

## Study Plan

### 1. For students who do not participate in cooperative education

Year 1 Semester 1	Credits (Lecture – Lab – Self Study)
01208111 Engineering Drawing	3(2–3–6)
01417167 Engineering Mathematics I	3(3–0–6)
01420111 General Physics I	3(3–0–6)
01420113 Laboratory in Physics I	1(0–3–2)
01999111 Knowledge of the Land	2(2–0–4)
01355xxx English	3( – – )
Thai language	3( – – )
General education (entrepreneurship)	<u>3( – – )</u>
<b>Total</b>	<b><u>21( – – )</u></b>

Year 1 Semester 2	Credits (Lecture – Lab – Self Study)
01204111 Computers and Programming	3(2–3–6)
01403114 Laboratory in Fundamentals of General Chemistry	1(0–3–2)
01403117 Fundamentals of General Chemistry	3(3–0–6)
01417168 Engineering Mathematics II	3(3–0–6)
01420112 General Physics II	3(3–0–6)
01420114 Laboratory in Physics II	1(0–3–2)
General education (wellness)	3( – – )
General education (Aesthetics)	3( – – )
Information/Computer	<u>1( – – )</u>
<b>Total</b>	<b><u>21( – – )</u></b>

Year 2 Semester 1		Credits (Lecture – Lab – Self Study)
01205201	Introduction to Electrical Engineering	3(3-0-6)
01208211	Engineering Design and Modeling	3(2-3-6)
01208221	Engineering Mechanics I	3(3-0-6)
01213211	Materials Science for Engineers	3(3-0-6)
01417267	Engineering Mathematics III	3(3-0-6)
01355xxx	English	3( - - )
	General education (Thai Citizen and Global Citizen)	<u>3( - - )</u>
<b>Total</b>		<b><u>21( - - )</u></b>

Year 2 Semester 2		Credits (Lecture – Lab – Self Study)
01205202	Electrical Engineering Laboratory I	1(0-3-2)
01208222	Engineering Mechanics II	3(3-0-6)
01208223	Mechanics of Materials	3(3-0-6)
01208241	Thermodynamics I	3(3-0-6)
01208242	Fluid Mechanics	3(3-0-6)
01208271	Computer Methods for Mechanical Engineering	3(2-3-6)
01208281	Workshop Practice	1(0-3-2)
01175xxx	Physical Education Activity	1(0-2-1)
	General education (wellness)	<u>2( - - )</u>
<b>Total</b>		<b><u>20( - - )</u></b>

Year 3 Semester 1	Credits (Lecture – Lab – Self Study)
01206311 Manufacturing Process I	3(3-0-6)
01208321 Mechanics of Machinery	3(3-0-6)
01208322 Mechanical Vibrations	3(3-0-6)
01208341 Thermodynamics II	3(3-0-6)
01208351 Heat Transfer	3(3-0-6)
01355xxx English	<u>3( - - )</u>
<b>Total</b>	<b><u>18( - - )</u></b>

Year 3 Semester 2	Credits (Lecture – Lab – Self Study)
01208311 Machine Design	3(3-0-6)
01208331 Automotive Technology	3(3-0-6)
01208342 Power Plant Engineering	3(3-0-6)
01208352 Refrigeration and Air Conditioning	3(3-0-6)
01208371 Automatic Control	3(3-0-6)
01208381 Mechanical Engineering Laboratory I	1(0-3-2)
01208382 Mechanical Workshop Practice	<u>1(0-3-2)</u>
<b>Total</b>	<b><u>17( - - )</u></b>

Year 4 Semester 1		Credits (Lecture – Lab – Self Study)
01208399	Internship	1
01208481	Mechanical Engineering Laboratory II	1(0–3–2)
01208495	Mechanical Engineering Project Preparation	1(0–3–2)
	Engineering Elective	9( – – )
	Free Elective	<u>3( – – )</u>
	<b>Total</b>	<b><u>15( – – )</u></b>

Year 4 Semester 2		Credits (Lecture – Lab – Self Study)
01208499	Mechanical Engineering Project	2(0–6–3)
01208497	Seminar	1
	Engineering Elective	9( – – )
	Free Elective	<u>3( – – )</u>
	<b>Total</b>	<b><u>15( – – )</u></b>

## 2. For students who participate in co-operative education

Year 1 Semester 1	Credits (Lecture – Lab – Self Study)
01208111 Engineering Drawing	3(2-3-6)
01417167 Engineering Mathematics I	3(3-0-6)
01420111 General Physics I	3(3-0-6)
01420113 Laboratory in Physics I	1(0-3-2)
01999111 Knowledge of the Land	2(2-0-4)
01355xxx English	3( - - )
Thai language	3( - - )
General education (entrepreneurship)	<u>3( - - )</u>
รวม	<u>21( - - )</u>

Year 1 Semester 2	Credits (Lecture – Lab – Self Study)
01204111 Computers and Programming	3(2-3-6)
01403114 Laboratory in Fundamentals of General Chemistry	1(0-3-2)
01403117 Fundamentals of General Chemistry	3(3-0-6)
01417168 Engineering Mathematics II	3(3-0-6)
01420112 General Physics II	3(3-0-6)
01420114 Laboratory in Physics II	1(0-3-2)
General education (wellness)	3( - - )
General education (Aesthetics)	3( - - )
Information/Computer	<u>1( - - )</u>
<b>Total</b>	<u><b>21( - - )</b></u>

Year 2 Semester 1		Credits (Lecture – Lab – Self Study)
01205201	Introduction to Electrical Engineering	3(3-0-6)
01208211	Engineering Design and Modeling	3(2-3-6)
01208221	Engineering Mechanics I	3(3-0-6)
01213211	Materials Science for Engineers	3(3-0-6)
01417267	Engineering Mathematics III	3(3-0-6)
01355xxx	English	3( - - )
	General education (Thai Citizen and Global Citizen)	<u>3( - - )</u>
<b>Total</b>		<b><u>21( - - )</u></b>

Year 2 Semester 2		Credits (Lecture – Lab – Self Study)
01205202	Electrical Engineering Laboratory I	1(0-3-2)
01208222	Engineering Mechanics II	3(3-0-6)
01208223	Mechanics of Materials	3(3-0-6)
01208241	Thermodynamics I	3(3-0-6)
01208242	Fluid Mechanics	3(3-0-6)
01208271	Computer Methods for Mechanical Engineering	3(2-3-6)
01208281	Workshop Practice	1(0-3-2)
01175xxx	Physical Education Activity	1(0-2-1)
	General education (wellness)	<u>2( - - )</u>
<b>Total</b>		<b><u>20( - - )</u></b>

Year 3 Semester 1		Credits (Lecture – Lab – Self Study)
01206311	Manufacturing Process I	3(3-0-6)
01208321	Mechanics of Machinery	3(3-0-6)
01208322	Mechanical Vibrations	3(3-0-6)
01208341	Thermodynamics II	3(3-0-6)
01208351	Heat Transfer	3(3-0-6)
01355xxx	English	3( - - )
	Free Elective	<u>3( - - )</u>
	<b>Total</b>	<b><u>21( - - )</u></b>

Year 3 Semester 2		Credits (Lecture – Lab – Self Study)
01208311	Machine Design	3(3-0-6)
01208331	Automotive Technology	3(3-0-6)
01208342	Power Plant Engineering	3(3-0-6)
01208352	Refrigeration and Air Conditioning	3(3-0-6)
01208371	Automatic Control	3(3-0-6)
01208381	Mechanical Engineering Laboratory I	1(0-3-2)
01208382	Mechanical Workshop Practice	1(0-3-2)
01208495	Mechanical Engineering Project Preparation	1(0-3-2)
01208497	Seminar	1
	<b>Total</b>	<b><u>19( - - )</u></b>

Year 4 Semester 1		Credits (Lecture – Lab – Self Study)
01208399	Internship	1
01208481	Mechanical Engineering Laboratory II	1(0–3–2)
01208499	Mechanical Engineering Project	2(0–6–3)
	Engineering Elective	12( – – )
	Free Elective	<u>3( – – )</u>
	<b>Total</b>	<b><u>19( – – )</u></b>

Year 4 Semester 2		Credits (Lecture – Lab – Self Study)
01208490	Co-operative Education	<u>6</u>
	<b>Total</b>	<b><u>6</u></b>