

## Undergraduate Course Placement Major (Mechanical Engineering)

Year	First Trimester	Cr	Second Trimester	Cr	Third Trimester	Cr
FRESHMAN	SCIO2 1111 Fundamental Chemistry I	4	SCIO3 1002 Calculus II	4	SCIO3 1005 Calculus III	4
	SCIO2 1112 Fundamental Chemistry Laboratory I	1	SCIO5 1001 Physics I	4	SCIO5 1002 Physics II	4
	SCIO3 1001 Calculus I	4	SCIO5 1191 Physics Laboratory I	1	SCIO5 1192 Physics Laboratory II	1
	IST20 1001 Digital Literacy	2	IST20 1003 Life Skills	3	IST20 1004 Citizenship and Global Citizens	3
	IST20 1002 Use of Application Programs for Learning	1	IST30 1102 English for Communication II	3	ENG31 1000 Engineering Materials I	2
	IST30 1101 English for Communication I	3	ENG85 1020 Computer Programming I	1	General Education Elective (1)	2
	ENG85 1010 Engineering Graphics I	2				
	<b>รวม</b>	<b>17</b>	<b>รวม</b>	<b>16</b>	<b>รวม</b>	<b>16</b>
SOPHOMORE	SCIO3 1003 Probability and Statistics	3	SCIO3 2303 Mathematical Methods for Differential Equations	4	SCIO3 2002 Numerical Methods for Computer	4
	IST20 2001 Man, Society and Environment	3	IST20 2002 Man, Economy and Development	3	IST30 1103 English for Academic Purposes	3
	ENG33 6004 Introduction to Manufacturing Processes	2	ENG85 2050 Engineering Dynamics	3	ENG85 2100 Fluid Mechanics I	3
	ENG83 1001 Engineering Materials II	2				
	ENG85 2010 Introduction to Mechanical and Aeronautical Engineering Profession	1	ENG85 2060 Mechanical Drawing	2	ENG85 2110 Mechanics of Materials I	3
	ENG85 2020 Thermodynamics I	3	ENG85 2070 Fundamentals of Electrical and Electronics Circuitry	3	ENG85 2120 Mechanics of Machinery	3
	ENG85 2030 Engineering Statics	3	ENG85 2080 Manufacturing Processes Laboratory	1	ENG85 2130 Internet of Things for Engineering Application	2
ENG85 2040 Measurement and Instrumentation	2	ENG85 2090 Safety Engineering	2			
	<b>รวม</b>	<b>19</b>	<b>รวม</b>	<b>18</b>	<b>รวม</b>	<b>18</b>
JUNIOR	ENG85 3010 Energy Management and Economics	2	IST30 1104 English for Specific Purposes	3	IST30 1105 English for Careers	3
	ENG85 3020 Introduction to Artificial Intelligence	2	ENG85 3060 Refrigeration and Air Conditioning	3	ENG85 3058 Building System Design for Mechanical Engineer	3
	ENG85 3030 Industrial Robots	2	ENG85 3070 Fundamental of Computer Aided Engineering	2	ENG85 3068 Power Plant Engineering	3
	ENG85 3040 Heat Transfer	3	ENG85 3080 Thermal System Design	3	ENG85 3078 Industrial Automation Engineering	3
	ENG85 3050 Mechanical Vibration	3	ENG85 3410 Mechanical and Aeronautical Engineering Laboratory II	1	General Education Elective (2)	2
	ENG85 3400 Mechanical and Aeronautical Engineering Laboratory I	1	ENG85 3038 Jig and Fixture Design	3	Technical Elective (1)	3
	ENG85 3018 Fundamental skill of Mechanical Engineering	1	ENG85 3048 Automatic Control Systems	4		
ENG85 3028 Machine Design	3					
	<b>รวม</b>	<b>17</b>	<b>รวม</b>	<b>19</b>	<b>รวม</b>	<b>17</b>
SENIOR	ENG85 4007 Pre-cooperative Education	1	ENG85 4017 Cooperative Education I	8	Free Elective (1)	4
	ENG85 4508 Mechanical Engineering Capstone Project	4			Free Elective (2)	4
	General Education Elective (3)	2				
	General Education Elective (4)	2				
	Technical Elective (2)	3				
Technical Elective (3)	3					
	<b>รวม</b>	<b>15</b>	<b>รวม</b>	<b>8</b>	<b>รวม</b>	<b>8</b>

Grand Total 188 Credits

## Undergraduate Course Placement Major (Aeronautical Engineering)

Year	First Trimester	Cr	Second Trimester	Cr	Third Trimester	Cr
FRESHMAN	SCIO2 1111 Fundamental Chemistry I	4	SCIO3 1002 Calculus II	4	SCIO3 1005 Calculus III	4
	SCIO2 1112 Fundamental Chemistry Laboratory I	1	SCIO5 1001 Physics I	4	SCIO5 1002 Physics II	4
	SCIO3 1001 Calculus I	4	SCIO5 1191 Physics Laboratory I	1	SCIO5 1192 Physics Laboratory II	1
	IST20 1001 Digital Literacy	2	IST20 1003 Life Skills	3	IST20 1004 Citizenship and Global Citizens	3
	IST20 1002 Use of Application Programs for Learning	1	IST30 1102 English for Communication II	3	ENG31 1000 Engineering Materials I	2
	IST30 1101 English for Communication I	3	ENG85 1020 Computer Programming I	1	General Education Elective (1)	2
	ENG85 1010 Engineering Graphics I	2				
	<b>รวม</b>	<b>17</b>	<b>รวม</b>	<b>16</b>	<b>รวม</b>	<b>16</b>
SOPHOMORE	SCIO3 1003 Probability and Statistics	3	SCIO3 2303 Mathematical Methods for Differential Equations	4	SCIO3 2002 Numerical Methods for Computer	4
	IST20 2001 Man, Society and Environment	3	IST20 2002 Man, Economy and Development	3	IST30 1103 English for Academic Purposes	3
	ENG33 6004 Introduction to Manufacturing Processes	2	ENG85 2050 Engineering Dynamics	3	ENG85 2100 Fluid Mechanics I	3
	ENG83 1001 Engineering Materials II	2	ENG85 2060 Mechanical Drawing	2	ENG85 2110 Mechanics of Materials I	3
	ENG85 2010 Introduction to Mechanical and Aeronautical Engineering Profession	1	ENG85 2070 Fundamentals of Electrical and Electronics Circuitry	3	ENG85 2120 Mechanics of Machinery	3
	ENG85 2020 Thermodynamics I	3	ENG85 2080 Manufacturing Processes Laboratory	1	ENG85 2130 Internet of Things for Engineering Application	2
	ENG85 2030 Engineering Statics	3	ENG85 2090 Safety Engineering	2		
	ENG85 2040 Measurement and Instrumentation	2				
	<b>รวม</b>	<b>19</b>	<b>รวม</b>	<b>18</b>	<b>รวม</b>	<b>18</b>
JUNIOR	ENG85 3010 Energy Management and Economics	2	IST30 1104 English for Specific Purposes	3	IST30 1105 English for Careers	3
	ENG85 3020 Introduction to Artificial Intelligence	2	ENG85 3060 Refrigeration and Air Conditioning	3	ENG85 3051 Aircraft Automatic Control	4
	ENG85 3030 Industrial Robots	2	ENG85 3070 Fundamental of Computer Aided Engineering	2	ENG85 3061 Aircraft Design	3
	ENG85 3040 Heat Transfer	3	ENG85 3080 Thermal System Design	3	ENG85 3071 Aircraft Power Plant	3
	ENG85 3050 Mechanical Vibration	3	ENG85 3410 Mechanical and Aeronautical Engineering Laboratory II	1	General Education Elective (2)	2
	ENG85 3400 Mechanical and Aeronautical Engineering Laboratory I	1	ENG85 3031 Aircraft Structures	3	Technical Elective (1)	3
	ENG85 3011 Fundamental Skill of Aeronautical Engineering	1	ENG85 3041 Flight Mechanics	3		
	ENG85 3021 Aerodynamics	3				
<b>รวม</b>	<b>17</b>	<b>รวม</b>	<b>18</b>	<b>รวม</b>	<b>18</b>	
SENIOR	ENG85 4003 Pre-cooperative Education	1	ENG85 4013 Cooperative Education I	8	Free Elective (1)	4
	ENG85 4501 Aeronautical Engineering Capstone Project	4			Free Elective (2)	4
	General Education Elective (3)	2				
	General Education Elective (4)	2				
	Technical Elective (2)	3				
	Technical Elective (3)	3				
<b>รวม</b>	<b>15</b>	<b>รวม</b>	<b>8</b>	<b>รวม</b>	<b>8</b>	

Grand Total 188 Credits

## Undergraduate Course Placement Major – Minor (Mechanical Engineering - Entrepreneurship)

Year	First Trimester	Cr	Second Trimester	Cr	Third Trimester	Cr
FRESHMAN	SCIO2 1111 Fundamental Chemistry I	4	SCIO3 1002 Calculus II	4	SCIO3 1005 Calculus III	4
	SCIO2 1112 Fundamental Chemistry Laboratory I	1	SCIO5 1001 Physics I	4	SCIO5 1002 Physics II	4
	SCIO3 1001 Calculus I	4	SCIO5 1191 Physics Laboratory I	1	SCIO5 1192 Physics Laboratory II	1
	IST20 1001 Digital Literacy	2	IST20 1003 Life Skills	3	IST20 1004 Citizenship and Global Citizens	3
	IST20 1002 Use of Application Programs for Learning	1	IST30 1102 English for Communication II	3	ENG31 1000 Engineering Materials I	2
	IST30 1101 English for Communication I	3	ENG85 1020 Computer Programming I	1	General Education Elective (1)	2
	ENG85 1010 Engineering Graphics I	2				
	<b>รวม</b>	<b>17</b>	<b>รวม</b>	<b>16</b>	<b>รวม</b>	<b>16</b>
SOPHOMORE	SCIO3 1003 Probability and Statistics	3	SCIO3 2303 Mathematical Methods for Differential Equations	4	SCIO3 2002 Numerical Methods for Computer	4
	IST20 2001 Man, Society and Environment	3	IST20 2002 Man, Economy and Development	3	IST30 1103 English for Academic Purposes	3
	IST50 2401 Entrepreneurship and New Venture Creation	3	IST50 2402 Go-to-Market Strategies for Innovative Product and Service	2	ENG85 2100 Fluid Mechanics I	3
	ENG33 6004 Introduction to Manufacturing Processes	2	ENG85 2050 Engineering Dynamics	3	ENG85 2110 Mechanics of Materials I	3
	ENG83 1001 Engineering Materials II	2	ENG85 2060 Mechanical Drawing	2	ENG85 2120 Mechanics of Machinery	3
	ENG85 2010 Introduction to Mechanical and Aeronautical Engineering Profession	1	ENG85 2070 Fundamentals of Electrical and Electronics Circuitry	3	ENG85 2130 Internet of Things for Engineering Application	2
	ENG85 2020 Thermodynamics I	3	ENG85 2080 Manufacturing Processes Laboratory		General Education Elective (2)	
	ENG85 2030 Engineering Statics	3	ENG85 2090 Safety Engineering	1		2
	ENG85 2040 Measurement and Instrumentation	2		2		
	<b>รวม</b>	<b>22</b>	<b>รวม</b>	<b>20</b>	<b>รวม</b>	<b>20</b>
JUNIOR	IST50 2403 Business Plan and Financing	3	IST30 1104 English for Specific Purposes	3	IST30 1105 English for Careers	3
	ENG85 3010 Energy Management and Economics	2	ENG85 3060 Refrigeration and Air Conditioning	3	ENG85 3058 Building System Design For Mechanical Engineer	3
	ENG85 3020 Introduction to Artificial Intelligence	2	ENG85 3070 Fundamental of Computer Aided Engineering	2	ENG85 3068 Power Plant Engineering	3
	ENG85 3030 Industrial Robots	2	ENG85 3080 Thermal System Design	3	ENG85 3078 Industrial Automation Engineering	3
	ENG85 3040 Heat Transfer	3	ENG85 3410 Mechanical and Aeronautical Engineering Laboratory II	1	Technical Elective (1)	3
	ENG85 3050 Mechanical Vibration	3	ENG85 3038 Jig and Fixture Design	3	Entrepreneur Elective (2)	2
	ENG85 3400 Mechanical and Aeronautical Engineering Laboratory I	1	ENG85 3048 Automatic Control Systems	4	Free Elective (1)	4
	ENG85 3018 Fundamental skill of Mechanical Engineering	1	Entrepreneur Elective (1)	2		
	ENG85 3028 Machine Design	3				
	<b>รวม</b>	<b>20</b>	<b>รวม</b>	<b>21</b>	<b>รวม</b>	<b>21</b>
SENIOR	IST50 3412 Pre-Enterprise Cooperative Education or Pre-Enterprise Incubation	1	ENG85 4017 Cooperative Education I	8	IST50 4413 Enterprise Cooperative Education or	8
	ENG85 4007 Pre-Cooperative Education I	1			IST50 4414 Enterprise Incubation	
	ENG85 4508 Mechanical Engineering Capstone Project	4				
	General Education Elective (3)	2				
	General Education Elective (4)	2				
	Technical Elective (2)	3				
	Technical Elective (3)	3				
Free Elective (2)	4					
	<b>รวม</b>	<b>20</b>	<b>รวม</b>	<b>8</b>	<b>รวม</b>	<b>8</b>

Grand Total 209 Credits

## Undergraduate Course Placement Major – Minor (Aeronautical Engineering - Entrepreneurship)

Year	First Trimester		Cr	Second Trimester		Cr	Third Trimester		Cr
FRESHMAN	SCIO2 1111	Fundamental Chemistry I	4	SCIO3 1002	Calculus II	4	SCIO3 1005	Calculus III	4
	SCIO2 1112	Fundamental Chemistry Laboratory I	1	SCIO5 1001	Physics I	4	SCIO5 1002	Physics II	4
	SCIO3 1001	Calculus I	4	SCIO5 1191	Physics Laboratory I	1	SCIO5 1192	Physics Laboratory II	1
	IST20 1001	Digital Literacy	2	IST20 1003	Life Skills	3	IST20 1004	Citizenship and Global Citizens	3
	IST20 1002	Use of Application Programs for Learning	1	IST30 1102	English for Communication II	3	ENG31 1000	Engineering Materials I	2
	IST30 1101	English for Communication I	3	ENG85 1020	Computer Programming I	1	General Education Elective (1)		2
	ENG85 1010	Engineering Graphics I	2				General Education Elective (2)		2
	<b>รวม</b>	<b>17</b>		<b>รวม</b>	<b>16</b>		<b>รวม</b>	<b>18</b>	
SOPHOMORE	SCIO3 1003	Probability and Statistics	3	SCIO3 2303	Mathematical Methods for Differential Equations	4	SCIO3 2002	Numerical Methods for Computer	4
	IST20 2001	Man, Society and Environment	3	IST20 2002	Man, Economy and Development	3	IST30 1103	English for Academic Purposes	3
	IST50 2401	Entrepreneurship and New Venture Creation	3	IST50 2402	Go-to-Market Strategies For Innovative Product and Service	2	ENG85 2100	Fluid Mechanics I	3
	ENG33 6004	Introduction to Manufacturing Processes	2	ENG85 2050	Engineering Dynamics	3	ENG85 2110	Mechanics of Materials I	3
	ENG83 1001	Engineering Materials II	2						
	ENG85 2010	Introduction to Mechanical and Aeronautical Engineering Profession	1	ENG85 2060	Mechanical Drawing	2	ENG85 2120	Mechanics of Machinery	3
	ENG85 2020	Thermodynamics I	3	ENG85 2070	Fundamentals of Electrical and Electronics Circuitry	3	ENG85 2130	Internet of Things for Engineering Application	2
	ENG85 2030	Engineering Statics	3	ENG85 2080	Manufacturing Processes Laboratory	1	General Education Elective (3)		2
	ENG85 2040	Measurement and Instrumentation	2	ENG85 2090	Safety Engineering	2			
	<b>รวม</b>	<b>22</b>		<b>รวม</b>	<b>20</b>		<b>รวม</b>	<b>20</b>	
JUNIOR	IST50 2403	Business Plan and Financing	3	IST30 1104	English for Specific Purposes	3	IST30 1105	English for Careers	3
	ENG85 3010	Energy Management and Economics	2	ENG85 3060	Refrigeration and Air Conditioning	3	ENG85 3051	Aircraft Automatic Control	4
	ENG85 3020	Introduction to Artificial Intelligence	2	ENG85 3070	Fundamental of Computer Aided Engineering	2	ENG85 3061	Aircraft Design	3
	ENG85 3030	Industrial Robots	2	ENG85 3080	Thermal System Design	3	ENG85 3071	Aircraft Power Plant	3
	ENG85 3040	Heat Transfer	3	ENG85 3410	Mechanical and Aeronautical Engineering Laboratory II	1	Technical Elective (1)		3
	ENG85 3050	Mechanical Vibration	3	ENG85 3031	Aircraft Structures	3	Free Elective (1)		4
	ENG85 3400	Mechanical and Aeronautical Engineering Laboratory I	1	ENG85 3041	Flight Mechanics	3			
	ENG85 3011	Fundamental Skill of Aeronautical Engineering	1	Entrepreneur Elective (1)		2			
	ENG85 3021	Aerodynamics	3						
	<b>รวม</b>	<b>17</b>		<b>รวม</b>	<b>20</b>		<b>รวม</b>	<b>20</b>	
SENIOR	IST50 3412	Pre-Enterprise Cooperative Education or Pre-Enterprise Incubation	1	ENG85 4013	Cooperative Education I	8	IST50 4413	Enterprise Cooperative Education or	8
	ENG85 4003	Pre-cooperative Education	4				IST50 4414	Enterprise Incubation	
	ENG85 4501	Aeronautical Engineering Capstone Project	1						
	General Education Elective (4)		2						
	Technical Elective (2)		3						
	Technical Elective (3)		3						
	Entrepreneur Elective (2)		2						
	Free Elective (2)		4						
	<b>รวม</b>	<b>20</b>		<b>รวม</b>	<b>8</b>		<b>รวม</b>	<b>8</b>	

Grand Total 209 Credits