Study Plan for the Bachelor of Engineering Program

Manufacturing Engineering Program, Revised Curriculum B.E. 2564 (2021) (For Students with Enrollment Codes 64)

1th Year

Semester 1

Code	Subject Name	Credit (s)	Note
200-111	Into Engineering World	2((2)-0-4)	
200-112	Fundamental Mathematics for Engineer	3((3)-0-6)	
200-113	Fundamental Physics for Engineer	3((3)-0-6)	
200-114	Fundamental Chemistry for Engineer	2((2)-0-4)	
200-115	BASIC ELECTRICAL ENGINEERING	3((2)-2-5)	
200-116	Basic Engineering Programming	3((2)-2-5)	
200-117	Basic Engineering Drawing	2((2)-0-4)	
890-0xx	GenEd 6: Language and Communication	2((2)-0-4)	
	Total	20(18-4-38)	

English courses must be taken according to the university's announcement.

Semester 2

Code	Subject Name	Credit (s)	Note
001-102	The King’s Philosophy and Sustainable Development**	2((2)-0-4)	
200-103	Modern Life for Green Love	2((2)-0-4)	

221-101	Engineering Mechnics I	3((3)-0-6)	
226-001	Benefit of Mankind**	1((1)-0-2)	
226-101	Introduction to Manufacturing Engineering	1((1)-0-2)	
226-102	Mathematics I	3((3)-0-6)	
226-103	Thermodynamic and Heat Transfer	3((3)-0-6)	
226-104	Fundamental Chemistry Laboratory	1(0-3-0)	
237-111	Engineering Materials	2((2)-0-4)	
xxx-xxx	GenEd 2 : Citizenship and Peaceful Life	3((3)-0-6)	
	Total	21(20-3-40)	

English courses must be taken according to the university's announcement.

** Or take the course 003-001: Volunteer Leadership and Sustainable Community Development

2nd Year

Semester 1

Code	Subject Name	Credit (s)	Note
226-201	Statistics and Probability	3((3)-0-6)	
226-202	Mathematics II	3((3)-0-6)	
226-203	Fundamentals of Machinery	3((2)-3-4)	
226-211	Manufacturing Processes Module	5((3)-4-8)	
226-221	Law, Work System, and Safety in Manufacturing	2((2)-0-4)	
226-241	Engineering Economy and Decision Making	2((2)-0-4)	

895-001	Good Citizens	2((2)-0-4)	
xxx-xxx	GenEd 7 : Aesthetics and Sports	1((1)-0-2)	
	Total	21(18-7-38)	

Semester 2

Code	Subject Name	Credit (s)	Note
234-566	Idea to Entrepreneurship	1((1)-0-2)	Recommended to take
226-204	Computer Aided Product Design and Drawing Module	5((4)-3-8)	
226-212	Forming Technology	3((2)-3-4)	
226-213	Tool Engineering	3((3)-0-6)	
226-231	Quality Control and Management for Manufacturing	3((3)-0-6)	
xxx-xxx	GenEd 5 : Systematic Thinking	2((2)-0-4)	
332-101	Fundamental Physics	3((3)-0-6)	
333-101	Fundamental Physics Laboratory	1(0-3-0)	
	Total	21(18-9-36)	

3rd Year

Semester 1

Code	Subject Name	Credit (s)	Note
200-107	Internet of Thing for Digital life	2((2)-0-4)	

226-311	Machining Engineering and Machinery Technology Module	5((4)-3-8)	
226-321	Manufacturing Automation and Material Handling for Digital Factory Module	5((4)-3-8)	
226-351	Integrated Productivity Management Module	5((4)-3-8)	
226-316	Chemistry I	3((3)-0-6)	
226-367	Numerical Methods	2((2)-0-4)	
	Total	22(19-9-38)	

Semester 2

Code	Subject Name	Credit (s)	Note
226-312	Machine Design and Engineering Analysis	3((3)-0-6)	
226-361	Skills for Professional Manufacturing Engineer	1(0-3-0)	
22x-3xx	Manufacturing Engineer Elective	3((3)-0-6)	
388-100	Health for All	1((1)-0-2)	
890-0xx	GenEd 6: Language and Communication	1((1)-0-2)	
xxx-xxx	GenEd 7 : Aesthetics and Sports	2((2)-0-4)	
xxx-xxx	GenEd 5 : Systematic Thinking	2((2)-0-4)	
22x-3xx	Manufacturing Engineer Elective	3((3)-0-6)	
324-102	General Chemistry II	3((3)-0-6)	
	Total	19(18-3-36)	

Semester 3 - Summer

Code	Subject Name	Credit (s)	Note
226-362	Practicum	At Least 320 Hours	Mandatory for all students

4th Year for Project Option

Semester 1

Code	Subject Name	Credit (s)	Note
226-461	Manufacturing Engineering Project I	3(0-15-0)	
226-465	Case Study and Industrial Plant Visit	3((2)-3-4)	
	Total	6(2-18-4)	

4th Year for Co-Operation Option

Semester 1

Code	Subject Name	Credit (s)	Note
226-463	Cooperative Education I	6(0-40-0)	
	Total	6(0-40-0)	

4th Year

Semester 2

Code	Subject Name	Credit (s)	Note
226-462	Manufacturing Engineering Project II	6(0-40-0)	
	Total	6(0-40-0)	

Prerequisite course: 200-112 Basic Mathematics for Engineers

The prerequisite course is 200-114 Fundamentals of Chemistry for Engineers.

The prerequisite course is 200-114 Fundamentals of Chemistry for Engineers.

Choose courses from the curriculum structure

มีรายวิชาบังคับเรียนก่อนคือ วิชา 200-112 คณิตศาสตร์พื้นฐานสำหรับวิศวกร

มีรายวิชาบังคับเรียนก่อนคือ วิชา 221-101 กลศาสตร์วิศวกรรม 1

Choose courses from the curriculum structure

Choose courses from the curriculum structure

Prerequisite courses are: Course 200-117: Basic Engineering Drawing
Course 226-102: Mathematics 1"

Co-requisite course is:Course 226-204: Computer-Aided Product Design and Drafting"

Prerequisite course is: Course 226-201: Statistics and Probability"

Choose courses from the curriculum structure

Prerequisite courses are:

Course 200-115: Electrical Fundamentals for Engineering
Course 226-202: Mathematics 2

Prerequisite courses are:

Choose courses from the curriculum structure

Choose courses from the curriculum structure

Choose courses from the curriculum structure

Choose courses from the curriculum structure

Prerequisite course is:

Course 226-361: Professional Manufacturing Engineering Skills

Prerequisite course is:

Course 226-361: Professional Manufacturing Engineering Skills

Prerequisite course is:

Course 226-461: Manufacturing Engineering Project 1

Prerequisite course: 226-361 Professional Manufacturing Engineer Skills"