<b>Course code</b> 科目编号	<b>Course name</b> 课程名	<b>Credit</b> (Theory - Practice - Self-study) 信用 (理论-实践-自学)
ME 303	Cooling and Air Conditioning 冷却和空调	3 (3 - 0 - 6)
ME 30 6	Mechanical Vibration 机械振动	3 (3 - 0 - 6)
ME 3 0 9	Computer-Aided Engineering for Mechanical Engineering 机械工程计算机辅助工程	3 (2 - 2 - 5)
ME 311	CAPS TONE CHANG DESIGN PROJECT 1 CAPS TONE CHANG 设计项目 1	1 (0 - 3 - 2)
xx xxx	Elective Professional Group 选修专业组	3(x - x - x)
xx xxx	Free Elective Courses 免费选修课	3(x - x - x)
<b>Total</b> 全部的		<b>16 (x - x - x)</b>

**Year 3, Summer Semester** 第三年，夏季学期

<b>Course code</b> 科目编号	<b>Course name</b> 课程名	<b>Credit</b> (Theory - Practice - Self-study) 信用 (理论-实践-自学)
GE 111	Computers and Information in the Digital Age 数字时代的计算机和信息	3 (2 - 2 - 5)
<b>Total</b> 全部的		<b>3 (2 - 2 - 5)</b>

**Year 4, Semester 1** 第四年， 第一学期

<b>Course code</b> 科目编号	<b>Course name</b> 课程名	<b>Credit</b> (Theory - Practice - Self-study) 信用 (理论-实践-自学)
ME 304	Power Plant Engineering 电厂工程	3 ( 3 - 0 - 6 )
ME 310	Mechanical Engineering Professional Compilation 机械工程专业编译	3(2-3-6)
ME 312	CAPS TONE CHENG DESIGN PROJECT 2 CAPS TONE CHENG 设计项目 2	3 ( 0 - 9 - 6 )
ME 401	Prepare for Cooperative Education for Mechanical Engineering 机械工程合作办学准备	1 ( 0 - 2 - 1 )
xx xxx	Free Elective Courses 免费选修课	3 ( x - x - x )
<b>Total</b> 全部的		<b>13 ( x - x - x )</b>

**Year 4, Semester 2** 第四年第二学期

<b>Course code</b> 科目编号	<b>Course name</b> 课程名	<b>Credit</b> (Theory - Practice - Self-study) 信用 (理论-实践-自学)
ME 402	Cooperative Education for Mechanical Engineering 机械工程合作办学	6 ( 600 hours)
<b>Total</b> 全部的		<b>6 ( 600 hours)</b>