B. Tech. COURSE STRUCTURE

ELECTRICAL ENGINEERING

NIT SILCHAR

3rd Semester

Code	Subject	L-T-P	Credits
MA 201	Mathematics-III	3-1-0	8
HU 201	Humanities-II (Industrial Sociology and Accountancy)	3-0-0	6
EC 201	Electrical Science - II	3-1-0	8
EC 202*	Electrical Science Lab[i]	0-0-2	2
EE 201	Electrical Engineering Materials	3-0-0	6
EE 202	Network Theory	3-1-0	8
EE 203	Network Theory Lab	0-0-2	2
EE 204	Measurement & Instruments	3-0-0	6
EE 205	Measurement Lab	0-0-2	2
	TOTAL	**18-3-6**	**48**

4th Semester

Code	Subject	L-T-P	Credit
MA 205	Probability Theory & Statistical Methods	3-1-0	8
CS 221	Programming and Data Structure	3-0-0	6
EE 210	Digital Electronics	3-0-0	6
EE 211	Digital Electronics Lab	0-0-2	2
EE 206	Power System-I	3-1-0	8
EE 207	Electrical Machines-I	3-1-0	8
EE 208	Electrical Machines-I Lab	0-0-2	2
EE 209	Electro-magnetic Field Theory	3-0-0	6
	TOTAL	**18-3-4**	**46**

5th Semester

Code	Subject	L-T-P	Credit
EE 301	Control System-I	3-1-0	8
EE 302	Control System Lab	0-0-2	2
EE 303	Power Electronics	3-1-0	8
EE 304	Power Electronics Lab	0-0-2	2
EE 305	Power System-II	3-1-0	8
EE 306	Analog & Digital Communications	3-1-0	8
EE 307	Computer Organization & Architecture	3-1-0	8
	TOTAL	**15-5-4**	**44**

B. Tech. COURSE STRUCTURE

6th Semester

Code	Subject	L-T-P	Credit
HU 301	Humanities (Managerial Economics)	3-1-0	8
EE 308	Microprocessors & Microcontrollers	3-1-0	8
EE 309	Microprocessor Lab	0-0-2	2
EE 310	Control system-II	3-1-0	8
EE 311	Electrical Machines-II	3-1-0	8
EE 312	Electrical Machines-II Lab.	0-0-2	2
EE 313	Switchgear & Industrial Protection	3-1-0	8
	TOTAL	**15-5-4**	**44**

7th Semester

Code	Subject	L-T-P	Credit
EE 401	Digital Signal Processing	3-0-0	6
EE 402	Industrial Drives	3-1-0	8
EE 403	Instrumentation	3-1-0	8
EE XXX	Elective-I	3-0-0	6
EE XXX	Elective-II	3-0-0	6
EE 404	Project-I	0-0-5	5
EE 314	Industrial Training		2
EE 406	Advance Electrical Lab-I	0-0-2	2
	TOTAL	**15-2-7**	**43**

8th Semester

Code	Subject	L-T-P	Credit
HU 401	Management and Economics of Globalisation	3-0-0	6
EE 405	Computer Aided Design of Electrical Systems	3-1-0	6
EE XXX	Elective-III (Open/Institute)	3-0-0	6
EE XXX	Elective-IV	3-0-0	6
EE 410	Project-II	0-0-15	15
CE 414	Environmental Studies	3-0-0	6
	TOTAL	**15-1-15**	**45**

Total Credit in B. Tech Electrical Engg Course = 368

Electives I & II

1. EE 421 Computer Application in Power System
2. EE 422 Advanced Electrical Machines
3. EE 423 Flexible AC Transmission
4. EE 424 EHV Transmission
5. EE 425 Higher Control Systems
6. EE 426 Advanced Power Electronics and Devices
7. EE 427 Integrated Circuits and VLSI Design
8. EE 429 Intelligent and Knowledge Based Systems
9. EE 430 High Voltage AC/DC
10. EE 431 Industrial Management

Elective-III & IV

1. EE 441 Modeling and Simulation
2. EE 442 Electric Power Utilization and Traction
3. EE 443 Biomedical Engineering
4. EE 444 Power Qualities
5. EE 445 Demand Side Management
6. EE 446 Distribution Systems Planning and Automation
7. EE 447 Illumination Technology
8. EE 448 Renewable Energy Sources and Management
9. EE 449 Intelligent Algorithms for Power Systems
10. EE 450 Foundation in Optimization Methods
11. EE 451 Hydro-electric Engineering
12. EE 452 Advanced Instrumentation
13. EE 453 Industrial Instrumentation
14. EE 454 Soft Computing Technique and Applications.

* To be shared between Electrical and Electronics & Communication Engineering Departments