

B'ANNA UNIVERSITY, CHENNAI
AFFILIATED INSTITUTIONS
REGULATIONS – 2017
CHOICE BASED CREDIT SYSTEM
M.E. POWER SYSTEMS ENGINEERING
I TO VI SEMESTERS CURRICULUM (PART TIME)

SEMESTER I

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	MA5155	Applied Mathematics for Electrical Engineers	FC	4	4	0	0	4
2.	PS5101	Advanced Power System Analysis	PC	4	4	0	0	4
3.	PS5102	Power System Operation and Control	PC	3	3	0	0	3
PRACTICALS								
4.	PS5111	Power System Simulation Lab	PC	4	0	0	4	2
TOTAL				15	11	0	4	13

SEMESTER II

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	PS5201	Power System Dynamics	PC	3	3	0	0	3
2.	PS5202	HVDC and FACTS	PC	3	3	0	0	3
3.	PS5203	Advanced Power System Protection	PC	3	3	0	0	3
PRACTICALS								
4.	PS5211	Advanced Power System Simulation Laboratory	PC	4	0	0	4	2
TOTAL				13	9	0	4	11

SEMESTER III

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	PS5103	Analysis and Computation of Electromagnetic Transients in Power Systems	PC	3	3	0	0	3
2.	IN5152	System Theory	PC	5	3	2	0	4
3.		Professional Elective I	PE	3	3	0	0	3
TOTAL				11	9	2	0	10

SEMESTER IV

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	PS5204	Restructured Power System	PC	3	3	0	0	3
2.		Professional Elective II	PE	3	3	0	0	3
3.		Professional Elective III	PE	3	3	0	0	3
PRACTICALS								
4.	PS5212	Technical Seminar	EEC	2	0	0	2	1
TOTAL				11	9	0	2	10

SEMESTER V

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.		Professional Elective IV	PE	3	3	0	0	3
2.		Professional Elective V	PE	3	3	0	0	3
3.		Professional Elective VI	PE	3	3	0	0	3
PRACTICALS								
4.	PS5311	Project Work Phase I	EEC	12	0	0	12	6
TOTAL				21	9	0	12	15

SEMESTER VI

SI.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
PRACTICALS								
1.	PS5411	Project Work Phase II	EEC	24	0	0	24	12
TOTAL				24	0	0	24	12

TOTAL NO. OF CREDITS : 71

PROFESSIONAL ELECTIVES (PE)*

**Semester I
Elective I**

S.No	Course Code	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.	PX5151	Analysis of Electrical Machines	PE		3	0	0	3
2.	PX5152	Analysis and Design of Power Converters	PE		3	0	0	3
3.	PS5001	Industrial Power System Analysis and Design	PE		3	0	0	3

**Semester II
Elective II and III**

1.	PS5091	Smart Grid	PE		3	0	0	3
2.	PS5092	Solar and Energy Storage Systems	PE		3	0	0	3
3.	PS5002	Power System Reliability	PE		3	0	0	3
4.	ET5071	Advanced Digital Signal Processing	PE		3	0	0	3
5.	PS5071	Distributed Generation and Microgrid	PE		3	0	0	3
6.	IN5091	Soft Computing Techniques	PE		3	0	0	3

**Semester III
Elective IV, V and VI**

1.	PS5003	Electrical Distribution System	PE		3	0	0	3
2.	PS5072	Energy Management and Auditing	PE		3	0	0	3
3.	PX5071	Wind Energy Conversion Systems	PE		3	0	0	3
4.	PS5073	Electric Vehicles and Power Management	PE		3	0	0	3
5.	PX5092	Electromagnetic Interference and Compatibility	PE		3	0	0	3
6.	PX5091	Control System Design for Power Electronics	PE		3	0	0	3
7.	PS5004	Principles of Electric Power Transmission	PE		3	0	0	3
8.	PS5005	Advanced Power System Dynamics	PE		3	0	0	3
9.	PS5006	Design of Substations	PE		3	0	0	3

***Professional Electives are grouped according to elective number as was done previously.**