

DIPLOMA IN AUTOMATION AND ROBOTICS

(COURSE STRUCTURE - C26)

Sub_Code	Sub_Name	Credits	Sub_Code	Sub_Name	Credits	Sub_Code	Sub_Name	Credits	Sub_Code	Sub_Name	Credits		Sub Name
HU-101	English	2	ME -301	Mechanics of Solids	3	ME -401	Design of Machine Elements	3	ME-501	Techno Entrepreneurship & Startups	3	601	Industrial Training (20 credits)
SC-102	Engineering Mathematics	3	ME -302	Thermodynamics	3	AR-402	Introduction to AI and ML for Robotics	3	AR-502	Robot Kinematics & Dynamics	3		
SC-103	Engineering Physics	3	ME-303	Additive and advanced Manufacturing	3	AR-403	Fluid Power Systems	3	AR-503	Robot Operation & Programming	3		
SC-104	Engineering Chemistry	3	AR-304	Fundamentals of Robotics	3	ME-404	Product Design & Development / CAM	3	ME-504(A)/(B) SC-504(C)	(A) Industrial Engineering & EC (B) Green Energy sources (C) Advanced Engineering Mathematics	3		
CS-115	Fundamentals of Python programming & IoT	3	EE-315	Basic Electrical & Electronics Engineering	3	AR-405	Basics of Automation & Control	3	AR-505 ME-505	(A) Robot perception and Sensor Fusion (B) Systems Engineering	3		
ME-106	Manufacturing Technology	3	ME-306	Machine Drawing/Solid modeling	2	AR-406	Fluid Power Lab	2	AR-506	Robot Operation & Programming lab	2		
ME-107	Engineering Drawing with CAD	2	AR-307	Sensors & Actuators LAB	2	AR-407	Automation and Controls Lab	2	AR-507	Instrumentation and Signal Analysis Lab	2		
ME -108	Manufacturing Technology Lab	2	ME -308	Additive and Advanced Manufacturing lab	2	ME-408	PDD & CAM Lab	2	AR-508	Mobile Robotics Lab	2		
SC-109	Science Lab	2	EE-319	Basic Electrical & Electronics Engineering Lab	2	AR-409	Computer Vision Lab	2	ME-509	Innovation & Design Thinking	2		
CS-120	Fundamentals of Python programming & IoT Lab	2	HU-310	Communication skills & Life Skills Lab	2	AR-410	Edge Computing and Communication protocols Lab	2	AR-510	Project Work	2		