

SNS COLLEGE OF TECHNOLOGY

COIMBATORE – 641035

(AN AUTONOMOUS INSTITUTION)

REGULATION – 2016

CHOICE BASED CREDIT SYSTEM

SUGGESTED CURRICULA I – IV SEMESTERS

AND

SYLLABI I – IV SEMESTERS

M.E. – POWER SYSTEM ENGINEERING

SNS COLLEGE OF TECHNOLOGY, COIMBATORE – 641035**(AN AUTONOMOUS INSTITUTION)****REGULATION – 2016****CHOICE BASED CREDIT SYSTEM****SUGGESTED CURRICULA I – IV SEMESTERS****AND****SYLLABI I – IV SEMESTERS****M. E. POWER SYSTEM ENGINEERING****SEMESTER I**

S.NO.	COURSE CODE	COURSE TITLE	CAT	CONTACT PERIODS	L	T	P	C	PRE-REQUISITES
THEORY									
1.	16MA603	Applied Mathematics for Electrical Engineers	FC	4	3	1	0	4	-
2.	16PS601	Power System Analysis	PC	4	3	1	0	4	-
3.	16PS606	Flexible AC Transmission systems	PC	3	3	0	0	3	-
4.	16PS603	System Theory	PC	4	3	1	0	4	-
5.	16PS604	Power System Protection	PC	3	3	0	0	3	-
6.	16PSXXX	Elective I	PE	3	3	0	0	3	-
PRACTICAL									
7.	16PS610	Power System Simulation Lab-I	EEC	2	0	0	2	1	-
8.	16PS619	Power Electronics and Drives Lab	EEC	2	0	0	2	1	-
TOTAL				25	18	3	4	23	

SEMESTER II

S.NO.	COURSE CODE	COURSE TITLE	CAT	CONTACT PERIODS	L	T	P	C	PRE-REQUISITES
THEORY									
1.	16PS605	Power System Dynamics	PC	3	3	0	0	3	-
2.	16PS602	Power System Operation and Control	PC	3	3	0	0	3	-
3.	16PS607	Power Quality	PC	3	3	0	0	3	-
4.	16PS608	Restructured Power Systems	PC	3	3	0	0	3	16PS602
5.	16PSXXX	Elective II	PE	3	3	0	0	3	-
6.	16PSXXX	Elective III	PE	3	3	0	0	3	-
PRACTICAL									
7.	16PS611	Power System Simulation Laboratory II	EEC	2	0	0	2	1	-
8.	16PS620	Technical Seminar	EEC	2	0	0	2	1	-
TOTAL				22	18	0	4	20	

SEMESTER III

S.NO.	COURSE CODE	COURSE TITLE	CAT	CONTACT PERIODS	L	T	P	C	PRE-REQUISITES
THEORY									
1.	16PSXXX	Elective III	PE	3	3	0	0	3	-
2.	16PSXXX	Elective IV	PE	3	3	0	0	3	-
3.	16PSXXX	Open Elective	OE	3	3	0	0	3	-
PRACTICAL									
4.	16PS701	Project Work Phase-I	EEC	12	0	0	12	6	-
TOTAL				21	9	0	12	15	

SEMESTER IV

S.NO.	COURSE CODE	COURSE TITLE	CAT	CONTACT PERIODS	L	T	P	C	PRE-REQUISITES
THEORY									
1.	16PS702	Project Work Phase-II	EEC	24	0	0	24	12	-
TOTAL				24	0	0	24	12	

FOUNDATION COURSE (FC)

S.NO.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	T	P	C	PRE-REQUISITES
1.	16MA603	Applied Mathematics for Electrical Engineers	3	3	1	0	4	

PROFESSIONAL CORE (PC)

S.NO.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	T	P	C	PRE-REQUISITES
1.	16PS601	Power System Analysis	3	3	1	0	4	-
2.	16PS602	Power System Operation and Control	3	3	0	0	3	-
3.	16PS603	System Theory	3	3	1	0	4	-
4.	16PS604	Power System Protection	3	3	0	0	3	-
5.	16PS605	Power System Dynamics	3	3	0	0	3	-
6.	16PS606	Flexible AC Transmission Systems	3	3	0	0	3	16PS613
7.	16PS607	Power Quality	3	3	0	0	3	-
8.	16PS608	Restructured Power Systems	3	3	0	0	3	16PS602

PROFESSIONAL ELECTIVES

S.NO.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	T	P	C	PRE-REQUISITES
1.	16PS612	New and Renewable Energy Sources	3	3	0	0	3	-
2.	16PS613	Analysis of Electrical Machines	3	3	0	0	3	-
3.	16PS614	Analysis of Inverters	3	3	0	0	3	-
4.	16PS615	Power System Simulation Software	3	3	0	0	3	-

5.	16PS616	Special Electrical Machines and Controllers	3	3	0	0	3	-
6.	16PS617	Energy Auditing And Management	3	3	0	0	3	16PS607
7.	16PS618	Power Electronics for Renewable Energy Systems	3	3	0	0	3	16PS614
8.	16PS621	Electrical Transients in Power Systems	3	3	0	0	3	16PS607
9.	16PS706	Smart Grid Technology	3	3	0	0	3	16PS608
10.	16PS707	Power Electronics Application for Power Systems	3	3	0	0	3	16PS614
11.	16PS708	Distributed Generation and Micro grid	3	3	0	0	3	16PS612
12.	16PS709	Advanced Power System Dynamics	3	3	0	0	3	16PS605
13.	16PS710	Power System Planning and Reliability	3	3	0	0	3	-
14.	16PS711	Power System Security	3	3	0	0	3	-
15.	16PS712	Industrial Power System Analysis and Design	3	3	0	0	3	16PS601
16.	16PS713	Real Time Control of Power System	3	3	0	0	3	-
17.	16PS714	High Voltage Direct Current Transmission	3	3	0	0	3	-
18.	16PS715	Wind Energy Conversion Systems	3	3	0	0	3	-
19.	16PS716	Power System Economics	3	3	0	0	3	-
20.	16PS717	Research Methodology	3	3	0	0	3	-
21.	16PS718	Applications of MEMS Technology	3	3	0	0	3	-
22.	16PS719	Microcontroller Based System Design	3	3	0	0	3	-
23.	16CS707	Soft Computing Techniques	3	3	0	0	3	-

EMPLOYABILITY ENHANCEMENT COURSES (EEC)

S.NO.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	T	P	C	PRE-REQUISITES
1.	16PS610	Power System Simulation Lab-I	2	0	0	2	1	-
2.	16PS611	Power System Simulation Lab-II	2	0	0	2	1	-
3.	16PS619	Power Electronics and Drives Lab	2	0	0	2	1	-
4.	16PS620	Technical Seminar	2	0	0	2	1	-
5.	16PS701	Project Work Phase-I	12	0	0	12	6	-
6.	16PS702	Project Work Phase-II	24	0	0	24	12	-

OPEN ELECTIVE OFFERED TO OTHER PG PROGRAMMES

S.NO.	COURSE CODE	COURSE TITLE	CONTACT PERIODS	L	T	P	C	PRE-REQUISITES
1.	16PS001	Electric and Hybrid Vehicles	3	3	0	0	3	-
2.	16PS002	PLC and SCADA Systems	3	3	0	0	3	-
3.	16PS003	Energy Scenario, Policy And Environment	3	3	0	0	3	-
4.	16PS004	Ethical Values for Business	3	3	0	0	3	-

S.No.	SUBJECT AREA	Credits Per Semester				Total Credits
		I	II	III	IV	
1	FC	4	0	0	0	4
2	PC	14	12	0	0	26
3	PE	3	6	9	0	18
4	EEC	2	2	6	12	22
	TOTAL	23	20	15	12	70