

Curriculum Mechanical Engineering Program			
Course		Prerequisite	
SEMESTER 1			
BA 113	Physics I	None	
BA 118	Chemistry	None	
BA 123	Mathematics I	None	
BA 141	Engineering mechanics I	None	
CC 111	Introduction to computer	None	
IM 111	Industrial relations	None	
LH 131	English For Special Purposes I	None	
SEMESTER 2			
BA 114	Physics II	BA 113	Physics I
BA 124	Mathematics II	BA 123	Mathematics I
BA 142	Engineering mechanics II	BA 141	Engineering mechanics I
CC 112	Structured programming	CC 111	Introduction to computer
IM 112	Manufacturing technology	None	
LH 132	English For Special Purposes II	LH 131	English For Special Purposes I
ME 151	Engineering Drawing & Projection	None	
SEMESTER 3			
BA 223	Mathematics III	BA 124	Mathematics II
EE 238	Electric Engineering Fundamentals	BA 124	Mathematics II
LH 231	Technical report writing	LH 132	English For Special Purposes II
ME 232	Thermodynamics I	BA 114	Physics II
ME 274	Materials Sciences	BA 114& BA 142	Physics II Engineering mechanics II
ME 252	Mechanical Engineering Drawings	ME 151	Engineering Drawing & Projection
SEMESTER 4			
BA 224	Mathematics IV	BA 223	Mathematics III
EE 218	Instrumentation & Measurements	EE 238	Electrical Engineering Fundamentals
IM 212	Manufacturing Process	IM 112	Manufacturing technology
EE 329	Electrical machines	EE 238	Electrical Engineering Fundamentals
ME 276	Stress Analysis	ME 274	Material Science
ME 333	Thermodynamics II	ME 232	Thermodynamics I
SEMESTER 5			
BA 323	Mathematics V	BA 224	Mathematics IV

YEAR 1

YEAR 2

YEAR 3

CC 413	Numerical analysis	CC 112& BA 224	Structured Programming Mathematics IV	
ME 241	Experimental Methods	54 Cr. Hrs		
ME 355	Theory of machines	BA 142	Engineering Mechanics II	
ME 356	Machine design I	ME 252 & ME 276	Mechanical Engineering Drawing Stress analysis	
ME 385	Internal combustion engine	ME 232	Thermodynamics I	
SEMESTER 6				
CC 442	Digital Design and Introduction to Microprocessors	CC 112 & EE 218	Structured Programming & Instrumentation & measurements	
ME 357	Machine design II	ME 356	Machine design I	
ME 362	Fluid mechanics I	BA 114	Physics II	
EC 238	Electronics I	EE 238	Electrical Engineering Fundamentals	
ME 458	Mechanical vibration	ME 355	Theory of machines	
CC 213	Programming Applications	CC 112	Structured Programming	
SEMESTER 7				YEAR 4
EE 417	Automatic Control Engineering	EE 218	Instrumentation & measurements	
IM 423	Operations research	90 Cr. Hr.		
ME 431	Heat transfer	ME 333	Thermodynamics II	
ME 591	Mechatronics	CC 442	Digital Design and Intro to Microprocessors	
ME 464	Hydraulic and Pneumatic Systems	ME 362	Fluid Mechanics I	
EC 339	Electronics II	EC 238	Electronics I	
SEMESTER 8				
EE 419	Modern Control Engineering	EE 417	Automatic Control Engineering	
ME 455	Computer Aided Design	ME 356	Machine design I	
EC 534	Analog & Digital Signal Processing	EC 239	Electronics II	
ME 593	Electromechanical Systems	ME 591	Mechatronics	
EE 416	Microcontroller Applications	CC 442	Digital Design and Intro to Microprocessors	
ME 4XX	Elective A	MEXXX	As Designated Below	

Course		Prerequisite	
SEMESTER 9			
NE 364	Engineering Economy	54 Cr.Hr.	
ME5XX	Elective B	MEXXX	As Designated Below
ME 501	Senior Project I	138 Credit Hours and a GPA of at least 2.00	
ME 592	Mechatronics Systems	ME 591	Mechatronics
ME 595	Automation of Mechanical Systems	ME 593	Electromechanical Systems
NE 264	Scientific Thinking	None	
SEMESTER 10			
IM 535	International operations management	126 Credit Hours	
ME 503	Senior Project II	ME 501	Senior Project I
ME5XX	Elective C	MEXXX	As Designated Below
ME 594	Robotics Applications	ME 355	Theory of machines
NE 466	Environmental science and technology	None	

YEAR 5

A list of the elective courses is shown below

Course		Credit
ME 542	Maintenance planning	3
ME 520	Thermal Plant Engineering	3
ME 425	Power Plant Technology	3
ME 524	Renewable Energy Resources	3
ME 565	Turbo machinery	3
ME 461	Fluid mechanics II	3
ME 423	Steam plant engineering	3
ME 434	Refrigeration & Air conditioning	3
ME 465	Computational Fluid Dynamics	3
ME 465	Computational Fluid Dynamics	3
ME 481	Automotive Technology	3
ME 554	Optimum Design	3
ME 583	Vehicle Control & Safety Systems	3