## Curriculum for Bachelor of Engineering

# (Electrical-Mechanical Manufacturing Engineering - International Program)

### First Year

First Semester ————————————————————————————————————				
		Credits (Lect - Lab)		
01208111	Engineering Drawing	3 (2-3)		
01417167	Engineering Mathematics I	4 (4-0)		
01420111	General Physics I	3 (3-0)		
01420113	Laboratory in Physics I	1 (0-3)		
01999021	Thai Language for Communication	3 (3-0)		
01xxxxxx	Foreign Language	<u>3 ( - )</u>		
		<u>17 ( - )</u>		
Second Semester —				
		Credits (Lect - Lab)		
01204111	Computers and Programming	Credits (Lect - Lab)		
01204111 01403114	Computers and Programming  Laboratory in Fundamental of General Chemistry			
		3 (2-3)		
01403114	Laboratory in Fundamental of General Chemistry	3 (2-3) 1 (0-3)		
01403114 01403117	Laboratory in Fundamental of General Chemistry  Fundamental of General Chemistry	3 (2-3) 1 (0-3) 3 (3-0)		
01403114 01403117 01417168	Laboratory in Fundamental of General Chemistry  Fundamental of General Chemistry  Engineering Mathematics II	3 (2-3) 1 (0-3) 3 (3-0) 3 (3-0)		
01403114 01403117 01417168 01420112	Laboratory in Fundamental of General Chemistry Fundamental of General Chemistry Engineering Mathematics II General Physics II	3 (2-3) 1 (0-3) 3 (3-0) 3 (3-0) 3 (3-0)		
01403114 01403117 01417168 01420112 01420114	Laboratory in Fundamental of General Chemistry  Fundamental of General Chemistry  Engineering Mathematics II  General Physics II  Laboratory in Physic II	3 (2-3) 1 (0-3) 3 (3-0) 3 (3-0) 1 (0-3)		
01403114 01403117 01417168 01420112 01420114 01175xxx	Laboratory in Fundamental of General Chemistry  Fundamental of General Chemistry  Engineering Mathematics II  General Physics II  Laboratory in Physic II  Physical Education Activities	3 (2-3) 1 (0-3) 3 (3-0) 3 (3-0) 1 (0-3) 1 (0-2)		

## (Electrical-Mechanical Manufacturing Engineering - International Program)

### Second Year

First Semester —				
		Credits (Lect - Lab)		
01205211	Electric Circuit Analysis I	3 (3-0)		
01208221	Engineering Mechanics I	3 (3-0)		
01208241	Thermodynamics I	3 (3-0)		
01208281	Workshop Practice	1 (0-3)		
01213211	Materials Science for Engineers	3 (3-0)		
01417267	Engineering Mathematics III	3 (3-0)		
01175xxx	Physical Education Activities	1 (0-2)		
01xxxxxx	Foreign Language	3 ( - )		
	Social Sciences	<u>3 ( - )</u>		
		<u>23 ( - )</u>		
Second S	Semester			
Second S	Serilestei ————————————————————————————————————			
		Credits (Lect - Lab)		
01204112	Information Technology for Engineers	1 (0-2)		
01205213	Electric Circuit Laboratory	1 (0-3)		
01205231	Electronic Circuits and Systems I	3 (3-0)		
01205251	Electromechanical Energy Conversion I	3 (3-0)		
01208222	Engineering Mechanics II	3 (3-0)		
01208261	Mechanics of Solids	3 (3-0)		
01211231	Conventional and Computer-Controlled Machines	3 (3-0)		
	Science and Mathematics	<u>3 ( - )</u>		

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## Curriculum for Bachelor of Engineering

## (Electrical-Mechanical Manufacturing Engineering - International Program)

### Third Year

First Semester —				
		Credits (Lect - Lab)		
01205305	Digital Circuits and Microcontrollers	3 (3-0)		
01205306	Digital Circuits and Microcontrollers Laboratory	1 (0-3)		
01205331	Electronic Circuits and Systems II	3 (3-0)		
01205332	Electronic Laboratory	1 (0-3)		
01205352	Electromechanical Energy Conversion Laboratory I	1 (1-3)		
01206311	Manufacturing Processes I	3 (3-0)		
01208371	Automatic Control	3 (3-0)		
01211311	Introduction to CAD/CAM	<u>3 (2-3)</u>		
		<u>18 (15-12)</u>		
Second Semester —				
		Crodits (Loct - Lah)		

		Credits (Lect - Lab)
01208321	Mechanics of Machinery	3 (3-0)
01208361	Machine Design I	3 (2-3)
01211322	Instrument and Precision Measurement	3 (2-3)
01211323	Instrument and Control Systems Laboratory	1 (0-3)
01211331	CNC Machine Technology I	3 (2-3)
01211361	Mold and Die	<u>3 (2-3)</u>
		<u>16 (11-15 )</u>

## Curriculum for Bachelor of Engineering

## (Electrical-Mechanical Manufacturing Engineering - International Program)

### Fourth Year

First Sem	ester ————————————————————————————————————		
		Credits (Lect - Lab)	
01211431	Machine Part Design	3 (3-0)	
01211442	Principles of Operation and Production	3 (3-0)	
01211495	Electrical-Mechanical Manufacturing Engineering Project Preparation	1 (0-3)	
01211497	Seminar	1	
	Free Electives	<u>6 ( - )</u>	
		<u>14 ( - )</u>	
Second Semester —			
		Credits (Lect - Lab)	
01208242	Fluid Mechanics	3 (3-0)	
01211499	Electrical-Mechanical Manufacturing Engineering Project	2 (0-6)	
	Technical Electives	<u>12 ( - )</u>	
		<u>17 ( - )</u>	