Study Plan

1.For student who do not participate in cooperative education

Year 1 Semester 1		Credits (Lecture – Lab – Self Study)
01204111	Computers and Programming	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)
	English	3(- -)
	General education	
	(Language and Communication)	3(- -)
	Total	18(- -)

Year 1 Semester 2		Credits (Lecture – Lab – Self Study)
01208112	Mechanical Engineering Drawing	3(2-3-6)
01211151	Statics and Strength of Materials	3(3-0-6)
01403114	Laboratory in Fundamental of General Chemistry	1(0-3-2)
01403117	Fundamental of General Chemistry	3(3-0-6)
01417168	Engineering Mathematics II	3(3-0-6)
01175xxx	Physical Education Activities	1(0-2-1)
	General education (Entrepreneurship)	3(- -)
	Total	17(- -)

Year 2 Semester 1		Credits (Lecture – Lab – Self Study)
01205201	Introduction to Electrical Engineering	3(3-0-6)
01208271	Mathematical Applications in Mechanical Engineering	3(2-3-6)
01211211	Design Engineering and Design Technology	3(2-3-6)
01211222	Mechatronics Engineering	3(2-3-6)
01213201	Materials and Manufacturing Processes	3(3-0-6)
	English	3(- -)
	Total	18(- -)

Year 2 Semester 2		Credits (Lecture – Lab – Self Study)
01205202	Electrical Engineering Laboratory I	1(0-3-2)
01208281	Workshop Practice	1(0-3-2)
01211221	Hydraulics and Pneumatics Systems	3(2-3-6)
01211232	Production Systems Management	3(3-0-6)
01211261	Fundamentals of Thermodynamics and Fluid Mechanics	3(3-0-6)
01211271	Industrial Artificial Intelligence and IoT	3(2-3-6)
	General education (wellness)	3(- -)
	Total	17(- -)

Year 3 Semester 1		Credits (Lecture – Lab – Self Study)
01205301	Digital Circuits and Microcontrollers	3(3-0-6)
01211323	Industrial Automation Control System	3(2-3-6)
01211325	Vibration Analysis and Condition Based Maintenance	3(2-3-6)
01211334	Robotics Engineering and Information System	3(2-3-6)
01211371	Industrial Dynamics System and Control	3(2-3-6)
01211373	Machine Learning and Programming for Industry	3(2-3-6)
	English	3(- -)
	Total	21(- -)

Year 3 Semester 2		Credits (Lecture – Lab – Self Study)
01205302	Digital Circuits and Microcontrollers Laboratory	1(0-3-2)
01208381	Mechanical Engineering Laboratory I	1(0-3-2)
01211313	Automatic Machine Design	3(3-0-6)
01211315	Manufacturing Facility Design	3(3-0-6)
01211324	Robotics Integration and Automation System	3(2-3-6)
01234397	Seminar	1
	Engineer Elective	6(- -)
	Total	18(- -)

Year 4 Semester 1		Credits (Lecture – Lab – Self Study)
01234495	Digital Manufacturing and Robotics Integration Engineering Projects Preparation	1(0-3-2)
	General education(wellness)	3(- -)
	Engineer Elective	3(- -)
	Free Elective	3(- -)
	Total	10(- -)

Year 4 Semester 2		Credits (Lecture – Lab – Self Study)
01234499	Digital Manufacturing and Robotics Integration Engineering Project	2(0-6-3)
	General education (Information/computer)	3(- -)
	General education (Aesthetics)	3(- -)
	Free Elective	3(- -)
	Total	11(- -)

2. For student who participate in co-operative education

Year 1 Semester 1		Credits (Lecture – Lab – Self Study)
01204111	Computers and Programming	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)
	English	3(- -)
	General education	
	(Language and Communication)	3(- -)
	Total	18(- -)

Year 1 Semester 2		Credits (Lecture – Lab – Self Study)
01208112	Mechanical Engineering Drawing	3(2-3-6)
01211151	Statics and Strength of Materials	3(3-0-6)
01403114	Laboratory in Fundamental of General Chemistry	1(0-3-2)
01403117	Fundamental of General Chemistry	3(3-0-6)
01417168	Engineering Mathematics II	3(3-0-6)
01175xxx	Physical Education Activities	1(0-2-1)
	General education (Entrepreneurship)	3(- -)
	Total	17(- -)

Year 2 Semester 1   Credits (Lecture – Lab – Self Study)

Code	Course	Credits
01205201	Introduction to Electrical Engineering	3(3-0-6)
01208271	Mathematical Applications in Mechanical Engineering	3(2-3-6)
01211211	Design Engineering and Design Technology	3(2-3-6)
01211222	Mechatronics Engineering	3(2-3-6)
01213201	Materials and Manufacturing Processes	3(3-0-6)
	English	3(- -)
	Total	18(- -)

Year 2 Semester 2   Credits (Lecture – Lab – Self Study)

Code	Course	Credits
01205202	Electrical Engineering Laboratory I	1(0-3-2)
01208281	Workshop Practice	1(0-3-2)
01211221	Hydraulics and Pneumatics Systems	3(2-3-6)
01211232	Production Systems Management	3(3-0-6)
01211261	Fundamentals of Thermodynamics and Fluid Mechanics	3(3-0-6)
01211271	Industrial Artificial Intelligence and IoT	3(2-3-6)
	General education (wellness)	3(- -)
	Total	17(- -)

Year 3 Semester 1   Credits (Lecture – Lab – Self Study)

Code	Course	Credits
01205301	Digital Circuits and Microcontrollers	3(3-0-6)
01211323	Industrial Automation Control System	3(2-3-6)
01211325	Vibration Analysis and Condition Based Maintenance	3(2-3-6)
01211334	Robotics Engineering and Information System	3(2-3-6)
01211371	Industrial Dynamics System and Control	3(2-3-6)
01211373	Machine Learning and Programming for Industry	3(2-3-6)
	English	3(- -)
	Total	21(- -)

Year 3 Semester 2

Credits (Lecture – Lab – Self Study)

01205302	Digital Circuits and Microcontrollers Laboratory	1(0-3-2)
01208381	Mechanical Engineering Laboratory I	1(0-3-2)
01211313	Automatic Machine Design	3(3-0-6)
01211315	Manufacturing Facility Design	3(3-0-6)
01211324	Robotics Integration and Automation System	3(2-3-6)
01234397	Seminar	1
01234495	Digital Manufacturing and Robotics Integration Engineering Projects Preparation	1(0-3-2)
	General education (Aesthetics)	3(- -)
	Free Elective	3(- -)
	Total	19(- -)

Year 4 Semester 1

Credits (Lecture – Lab – Self Study)

01234499	Digital Manufacturing and Robotics Integration Engineering Project	2(0-6-3)
	General education (Information/computer)	3(- -)
	General education (wellness)	3(- -)
	Free Elective	3(- -)
	Total	11(- -)

Year 4 Semester 2

Credits (Lecture – Lab – Self Study)

01234490	Co-operative Education	9
	Total	9