Curriculum for 2016 Batch

Semester I

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS1100	Computational Engineering	4	BET
2.	CY1010	Chemistry I	3	SCY
3.	ID1100	Concepts in Engineering Design	3	BET
4.	MA1010	Mathematics I	4	SMA
5.	ME1120	Engineering Drawing	3	BES
6.	PH1010	Physics I	3	SPH
7.	PH1030	Physics Laboratory	2	SPH
8.	WS1010	Workshop I	2	BES
Total Credits			**24**	

Semester II

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CY1020	Chemistry II	3	SCY
2.	CY1030	Chemistry Laboratory	2	SCY
3.	ID1200	Ecology and Environment	2	BET
4.	AM1100	Engineering Mechanics	4	BET
5.	GN1100	Life Skills	2	HPF
6.	MA1020	Mathematics II	4	SMA
7.	NS1030	National Service Scheme	0	NSS(CWC**)
8.	PH1020	Physics II	3	SPH
9.	ME1100	Thermodynamics	3	BET
10.	WS1020	Workshop II	2	BES
Total Credits			**23**	

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

Civil Engineering

Semester III

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE1100	Basic Electrical Engineering	3	BET
2.	CE2050	Building Drawing	2	PML
3.	CE2330	CivilEngineeringMaterialsand Construction	4	PMT
4.	CE1020	Functional Design of Buildings	2	PMT
5.	AM2200	Strength of Materials	4	PMT
6.	BT1010	Life Sciences	2	SLS
7.		Humanities Elective	3	HSS
8.		Mathematics Elective	3	SMA
Total Credits			**23**	

Semester IV

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CE2020	Structural Analysis	4	PMT
2.	CE2040	Hydraulic Engineering	4	PMT
3.	CE2060	Geology and Soil Mechanics	4	PMT
4.	CE2080	Surveying Theory	4	PMT
5.	CE2100	Surveying Practical	2	PML
6.		Humanities Elective	3	HSS
7.		Mathematics Elective	3	SMA
Total Credits			**24**	

Semester V

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CE3010	Transportation Engineering I	3	PMT
2.	CE3030	Water Resources Engineering	4	PMT
3.	CE3060	Basic Reinforced Concrete Design	4	PMT
4.	CE3350	Geotechnical Engineering	4	PMT
5.	CE3410	Construction Materials Laboratory	2	PML
6.		Professional Major Elective-1	3	PME
7.		General Category Elective-1	3	GCE
Total Credits			**23**	
8.		Professional Major Elective-1	3	PME*
Total Credits for Honors			**26**	

Semester VI

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CE3015	Transportation Engineering II	3	PMT
2.	CE3025	Environmental Engineering	4	PMT
3.	CE3035	Basic Structural Steel Design	4	PMT
4.	CE3115	Hydraulic and Environmental Engineering Laboratory	2	PML
5.	CE3125	Internship	2	PMP
6.		Professional Major Elective-2	3	PME
7.		General Category Elective-2	3	GCE
Total Credits			**21**	
8.		Professional Major Elective-2	3	PME*
Total Credits for Honors			**24**	

* For Honors

Semester VII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CE4010	Estimation & Construction Management	4	PMT
2.	CE4030	Structural Engineering Laboratory	2	PML
3.	CE4050	Project I	3	PMP
4.	HS3050	Professional Ethics	2	HSS
5.		Professional Major Elective-3	3	PME
6.		General Category Elective-3	3	GCE
Total Credits			**17**	
7.		Professional Major Elective-3	3	PME*
8.		Professional Major Elective-4	3	PME*
Total Credits for Honors			**23**	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CE4060	Project II	7	PMP
2.		Professional Major Elective-4	3	PME
Total Credits			**10**	
3.		Professional Major Elective-5	3	PME*
Total Credits for Honors			**13**	

* For Honors

Computer Science and Engineering

Semester III

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE1101	Signals and Systems	4	PMT
2.	CS2110	Computer Programming Laboratory	2	PML
3.	EE2702	Digital Circuits Laboratory	2	PML
4.	EE2001	Digital Systems	4	PMT
5.	CS2100	Discrete Mathematics for Computer Science	3	PMT
6.	BT1010	Life Sciences	2	SLS
7.		Humanities Elective	3	HSS
8.		Mathematics Elective	3	SMA
Total Credits			**23**	

Semester IV

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS2600	Computer Organization	3	PMT
2.	CS2610	Computer Organization Laboratory	2	PML
3.	CS2800	Data Structures and Algorithms	4	PMT
4.	CS2810	Data Structures and Algorithms Laboratory	2	PML
5.	CS2200	Language Machines and Computations	4	PMT
6.		Humanities Elective	3	HSS
7.		Mathematics Elective	3	SMA
Total Credits			**21**	

Semester V

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS3100	Paradigms of Programming	4	PMT
2.	CS4011	Artificial Intelligence	3	PMT
3.	CS4111	Artificial Intelligence Laboratory	2	PML
4.	CS3500	Operating Systems	3	PMT
5.	CS3510	Operating Systems Laboratory	2	PML
6.		Professional Major Elective-1	4	PME
7.		General Category Elective-1	3	GCE
Total Credits			**21**	
8.		Professional Major Elective-1	3	PME*
Total Credits for Honors			**24**	

Semester VI

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS3300	Compilers	3	PMT
2.	CS3310	Compilers Lab	2	PML
3.	CS3700	Introduction to Database Systems	3	PMT
4.	CS3710	Database Systems Lab	2	PML
5.	CS3660	Internship	2	PMP
6.		Professional Major Elective-2	3	PME
7.		General Category Elective-2	3	GCE
8.		General Category Elective-3	3	GCE
Total Credits			**21**	
9.		Professional Major Elective -2	3	PME*
10.		Professional Major Elective -3	3	PME*
Total Credits for Honors			**27**	

* For Honors

Semester VII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS3200	Computer Networks	3	PMT
2.	CS3210	Computer Networks Lab	2	PML
3.	CS4800	Project I	3	PMP
4.	HS3050	Professional Ethics	2	HSS
5.		Professional Major Elective-3	3	PME
6.		Professional Major Elective -4	3	PME
7.		Professional Major Elective -5	3	PME
8.		General Category Elective-4	3	GCE
Total Credits			**22**	
9.		Professional Major Elective -4	3	PME*
Total Credits for Honors			**25**	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS4810	Project II	7	PMP
2.		General Category Elective	3	GCE
Total Credits			**10**	
3.		Professional Major Elective	3	PME*
Total Credits for Honors			**13**	

* For Honors

Electrical Engineering

Semester III

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE2702	Digital Circuits Laboratory	2	PML
2.	EE2001	Digital Systems	4	PMT
3.	EE1001	Electrical and Magnetic Circuits	4	PMT
4.	EE1101	Signals and Systems	4	PMT
5.	BT1010	Life Sciences	2	SLS
6.		Humanities Elective	3	HSS
7.		Mathematics Elective	3	SMA
Total Credits			**22**	

Semester IV

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS2600	Computer Organization	3	PMT
2.	CS2610	Computer Organization Lab	2	PML
3.	EE2005	Electrical Machines	4	PMT
4.	EE2006	Electromagnetic Fields	4	PMT
5.	EE3002	Analog Circuits Theory	4	PMT
6.	EE2701	CAD Lab	2	PML
7.		Humanities Elective	3	HSS
8.		Mathematics Elective	3	SMA
Total Credits			**25**	

Semester V

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE3010	Digital Signal Processing	4	PMT
2.	EE3001	Solid State Devices	4	PMT
3.	EE3004	Control Engineering	4	PMT
4.	EE3005	Analog and Digital Communication Systems	4	PMT
5.	EE3125	Control Systems Laboratory	2	PML
6.	EE3703	Analog Circuits Laboratory	2	PML
7.		General Category Elective-1	3	GCE
Total Credits			**23**	
8.		Professional Major Elective-1	3	PME*
Total Credits for Honors			**26**	

Semester VI

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE3025	Power Systems	4	PMT
2.	EE3015	Measurements and Instrumentation	4	PMT
3.	EE3115	Measurements and Instrumentation Lab	2	PML
4.	EE3110	Electrical Machines Lab	2	PML
5.	EE3135	Internship	2	PMP
6.		Professional Major Elective-1	3	PME
7.		General Category Elective-2	3	GCE
Total Credits			**20**	
8.		Professional Major Elective-2	3	PME*
Total Credits for Honors			**23**	

* For Honors

Semester VII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE4110	Communication Systems and Microwave Lab	2	PML
2.	EE4120	Power Systems Lab	2	PML
3.	EE4130	Project I	3	PMP
4.	HS3050	Professional Ethics	2	HSS
5.		Professional Major Elective-2	3	PME
6.		Professional Major Elective-3	3	PME
7.		General Category Elective-3	3	GCE
Total Credits			**18**	
8.		Professional Major Elective-3	3	PME*
9.		Professional Major Elective-4	3	PME*
Total Credits for Honors			**24**	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE4135	Project II	7	PMP
2.		General Category Elective -4	3	GCE
Total Credits			**10**	
3.		Professional Major Elective-5	3	PME*
Total Credits for Honors			**13**	

* For Honors

Mechanical Engineering

Semester III

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE1100	Basic Electrical Engineering	3	BET
2.	AM2530	Foundations of Fluid Mechanics	4	PMT
3.	ME2050	Machine Drawing Practice	4	PMT
4.	AM2200	Strength of Materials	4	PMT
5.	BT1010	Life Sciences	2	SLS
6.		Humanities Elective	3	HSS
7.		Mathematics Elective	3	SMA
Total Credits			**23**	

Semester IV

S. No	Course Code	Course Title	Course Credit	Course Category
1.	ME2015	Kinematics and Dynamics of Machinery	4	PMT
2.	ME2025	Measurements, Instrumentation and Control	4	PMT
3.	ME2035	Materials and Design	4	PMT
4.	ME2045	Manufacturing Processes	4	PMT
5.	ME2540	Applied Mechanics Lab	2	PML
6.		Humanities Elective	3	HSS
7.		Mathematics Elective	3	SMA
Total Credits			**24**	

Semester V

S. No	Course Code	Course Title	Course Credit	Course Category
1.	ME3010	Gas Dynamics	3	PMT
2.	ME3020	Heat and Mass Transfer	4	PMT
3.	ME3030	Combustion and IC Engines	4	PMT
4.	ME3040	Machine Tools and Metrology	3	PMT
5.	ME3050	Design of Machine Elements	3	PMT
6.	ME3170	Mechanical Engineering Laboratory	2	PML
7.		General Category Elective-1	3	GCE
Total Credits			**22**	
8.		Professional Major Elective-1	3	PME*
Total Credits for Honors			**25**	

Semester VI

S. No	Course Code	Course Title	Course Credit	Course Category
1.	ME3015	Applied Thermo-Fluids Engineering	4	PMT
2.	ME3025	Mechanical Vibrations	3	PMT
3.	ME3045	Machine Design Practice	3	PMT
4.	ME3180	Mechanical Engineering Laboratory	2	PML
5.	ME3100	Internship	2	PMP
6.		Professional Major Elective-1	3	PME
7.		General Category Elective -2	3	GCE
Total Credits			**20**	
8.		Professional Major Elective -2	3	PME*
Total Credits for Honors			**23**	

* For Honors

Semester VII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	ME4010	Industrial Engineering and Management	3	PMT
2.	ME4030	Automation in Manufacturing	3	PMT
3.	ME4170	Mechanical Engineering Laboratory	2	PML
4.	ME4150	Project I	3	PMP
5.	HS3050	Professional Ethics	2	HSS
6.		Professional Major Elective -2	3	PME
7.		General Category Elective-3	3	GCE
Total Credits			**19**	
8.		Professional Major Elective -3	3	PME*
9.		Professional Major Elective -4	3	PME*
Total Credits for Honors			**25**	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	ME4160	Project II	7	PMP
2.		General Category Elective-4	3	GCE
Total Credits			**10**	
3.		Professional Major Elective-5	3	PME*
Total Credits for Honors			**13**	

* For Honors

Summary of Semester Wise Credits for 2016 batch

	I	II	III	IV	V	VI	VII	VIII	Total
CE	24	25	23	24	23/26	21/24	17/23	10/13	167/182
CSE	24	25	23	21	21/24	21/27	22/25	10/13	167/182
EE	24	25	22	25	23/26	20/23	18/24	10/13	167/182
ME	24	25	23	24	22/25	20/23	19/25	10/13	167/182

Category expansion

BES   : Basic Engineering Skills
BET   : Basic Engineering Theory
CWC :Course without Credits
GCE   : General Category Elective
HPF   : Humanities Pass Fail
HSE   : Humanities Elective
HSS   : Humanities and Social Sciences
MAE   : Mathematics Elective
NSS   : National Service Scheme
PME   : Professional Major Elective
PML   : Professional Major Laboratory
PMP   : Professional Major Practice
 PMT : Professional Major Theory
SCY   : Science Chemistry
SLS   : Science Life Science
SMA   : Science Mathematics
SPH   : Science Physics