

STUDY & EVALUATION SCHEME
INTEGRATED B. TECH. + M. TECH. ELECTRICAL ENGINEERING
(POWER ELECTRONICS & ELECTRIC DRIVES+ ENGINEERING)
II YEAR: III SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
THEORY									
1	BMA3001/ ---	Mathematics-III/ Science Based Open Elective ¹	3	2	0	40	60	100	4
2	BHU3018/ BHU3019	Organizational Psychology/ Organizational Sociology	2	0	0	40	60	100	2
3	BEC3008	Analog And Digital Electronics	3	2	0	40	60	100	4
4	BME3004	Basics of Thermodynamic	3	1	0	40	60	100	3
5	BEE3001	Network Analysis And Synthesis	3	2	0	40	60	100	4
6	BEE3002	Engineering Material	3	2	0	40	60	100	4
PRACTICAL/TRAINING/PROJECT									
7	BEC3505	Electronics Lab	0	0	2	80	20	100	1
8	BEE3501	Electrical Simulation Lab	0	0	2	80	20	100	1
9	BEE3502	Network Lab	0	0	2	80	20	100	1
TOTAL			17	9	6	480	420	900	24

L - Lecture
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II YEAR: IV SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	---/ BMA4001	Science Based Open ElectiveI ¹ / Mathematics-III	3	2	0	40	60	100	4
2	BHU4019/ BHU4018	Organizational Sociology / Organizational Psychology	2	0	0	40	60	100	2
3	BEC4008	Micro-Processor & Micro Controller	3	1	0	40	60	100	3
4	BEE4001	EMMI	3	1	0	40	60	100	3
5	BEE4002	EMEC-I	3	2	0	40	60	100	4
6	BEE4003	Signal and System	3	2	0	40	60	100	4
PRACTICAL/TRAINING/PROJECT									
7	BEC4506	Micro-Processor Lab	0	0	2	80	20	100	1
8	BEE4501	Electrical Measurement Lab	0	0	2	80	20	100	1
9	BEE4502	EMEC-I Lab	0	0	2	80	20	100	1
TOTAL			17	8	6	480	420	900	23

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III YEAR: V SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	BMG5006/ BMG5007	Engineering and Managerial Economics / Principles of Management	3	0	0	40	60	100	3
2	BEE5001	EMEC-II	3	2	0	40	60	100	4
3	BEE5002	Control System	3	2	0	40	60	100	4
4	BEE5003	Electrical Instrumentation and Process Control	3	0	0	40	60	100	3
5	BEE5004	Fundamentals of EM Field Theory	3	2	0	40	60	100	4
6	BEE5005	Element of Power System	3	2	0	40	60	100	4
PRACTICAL/TRAINING/PROJECT									
7	BEE5501	EMEC-II Lab	0	0	2	80	20	100	1
8	BEE5502	Control Lab	0	0	2	80	20	100	1
9	BEE5503	Instrumentation Lab	0	0	2	80	20	100	1
TOTAL			18	8	6	480	420	900	25

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III YEAR: VI SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	BMG6006/ BMG6007	Engineering and Managerial Economics/ Principles of Management	3	0	0	40	60	100	3
2	BEC6008	Communication Engineering	3	0	0	40	60	100	3
3	BEE6001	Power Electronics	3	2	0	40	60	100	4
4	BEE6002	Power System Analysis	3	2	0	40	60	100	4
5	BEE6003	Power System Operation & Control	3	2	0	40	60	100	4
6	---	Department Elective-I	3	1	0	40	60	100	3
PRACTICAL/TRAINING/PROJECT									
7	BEC6508	Communication Engineering Lab	0	0	2	80	20	100	1
8	BEE6501	Power Electronics Lab	0	0	2	80	20	100	1
9	BEE6502	Seminar	0	0	2	100	-	100	1
10	BEE6503	Industrial Visit	0	0	0	100	-	100	1
TOTAL			18	7	6	600	400	1000	25

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IV YEAR: VII SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	BEE7001	Electric Drives	3	2	0	40	60	100	4
2	BEE7002	Switch Gear and Protection	3	1	0	40	60	100	3
3	MEE7004	Electrical Drives	4	2	0	40	60	100	5
4	MEE7005	Industrial Power Electronics	4	2	0	40	60	100	5
5	MEE7006	Modeling & Analysis of Electrical Machines	4	2	0	40	60	100	5
PRACTICAL/TRAINING/PROJECT									
6	BEE7501	Electric Drives Lab	0	0	2	80	20	100	1
7	BEE7503	Summer Training	0	0	2	100	-	100	1
8	MEE7503	Power Electronics Lab	0	0	3	80	20	100	2
TOTAL			18	9	7	460	340	800	26

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IV YEAR: VIII SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1	MEE8004	Advanced Electrical Drives Systems	4	2	0	40	60	100	5
2	MEE8005	Advanced Power Electronics	4	2	0	40	60	100	5
3	MEE8006	Modeling & Simulation of Power Electronic Systems	4	2	0	40	60	100	5
4	---	Department Elective II	3	1	0	40	60	100	3
5	---	Elective-I	4	2	0	40	60	100	5
PRACTICAL/TRAINING/PROJECT									
6	MEE8503	Seminar	0	0	2	100	-	100	1
7	MEE8504	Advance Electric Drives Lab	0	0	4	80	20	100	2
TOTAL			19	9	6	380	320	700	26

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V YEAR: IX SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
THEORY									
1	---	Elective-II	4	2	0	40	60	100	5
2	---	Elective-III	4	2	0	40	60	100	5
PRACTICAL/TRAINING/PROJECT									
3	MEE9501	Seminar/Minor Project	-	-	4	100	-	100	4
4	MEE9502	Dissertation-I	-	-	6	100	-	100	6
TOTAL			8	4	10	280	120	400	20

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V YEAR: X SEMESTER

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
PRACTICAL/TRAINING/PROJECT									
1	MEE0501	Dissertation-II	-	-	18	80	20	100	18
2	MEE0502	Comprehensive viva	-	-	-	100	-	100	2
TOTAL			-	-	18	180	20	200	20

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LIST OF ELECTIVES (B. TECH.)

S. NO.	SUBJECT CODE	SUBJECT NAME	SEMESTER
SCIENCE BASED OPEN ELECTIVES I			
1	BCY3301/BCY4301	Industrial Chemical & Environment	III/IV SEMESTER
2	BCY3302/BCY4302	Polymer Technology	
3	BMA3301/BMA4301	Discrete Mathematics	
4	BST3301/BST4301	Statistical & Numerical Analysis	
5	BPH3301/BPH4301	Nano Science	
6	BPH3302/BPH4302	Space Science	
DEPARTMENT ELECTIVE-I			
1	BEE6101	Special Electrical Machine	VI SEMESTER
2	BEE6102	Digital control system	
3	BEE6103	Intelligent instrumentation	
4	BCS6105	Object oriented system and C ⁺⁺	
DEPARTMENT ELECTIVE-II			
1	BEE8101	Energy Efficiency and Conservation	VIII SEMESTER
2	BEE8102	Distributed Generation & Micro Grid	
3	BCS8107	Computer Networks	
4	BEC8105	Digital Communication	

LIST OF ELECTIVES (M.TECH.)

S. NO.	SUBJECT CODE	SUBJECT
ELECTIVE-I (SEMESTER-VIII)		
1	MEE8104	Microprocessor Controlled Electric Drives
2	MMA8101	Optimization Techniques
3	MEE8105	HVDC Systems
4	MEE8103	Active Power Conditioning

ELECTIVE-II (SEMESTER-IX)		
1	MEE9101	Switched Mode Power Converters
2	MEE9105	Special Machine
3	MEE9103	Neural Network & Fuzzy Control
4	MEE9106	Digital Controllers Architecture and Interfacing
ELECTIVE-III (SEMESTER-IX)		
1	MEE9201	Power Quality
2	MEE9202	Power Electronics Applications in Renewable Energy Systems
3	MEE9205	Digital Signal Processing and its Applications
4	MEE9206	Electric Traction System