Example of Study Plan

for the students <u>not</u> 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	3(- -)
	Total	**18(- -)**

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	3(- -)
	Total	**19(- -)**

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(- -)
	Total	**18(- -)**

Year 4 Semester 2   **Credits (Lecture-Lab-Self Study)**

	Area of Concentration: Approved Electives	6(- -)
	Free Elective	3(- -)
	Total	**9(- -)**