

Bachelor of Engineering Program in Mechanical Engineering (Revised B.E.2024)

Year 1 – Semester 1

Course	Title	Credit
ENGL0001	English in the Digital World	3
MATH0101	Elementary Calculus	3
CHEM0120	Chemistry	3
CHEM0190	Chemistry Laboratory	1
PHYS0110	Physics I	3
PHYS0190	Physics Laboratory	1
	<u>Total</u>	<u>14</u>

Year 1 – Semester 2

Course	Title	Credit
MATH0102	Multivariable Calculus	3
PHYS0111	Physics II	3
ENCC0007	Scientific Laboratory	1
ENCC0008	Engineering Innovation and Design	3
MECH0110	Engineering Mechanics	3
MECH0105	Fundamental Engineering Drafting	3
	<u>Total</u>	<u>16</u>

Year 2 – Semester 1

Course	Title	Credit
EECC0232	Fundamental Electrical Engineering	3
MATH0201	Linear Algebra and Differential Equation	3
MATS0310	Engineering Materials	3
MECH0111	Engineering Dynamics	3
MECH0220	Thermodynamics	3
SCIE0103	Earth and Space	3
STAT0115	Statistics for Problem Solving	3
	<u>Total</u>	<u>21</u>

Year 2 – Semester 2

Course	Title	Credit
ENCC0201	Computer Programming	3
ENGL0002	English for STEM Education	3
MATH0202	Numerical Methods	3
MECH0210	Fluid Mechanics	3
MECH0230	Mechanics of Materials	3
MECH0360	Mechanical Vibration	3
MECH0362	Heat Transfer	3
	<u>Total</u>	<u>21</u>

Year 3 – Semester 1

Course	Title	Credit
ENGL0003	English for Engineering and Technology	3
MECH0340	Machine Part Design	3
MECH0355	Pump and Piping Systems	3
MECH0365	Design of Thermal Systems	3
MECH0391	Applied Mechanics Laboratory	1
MECH0392	Thermofluids Laboratory	1
MECH0405	Introduction to Mechatronics, Robotics and AI	3
XXXXxxxx	Free Elective	3
	<u>Total</u>	<u>20</u>

Year 3 – Semester 2

Course	Title	Credit
MECH0305	Safety, Health, Environment and Manufacturing Technology	3
MECH0345	Design of Pressure Vessels	3
MECH0363	Power Plant Engineering	3
MECH0414	Introduction to Multibody Dynamics	3
MECH0443	Computer Aided Mechanical Design	3
MECH0463	Refrigeration and Air-Conditioning	3
XXXXxxxx	Free Elective	3
	<u>Total</u>	<u>21</u>

Year 3 – Summer Semester

Course	Title	Credit
INDT0390	Industrial Internship	0(240 hrs.)
	<u>Total</u>	<u>0</u>

Year 4 – Semester 1

Course	Title	Credit
MECH0444	Computer Aided Mechanical Engineering	3
MECH0490	Mechanical Engineering Project I	1
MECH0494	Mechanical Engineering Capstone Design	2
MECHxxxx	Mechanical Engineering Elective	3
MECHxxxx	Mechanical Engineering Elective	3
	<u>Total</u>	<u>12</u>

Year 4 – Semester 2

Course	Title	Credit
ENCC0006	Ethics for Engineers	1
ENGL0004	Business English in the Workplace	3
MECH0402	Entrepreneurship for Engineers	3
MECH0491	Mechanical Engineering Project II	2
	<u>Total</u>	<u>9</u>