2017 Batch Onward Curriculum

Semester- I

S.No	Code	Title	Credit	Category
1.	MA1010	Calculus	4	BST
2.	PH1010	Physics I	3	BST
3.	CY1010	Theoretical and Inorganic Chemistry	3	BST
4.	ID1010	Ecology and Environment	2	IDC
5.	ID1050	Concepts in Engineering Design	2	IDC
6.	ID1030	Introduction to Engineering	1	IDC
7.	ME1130	Engineering Drawing	3	BEP
8.	ME1150	Workshop Practice I	2	BEP
9.	PH1130	Physics Laboratory	2	BSP
10.	GN1000	Life Skills*	0	CWC**
		22		

^{*}Life skills are introduced through Orientation Programme

Semester- II

S.No	Code	Title	Credit	Category	
1.	MA1020	Vector Calculus and Linear Algebra	4	BST	
2.	PH1020	Physics II	3	BST	
3.	CY1020	Thermodynamics, Kinetics and Organic Reactions	3	BST	
4.	ME1020	Engineering Thermodynamics	3	BET	
5.	CE1020	Engineering Mechanics	4	BET	
6.	CS1020	Introduction to Programming	4	BET	
7.	ME1160	Workshop Practice II	2	BEP	
8.	CY1140	Chemistry Laboratory	2	BSP	
9.	GN1002	National Service Scheme	0	CWC**	
	Total Credits 25				

^{**}CWC category courses are without credits but mandatory for the award of the degree

Civil Engineering

Semester- III

S.No	Code	Course Title	Credit	Category
1.	BT2010	Life Sciences	2	BST
2.	EE2010	Basic Electrical Engineering	3	BET
3.	MA2030	Differential Equations	3	BST
4.	HSxxxx	Humanities Elective	3	HSE
5.	CE2010	Strength of Materials	4	PMT
	CE2030	Civil Engineering Materials and Construction	4	PMT
	CE2050	Functional Design of Buildings	2	PMT
	CE2150	Building Drawing	2	PMP
	Total Credits			

Semester -IV

S.No	Code	Title	Credit	Category
1.	HS2000	Professional Ethics	2	IDC
2.	CE2020	Structural Analysis	4	PMT
3.	CE2040	Hydraulic Engineering	4	PMT
4.	CE2060	Geology and Soil Mechanics	4	PMT
5.	CE2080	Surveying Theory	3	PMT
6.	CE2180	Surveying Practical	2	PMP
7.	HSxxxx	Humanities Elective	3	HSE
8.	MAxxxx	Mathematics Elective	3	MAE
Total	Total Credits			

$\underline{Semester-V}$

S.No	Code	Title	Credit	Category
1.	CE3010	Transportation Engineering	3	PMT
2.	CE3030	Environmental Engineering	4	PMT
3.	CE3050	Basic Reinforced Concrete Design	4	PMT
4.	CE3070	Geotechnical Engineering	4	PMT
5.	CE3090	Water Resources Engineering	4	PMT
6.	CE3110	Construction Materials Laboratory	2	PMP
7.		General Category Elective-1	3	GCE
Total C	redits		24	
8.		Professional Major Elective-1	3	PME*
	Total Credits for Honors			

S.No	Code	Title	Credit	Category
1.	CE3020	Traffic Engineering	4	PMT
2.	CE3040	Basic Structural Steel Design	4	PMT
3.	CE3060	Estimation & Construction Management	4	PMT
4.	CE3080	Hydraulic and Environmental Engineering Laboratory	2	PMP
5.	CE3100	Internship	0	CWC
6.		General Category Elective-2	3	GCE
7.		Professional Major Elective-1	3	PME
Total C	redits		20	
8.		Professional Major Elective-2	3	PME*
	Total Credits for Honors			1

$\underline{Semester-VII}$

S.No	Code	Title	Credit	Category
1.	CE4110	Project I	3	PMP
2.	CE4170	Structural Engineering Laboratory	2	PMP
3.		General Category Elective -3	3	GCE
4.		Professional Major Elective -2	3	PME
Total (Credits		11	
5.		Professional Major Elective -3	3	PME*
	Total Credits for Honors			

$\underline{Semester-VIII}$

S.No	Code	Title	Credit	Category
1.	CE4120	Project II	7	PMP
2.		Professional Major Elective-3	3	PME
Total	Total Credits			
3.		Professional Major Elective - 4	3	PME*
	Total Credits for Honors			

Computer Science and Engineering

<u>Semester –III</u>

S.No	Code	Course Title	Credit	Category
1	BT2010	Life Sciences	2	BST
2	MA2010	Probability, Stochastic Process and Statistics	3	BST
3	EE2070	Digital Systems	4	BET
4	HSxxxx	Humanities Elective	3	HSE
5	CS2010	Logic for Computing	3	PMT
6	CS2030	Data Structures and Algorithms	3	PMT
7	CS2130	Data Structures and Algorithms Laboratory	2	PMP
8	EE2170	Digital Circuits Laboratory	2	PMP
	Total Credits			

$\underline{Semester-IV}$

S.No	Code	Title	Credit	Category
		Discrete Mathematics for Computer		
1	CS2020	Science	3	PMT
2	CS2040	Design and Analysis of Algorithms	4	PMT
3	CS2060	Computer Organisation	3	PMT
4	CS2080	Artificial Intelligence	3	PMT
5	CS2160	Computer Organisation Laboratory	2	PMP
6	CS2180	Artificial Intelligence Laboratory	2	PMP
7	HSxxxx	Humanities Elective	3	HSE
8	MAxxxx	Mathematics Elective	3	MAE
Total	Credits		23	·

Semester -V

S.No	Code	Title	Credit	Category
1	HS2000	Professional Ethics	2	IDC
2	CS3010	Operating Systems	3	PMT
3	CS3030	Paradigms of Programming	3	PMT
4	CS3050	Theory of Computation	4	PMT
5	CS3110	Operating Systems Laboratory	2	PMP
6	CS3130	Paradigms of Programming Laboratory	2	PMP
7		General Category Elective-1	3	GCE
8		Professional Major Elective-1	3	PME
Total (Credits		22	
9		Professional Major Elective-1	3	PME*
	Total C	25		

S.No	Code	Title	Credit	Category
1	CS3020	Database Management Systems	3	PMT
2	CS3040	Compiler Design	3	PMT
		Database management system		
3	CS3120	Laboratory	2	PMP
4	CS3140	Compiler Design Laboratory	2	PMP
5	CS3100	Internship	0	CWC
6		General Category Elective-2	3	GCE
7		Professional Major Elective-2	3	PME
8		Professional Major Elective-3	3	PME
Total (Credits		19	
9		Professional Major Elective-2	3	PME*
Tota	al Credits for	· Honors	22	

$\underline{Semester-VII}$

S.No	Code	Title	Credit	Category
1	CS4010	Computer Networks	3	PMT
2	CS4110	Project I	3	PMP
3	CS4150	Computer Networks + Laboratory	2	PMP
4		General Category Elective-3	3	GCE
5		Professional Major Elective-4	3	PME
6		Professional Major Elective-5	3	PME
	Total Credits			
7		Professional Major Elective-3	3	PME*
	Tot	al Credits for Honors	20	

Semester - VIII

S.No	Code	Title	Credit	Category
1	CS4120	Project II	7	PMP
2		General Category Elective-4	3	GCE
Total (Credits		10	
3		Professional Major Elective-4	3	PME*
	TotalCredits for Honors			

Electrical Engineering

<u>Semester – III</u>

S.No	Code	Course Title	Credit	Category
1.	BT2010	Life Sciences	2	BST
2.	MA2030	Differential Equations	3	BST
3.	EE2070	Digital Systems	4	BET
4.	HSxxxx	Humanities Elective	3	HSE
5.	EE2030	Electrical and Magnetic Circuits	4	PMT
6.	EE2050	Signals and Systems	4	PMT
7.	EE2140	Digital Circuits Laboratory	2	PMP
Total	Total Credits			

Semester -IV

S.No	Code	Title	Credit	Category
1.	EE2020	Electrical Machines	4	PMT
2.	EE2040	Analog Circuits Theory	4	PMT
3.	EE2060	Engineering Electromagnetics	3	PMT
4.	EE2080	Microprocessor Systems Design and Interfacing	4	PMT
5.	EE2160	CAD Lab	2	PMP
6.	HSxxxx	Humanities Elective	3	HSE
7.	MAxxxx	Mathematics Elective	3	MAE
Total Credits			23	

Semester – V

S.No	Code	Title	Credit	Category
1.	HS2000	Professional Ethics	2	IDC
2.	EE3010	Solid State Devices	4	PMT
3.	EE3030	Measurements and Instrumentation	3	PMT
4.	EE3050	Analog and Digital Communication Systems	4	PMT
5.	EE3170	Electrical Machines Laboratory	2	PMP
6.	EE3150	Analog Circuits Laboratory	2	PMP
7.		General Category Elective -1	3	GCE
Total	Total Credits		20	
8.		Professional Major Elective-1	3	PME*
	Total Credits for Honors			

S.No	Code	Title	Credit	Category
1.	EE3020	Digital Signal Processing	4	PMT
2.	EE3040	Power Systems	4	PMT
3.	EE3060	Control Engineering	4	PMT
4.	EE3100	Internship	0	CWC
5.	EE3120	Communication Systems and Microwave Laboratory	2	PMP
6.	EE3140	Measurements and Instrumentation Laboratory	2	PMP
7.		General Category Elective-2	3	GCE
8.		Professional Major Elective-1	3	PME
Tota	Total Credits		22	
9.		Professional Major Elective-2	3	PME*
	1	Cotal Credits for Honors	25	

Semester -VII

S.No	Code	Title	Credit	Category
1.	EE4110	Project I	3	PMP
2.	EE4150	Control Systems Laboratory	2	PMP
3.	EE4170	Power Systems & Renewable Energy Laboratory	2	PMP
4.		General Category Elective-3	3	GCE
5.		Professional Major Elective-2	3	PME
6.		Professional Major Elective-3	3	PME
Total Credits		16		
7.		Professional Major Elective-3	3	PME*
	Total Credits for Honors			

Semester -VIII

S.No	Code	Title	Credit	Category
1.	EE4120	Project II	7	PMP
2.		General Category Elective -4	3	GCE
Total (Total Credits			
3.		Professional Major Elective -4	3	PME*
	Total Credits for Honors			

Mechanical Engineering

<u>Semester –III</u>

S.No	Code	Title	Credit	Category
1.	BT2010	Life Sciences	2	BST
2.	EE2010	Basic Electrical Engineering	3	BET
3.	MA2030	Differential Equations	3	BST
4.	HSxxxx	Humanities Elective	3	HSE
5.	CE2010	Strength of Materials	4	PMT
6.	ME2010	Foundations of Fluid Mechanics	4	PMT
7.	ME2030	Manufacturing Processes	4	PMT
	Total Credits			•

Semester –IV

S.No	Code	Title	Credit	Category
1.	HS 2000	Professional Ethics	2	IDC
2.	ME2020	Gas Dynamics	3	PMT
3.	ME2040	Machine Drawing Practice	4	PMT
4.	ME2060	Kinematics and Dynamics of Machinery	4	PMT
5.	ME2080	Engineering Materials	4	PMT
6.	ME2140	Applied Mechanics Laboratory	2	PMP
7.	HSxxx	Humanities Elective	3	HSE
8.	MAxxxx	Mathematics Elective	3	MAE
Total	Total Credits			

$\underline{Semester-V}$

S.No	Code	Title	Credit	Category
1.	ME3010	Measurements, Instrumentation and	3	PMT
1.	MILSOIU	Control	3	1 1V1 1
2.	ME3030	Combustion and IC Engines	4	PMT
3.	ME3050	Heat and Mass Transfer	4	PMT
4.	ME3070	Design of Machine Elements	3	PMT
5.	ME3090	Machine Tools and Metrology	3	PMT
6.	ME3190	Mechanical Engineering Laboratory 1	2	PMP
7.		General Category Elective-1	3	GCE
Total Cr	Total Credits			
8.		Professional Major Elective-1	3	PME*
	Total Credits for Honors			

S.No	Code	Title	Credit	Category
1.	ME3020	Applied Thermo-Fluids Engineering	4	PMT
2.	ME3040	Mechanical Vibrations	3	PMT
3.	ME3060	Machine Design Practice	3	PMT
4.	ME3080	Automation in Manufacturing	3	PMT
5.	ME3100	Internship	0	CWC
6.	ME3180	Mechanical Engineering Laboratory 2	2	PMP
7.		General Category Elective-2	3	GCE
Total C	Total Credits			
8.		Professional Major Elective-2	3	PME*
	Total Credits for Honors			

Semester -VII

S.No	Code	Title	Credit	Category
1.	ME4010	Industrial Engineering and	4	PMT
		Management		
2.	ME4110	Project I	3	PMP
3.	ME4170	Mechanical Engineering Laboratory 3	2	PMP
4.		General Category Elective-3	3	GCE
5.		Professional Major Elective-1	3	PME
Total Credits			15	
6.		Professional Major Elective-3	3	PME*
		18		

Semester -VIII

S.No	Code	Title	Credit	Category
1.	ME4160	Project II	7	PMP
2.		Professional Major Elective-2	3	PME
Total	Credits	10		
3.		Professional Major Elective-4	3	PME*
Total (Credits for Hon	13		