

Curriculum for 2017 Batch

Semester I

S. No	Course Code	Course Title	Course Credit	Course 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**
Total Credits			22	

Semester II

S. No	Course Code	Course Title	Course Credit	Course 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	

*Life Skills are introduced through Induction Programme.

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

Semester III (Civil Engineering)

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CE2010	Strength of Materials	4	PMT
2.	CE2030	Civil Engineering Materials and Construction	4	PMT
3.	EE2010	Basic Electrical Engineering	3	BET
4.	MA2010	Differential Equations	3	BST
5.	HSxxxx	Humanities Elective	3	HSE
6.	CE2050	Functional Design of Buildings	2	PMT
7.	BT2010	Life Sciences	2	BST
8.	CE2150	Building Drawing	2	PMP
Total Credits			23	

Semester III (Computer Science and Engineering)

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE2070	Digital Systems	4	PMT
2.	CS2030	Data Structures and Algorithms	3	PMT
3.	CS2010	Logic for Computing	3	PMT
4.	MA2040	Probability, Stochastic Process and Statistics	3	BST
5.	HSxxxx	Humanities Elective	3	HSE
6.	BT2010	Life Sciences	2	BST
7.	CS2130	Data Structures and Algorithms Lab	2	PMP
8.	EE2170	Digital Circuits Laboratory	2	PMP
Total Credits			22	

Semester III (Electrical Engineering)

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE2070	Digital Systems	4	PMT
2.	EE2030	Electrical Circuits and Networks	4	PMT
3.	EE2050	Signals and Systems	4	PMT
4.	MA2010	Differential Equations	3	BST
5.	HSxxxx	Humanities Elective	3	HSE
6.	BT2010	Life Sciences	2	BST
7.	EE2170	Digital Circuits Laboratory	2	PMP
Total Credits			22	

Semester III (Mechanical Engineering)

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CE2010	Strength of Materials	4	PMT
2.	ME2010	Foundations of Fluid Mechanics	4	PMT
3.	ME2030	Manufacturing Processes	4	PMT
4.	EE2010	Basic Electrical Engineering	3	BET
5.	MA2010	Differential Equations	3	BST
6.	HSxxxx	Humanities Elective	3	HSE
7.	BT2010	Life Sciences	2	BST
Total Credits			23	

Category expansion

BEP	: Basic Engineering Practice
BET	: Basic Engineering Theory
BSP	: Basic Science Practice
BST	: Basic Science Theory
CWC	: Course without Credits
HSE	: Humanities Elective
IDC	: Inter Disciplinary Course
PMP	: Professional Major Practice
PMT	: Professional Major Theory

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	CWC**
8.	PH1020	Physics II	3	SPH
9.	ME1100	Thermodynamics	3	BET
10.	WS1020	Workshop II	2	BES
Total Credits			25	

* Life Skills are introduced through Induction Programme

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

Civil Engineering (2016 Batch)

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	Civil Engineering Materials and 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.	HSE	Humanities Elective	3	HSE
8.	MAE	Mathematics Elective	3	MAE
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.	HSE	Humanities Elective	3	HSE
7.	MAE	Mathematics Elective	3	SMA
Total Credits			24	

Civil Engineering (2016 Batch)

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.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			23 / 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.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			21 / 24	

* For Honors

Civil Engineering (2016 Batch)

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 Phase I	3	PMP
4.	HS3050	Professional Ethics	2	HSS
5.	PME	Professional Major Elective	3	PME
6.	PME	Professional Major Elective	3	PME*
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			17 / 23	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CE4060	Project Phase II	7	PMP
2.	PME	Professional Major Elective	3	PME
3.	PME	Professional Major Elective	3	PME*
Minimum Credits: B.Tech / B.Tech (Honours)			10 / 13	

* For Honours

Computer Science and Engineering (2016 Batch)

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.	HSE	Humanities Elective	3	HSE
8.	MAE	Mathematics Elective	3	MAE
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 Lab	2	PML
5.	CS2200	Language Machines and Computations	4	PMT
6.	HSE	Humanities Elective	3	HSE
7.	MAE	Mathematics Elective	3	MAE
Total Credits			21	

Computer Science and Engineering (2016 Batch)

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.	PME	Professional Major Elective	3**	PME
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech Honours			20 / 23	

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.	PME	Professional Major Elective	3**	PME
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
9.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech Honours			22 / 25	

* For Honors

**One of the PME course viz CS4803: Model Checking of 4 credits will be offered in either of the semesters for earning total required credits for the degree.

Computer Science and Engineering (2016 Batch)

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 Phase I	3	PML
4.	HS3050	Professional Ethics	2	HSS
5.	PME	Professional Major Elective	3	PME
6.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME
8.	PME	Professional Major Elective	3	PME
9.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech Honours			22 / 25	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS4810	Project Phase II	7	PMP
2.	PME	Professional Major Elective	3	PME*
3.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			10/ 13	

* For Honors

Electrical Engineering (2016 Batch)

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.	HSE	Humanities Elective	3	HSE
7.	MAE	Mathematics Elective	3	MAE
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.	HSE	Humanities Elective	3	HSE
8.	MAE	Mathematics Elective	3	MAE
Total Credits			25	

Electrical Engineering (2016 Batch)

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.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			23 / 26	

Semester VI

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE2003	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.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			20 / 23	

* For Honors

Electrical Engineering (2016 Batch)

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 Phase I	3	PMP
4.	HS3050	Professional Ethics	2	HSS
5.	PME	Professional Major Elective	3	PME
6.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME*
8.	PME	Professional Major Elective	3	PME*
9.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			18 / 24	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE4135	Project Phase II	7	PMP
2.	PME	Professional Major Elective 8	3	PME*
3.	GCE	General Category Elective 4	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			10 / 13	

* For Honors

Mechanical Engineering (2016 Batch)

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.	HSE	Humanities Elective	3	HSE
7.	MAE	Mathematics Elective	3	MAE
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.	HSE	Humanities Elective	3	HSE
7.	MAE	Mathematics Elective	3	MAE
Total Credits			24	

Mechanical Engineering (2016 Batch)

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.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			22 / 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.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			20 / 23	

* For Honors

Mechanical Engineering (2016 Batch)

Semester VII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	ME4010	Industrial Engineering and Management	3	PMT
2.	ME3035	Automation in Manufacturing	3	PMT
3.	ME4170	Mechanical Engineering Laboratory	2	PML
4.	ME4150	Project Phase I	3	PMP
5.	HS3050	Professional Ethics	2	HSS
6.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME*
8.	PME	Professional Major Elective	3	PME*
9.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			19 / 25	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	ME4160	Project Phase II	7	PMP
2.	PME	Professional Major Elective	3	PME*
3.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			10 / 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	20/23	22/25	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

* Will be of 167 if an elective of 4 credit is opted only once.

[#] Will be 182 if one more elective of 3 credit is opted.

Curriculum for 2015 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 1	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
8.	PH1020	Physics II	3	SPH
9.	ME1100	Thermodynamics	3	BET
10.	WS1020	Workshop II	2	BES
Total Credits			25	

* Life Skills are introduced through Induction Programme

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

Civil Engineering (2015 Batch)

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	Civil Engineering Materials and 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.	HSE	Humanities Elective	3	HSE
8.	MAE	Mathematics Elective	3	MAE
Total Credits			23	

Semester IV

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CE2020	Structural Engineering	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.	HSE	Humanities Elective	3	HSE
7.	MAE	Mathematics Elective	3	MAE
Total Credits			24	

Civil Engineering (2015 Batch)

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.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			23 / 26	

Semester V

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.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			21 / 24	

* For Honors

Civil Engineering (2015 Batch)

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 Phase I	3	PMP
4.	HS3050	Professional Ethics	2	HSS
5.	PME	Professional Major Elective	3	PME
6.	PME	Professional Major Elective	3	PME*
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			17 / 23	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CE4060	Project Phase II	7	PMP
2.	PME	Professional Major Elective	3	PME
3.	PME	Professional Major Elective	3	PME*
Minimum Credits: B.Tech / B.Tech (Honours)			10 / 13	

* For Honors

Computer Science and Engineering (2015 Batch)

Semester III

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE1100	Basic Electrical Engineering	3	BET
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.	HSE	Humanities Elective	3	HSE
8.	MAE	Mathematics Elective	3	MAE
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 Laboratory	2	PML
3.	CS2800	Data Structures and Algorithms	4	PMT
4.	CS2810	Data Structures and Algorithms Lab	2	PML
5.	CS2200	Language Machines and Computations	4	PMT
6.	HSE	Humanities Elective	3	HSE
7.	MAE	Mathematics Elective	3	MAE
Total Credits			21	

Computer Science and Engineering (2015 Batch)

Semester V

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS3100	Paradigms of Programming	4	PMT
2.	CS3300	Language Translators	3	PMT
3.	CS3310	Language Translators Laboratory	2	PML
4.	CS3500	Operating Systems	3	PMT
5.	CS3510	Operating Systems Laboratory	2	PML
6.	PME	Professional Major Elective	4	PME
7.	PME	Professional Major Elective	4	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			21 / 25	

Semester VI

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS3200	Computer Networks	3	PMT
2.	CS3210	Computer Networks Lab	2	PML
3.	CS3700	Introduction to Database Systems	3	PMT
4.	CS3710	Database Systems Lab	2	PML
5.	CS3660	Internship	2	PMP
6.	PME	Professional Major Elective	4	PME
7.	PME	Professional Major Elective	4	PME*
8.	GCE	General Category Elective	3	GCE
9.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			22 / 26	

* For Honors

Computer Science and Engineering (2015 Batch)

Semester VII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS3400	Principles of Software Engineering	3	PMT
2.	CS3410	Principles of Software Engineering Lab	2	PML
3.	CS4800	Project Phase I	3	PMP
4.	HS3050	Professional Ethics	2	HSS
5.	PME	Professional Major Elective	3	PME
6.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME
8.	PME	Professional Major Elective	3	PME
9.	PME	Professional Major Elective	3	PME*
Minimum Credits: B.Tech / B.Tech (Honours)			22 / 25	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	CS4810	Project Phase II	7	PMP
2.	PME	Professional Major Elective	3	PME*
3.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			10 / 13	

* For Honors

Electrical Engineering (2015 Batch)

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.	HSE	Humanities Elective	3	HSE
7.	MAE	Mathematics Elective	3	MAE
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.	HSE	Humanities Elective	3	HSE
8.	MAE	Mathematics Elective	3	MAE
Total Credits			25	

Electrical Engineering (2015 Batch)

Semester V

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE2003	Power Systems	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.	PME	Professional Major Elective	3	PME*
Minimum Credits: B.Tech / B.Tech (Honours)			20 / 23	

Semester VI

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE3010	Digital Signal Processing	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.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
9.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			23 / 26	

* For Honors

Electrical Engineering (2015 Batch)

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 Phase I	3	PMP
4.	HS3050	Professional Ethics	2	HSS
5.	PME	Professional Major Elective	3	PME
6.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME*
8.	PME	Professional Major Elective	3	PME*
9.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			18 / 24	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	EE4135	Project Phase II	7	PMP
2.	PME	Professional Major Elective	3	PME*
3.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			10 / 13	

* For Honors

Mechanical Engineering (2015 Batch)

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.	HSE	Humanities Elective	3	HSE
7.	MAE	Mathematics Elective	3	MAE
Total Credits			23	

Semester IV

S. No	Course Code	Course Title	Course Credit	Course Category
1.	ME2220	Kinematics and Dynamics of Machinery	4	PMT
2.	ME2240	Measurements, Instrumentation and Control	4	PMT
3.	ME2260	Materials and Design	4	PMT
4.	ME2280	Manufacturing Processes	4	PMT
5.	ME2540	Applied Mechanics Lab	2	PML
6.	HSE	Humanities Elective	3	HSE
7.	MAE	Mathematics Elective	3	MAE
Total Credits			24	

Mechanical Engineering (2015 Batch)

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	4	PMT
5.	ME3050	Design of Machine Elements	4	PMT
6.	ME3170	Mechanical Engineering Laboratory	2	PML
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			24 / 27	

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.	ME3035	Automation in Manufacturing	3	PMT
4.	ME3180	Mechanical Engineering Laboratory	2	PML
5.	ME3100	Internship	2	PMP
6.	PME	Professional Major Elective	3	PME
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			20 / 23	

* For Honors

Mechanical Engineering (2015 Batch)

Semester VII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	ME4010	Industrial Engineering and Management	4	PMT
2.	ME4170	Mechanical Engineering Laboratory	2	PML
3.	ME4150	Project Phase I	3	PMP
4.	HS3050	Professional Ethics	2	HSS
5.	PME	Professional Major Elective	3	PME
6.	PME	Professional Major Elective	3	PME*
7.	PME	Professional Major Elective	3	PME*
8.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			17 / 23	

Semester VIII

S. No	Course Code	Course Title	Course Credit	Course Category
1.	ME4160	Project Phase II	7	PMP
2.	PME	Professional Major Elective	3	PME*
3.	GCE	General Category Elective	3	GCE
Minimum Credits: B.Tech / B.Tech (Honours)			10 / 13	

* For honors

Summary of Semester Wise Credits for 2015 batch

2015 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	22	21	21/25	22/26	22/25	10/13	167/181*
EE	24	25	22	25	20/23	23/26	18/24	10/13	167/182
ME	24	25	23	24	24/27	20/23	17/23	10/13	167/182

*Will be 182 if one of the PME course of 4 credit is opted.

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