Campus:	Main campus
Faculty:	Faculty of Mechanical Engienering
Department:	Dept. of Mechatronics and Control Engineering
OBE coordinator	

Courses and SDGs mapping

Semester	Sr #	Code	Course	SDG 1 No Poverty	SDG 2 Zero Hunger	SDG 3 Good Health and Well-being	SDG 4 Quality Education	SDG 5 Gender Equality	SDG 6 Clean Water and Sanitation	SDG 7 Affordable and Clean Energy	SDG 8 Decent Work and Economic Growth	SDG 9 Industry, Innovation and Infrastructure	SDG 10 Reduced Inequality	SDG 11 Sustainable Cities and Communities	SDG 12 Responsible Consumption and Production	SDG 13 Climate Action	SDG 14 Life Below Water	SDG 15 Life on Land	SDG 16 Peace & Justice Strong Institutions	SDG 17 Partnerships to achieve SDGs
1st Semester	1	MA-113	Calculus and Analytic Geometry									Yes								
	2	MCT-111 & MCT-111L	Engineering Graphics and Drawing				Yes					Yes								
	3	MCT-121 & MCT-121L	Electric Circuits									Yes								
	4	IS-101/HU-101	Islamic and Pak Studies –I/ Ethics and Pak Studies - I					Yes					Yes						Yes	
	5	PHY-118 & PHY-118L	Applied Physics									Yes				Yes				
	6	ME-100L	Workshop Practice	Yes								Yes								
	7	QT-101	Translation of The Holy Quran-I				Yes												Yes	
2nd Semester	8	MCT-142L	Computer Programming-I								Yes	Yes		Yes						
	9	HU-111L	Communication Skills					Yes					Yes						Yes	
	10	MA-225	Differential Equations and Transforms				Yes					Yes								
	11	MCT-113 & MCT-113L	Manufacturing Processes									Yes		Yes	Yes					
	12	MCT-117 & MCT-117L	Engineering Mechanics				Yes					Yes								
	13	MCT-122 & MCT-122L	Electronic Devices and Circuits									Yes								
	14	MCT-100	Community Service	Yes	Yes	Yes	Yes		Yes		Yes		Yes	Yes		Yes			Yes	
3rd Semester	15	MCT-223 & MCT-223L	Electrical Machinery									Yes		Yes						
	16	MCT-217 & MCT-217L	Mechanisms								Yes	Yes		Yes	Yes					
	17	MCT-243L	Computer Programming II									Yes								
	18	MA-129	Vector and Complex Analysis				Yes					Yes								
	19	MCT-241 & MCT-241L	Digital Logic Design									Yes								
	20	MCT-206	Entrepreneurship-I								Yes	Yes	Yes							Yes
	21	QT-201	Translation of The Holy Quran-II				Yes												Yes	
4th Semester	22	MCT-216 & MCT-216L	Machine Design and Elements								Yes	Yes		Yes	Yes					
	23	MCT-244 & MCT-244L	Signal Processing				Yes					Yes								
	24	MCT-236 & MCT-236L	Embedded Systems-I									Yes				Yes				
	25	IS-201/HU-201	Islamic and Pak Studies –II/ Ethics and Pak Studies - II					Yes					Yes						Yes	
	26	HU-003	International Language				Yes												Yes	Yes
	27	MA-234	Linear Algebra				Yes					Yes								

Semester	#	Code	Subject	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
5th Semester	28	MCT-361 & MCT-361L	Hydraulics and Pneumatics							Yes	Yes			Yes				
	29	MCT-306	Entrepreneurship-II							Yes	Yes	Yes						Yes
	30	MA-240 & MA-240L	Numerical Analysis								Yes							
	31	MCT-336 & MCT-336L	Embedded Systems-II								Yes			Yes				
	32	MCT-331 & MCT-331L	Modeling and Simulation			Yes					Yes							
	33	MCT-305	Probability and Statistics								Yes							
	34	QT-301	Translation of The Holy Quran-III			Yes											Yes	
6th Semester	35	MCT-xxx	Elective I															
	36	MCT-333 & MCT-333L	Control Systems – I								Yes							
	37	MCT-335 & MCT-335L	Instrumentation and Measurements			Yes					Yes							
	38	MCT-352 & MCT-352L	Robotics								Yes							
	39	MCT-341 & MCT-341L	Data Sciences and Analytics								Yes							
	40	HU-221	Technical Writing & Presentation Skills			Yes				Yes								
7th Semester	41	MCT-406	Entrepreneurship-III							Yes	Yes	Yes						Yes
	42	MCT-403 & MCT-403L	Product Design								Yes							
	43	MCT-434 & MCT-434L	Industrial Automation								Yes							
	44	MCT-435	Control Systems – II							Yes	Yes							
	45	MCT-xxx	Elective II															
	46	QT-401	Translation of The Holy Quran-IV			Yes											Yes	
	47	MCT-498	Final Project- I															
8th Semester	48	MCT-404	Professional Ethics			Yes	Yes			Yes		Yes					Yes	Yes
		MCT-499	Final Project- II															
	49	MCT-xxx	Elective III															
	50	MGT-211	Principles of Management							Yes				Yes				
Elective Subjects																		
	52	MCT-412 & MCT-412L	Condition Monitoring							Yes	Yes							
	53	MCT-415 & MCT-415L	Mechanical Vibrations			Yes					Yes							
	54	MCT-421 & MCT-421L	Digital Signal Processing								Yes							
	55	MCT-422 & MCT-422L	Power Electronics						Yes		Yes							
	56	MCT-432 & MCT-432L	Digital Control Systems							Yes	Yes							
	57	MCT-433 & MCT-433L	Estimation and Filtering							Yes	Yes							
	58	MCT-452 & MCT-452L	Intelligent Systems		Yes												Yes	
	59	MCT-453 & MCT-453L	Machine Vision								Yes							
	60	MCT-454 & MCT-454L	Mobile Robotics								Yes							
	61	MCT-455 & MCT-455L	Wearable Robotics								Yes							

#	Course	Title	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17
62	MCT-456 & MCT-456L	Internet of Things									Yes								
63	MCT-457 & MCT-457L	Biomedical Devices			Yes	Yes					Yes								
64	MCT-458 & MCT-458L	Human Centered Robotics								Yes	Yes								
65	MCT-459 & MCT-459L	Aerial Robotics									Yes								
66	MCT-461 & MCT-461L	Smart Electric Vehicles									Yes		Yes						
67	MCT-491 & MCT-491L	Special Topics in Mechatronics			Yes	Yes		Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes