

Example of Study Plan
for the students applied in Co-operative Education
Bachelor of Engineering Program in Digital Manufacturing System Engineering

Year 1 Semester 1	Credits (Lecture-Lab-Self Study)
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)
03603103 Basic Digital Circuit Design	3(3-0-6)
03609161 Digital Manufacturing System Engineering Exploration	1(0-3-2)
01355xxx English	3(- -)
General Education: Entrepreneurship	<u>3(- -)</u>
Total	<u>19(- -)</u>

Year 1 Semester 2	Credits (Lecture-Lab-Self Study)
01417168 Engineering Mathematics II	3(3-0-6)
03601101 Introduction to Industrial Electronics Engineering	3(3-0-6)
03601102 Introduction to Industrial Electrical Engineering	3(3-0-6)
03603101 Introduction to Computer Programming	3(2-3-6)
03609111 Basic Digital Modelling and Applications	3(2-3-6)
Information/Computer	1(- -)
General Education: Wellness	<u>2(- -)</u>
Total	<u>18(- -)</u>

Year 2 Semester 1		Credits (Lecture-Lab-Self Study)
03601206	Introduction to Industrial Electronics Engineering Laboratory	1(0-3-2)
03601207	Introduction to Industrial Electrical Engineering Laboratory	1(0-3-2)
03602201	Introduction to Materials and Manufacturing Processes	3(3-0-6)
03602221	Applied Probability and Statistics for Engineers	3(3-0-6)
03609231	Industrial Data Communication and Internet of Things	3(3-0-6)
03609271	Fundamentals of Computation for Digital Manufacturing System Engineering	3(3-0-6)
01175xxx	Physical Education Activity	1(0-2-1)
01355xxx	English	<u>3(- -)</u>
Total		<u>18(- -)</u>

Year 2 Semester 2		Credits (Lecture-Lab-Self Study)
03601208	Automation System in Manufacturing	3(3-0-6)
03603102	Basic Computer Architecture and Embedded System	3(3-0-6)
03609221	Production and Project Management	3(3-0-6)
03609223	Digital Work Analysis and Design	3(3-0-6)
03609299	Digital Manufacturing System Engineering Project I	1(0-3-2)
	General Education: Aesthetics	3(- -)
	Free Elective	<u>3(- -)</u>
Total		<u>19(- -)</u>

Year 3 Semester 1	Credits (Lecture-Lab-Self Study)
03601304 Automation System in Manufacturing Laboratory	1(0-3-2)
03607331 Machine Vision and Applications in Automation System	3(3-0-6)
03609324 Preventive and Predictive Maintenance	3(3-0-6)
03609332 Cyber Physical System and Cyber Security	3(3-0-6)
03609341 Digital Technology Applied in Manufacturing	3(2-2-5)
03609351 Database Design and Data Mining	3(3-0-6)
01355xxx English	<u>3(- -)</u>
Total	<u>19(- -)</u>

Year 3 Semester 2	Credits (Lecture-Lab-Self Study)
03607332 Artificial Intelligence for Robot and Machinery	3(3-0-6)
03609322 Virtual Factory	3(2-2-5)
03609344 Production Control System	3(3-0-6)
03609352 Industrial Data Analysis and Visualization	3(3-0-6)
03609353 Industrial Measurement and Quality Management	3(2-3-6)
03609399 Digital Manufacturing System Engineering Project II	2(0-6-3)
General Education: Thai Citizen and Global Citizen	<u>3(- -)</u>
Total	<u>20(- -)</u>

Year 4 Semester 1		Credits (Lecture-Lab-Self Study)
03602401	Financial and Economic Analysis	3(3-0-6)
03609426	Industrial System Analysis and Design	3(3-0-6)
	Area of Concentration: Approved Electives	6(- -)
	General Education: Entrepreneurship	3(- -)
	Thai Language	3(- -)
	Free Elective	<u>3(- -)</u>
	Total	<u>21(- -)</u>

Year 4 Semester 2		Credits (Lecture-Lab-Self Study)
03600490	Co-operative Education	<u>6</u>
	Total	<u>6</u>