

PHD  
23-24  
24-25

**JSPM University Pune**

**Faculty of Science and Technology**

**School of Electrical and Computational Sciences**



**NEP aligned Structure**

**for**

**Doctorate of Philosophy**

**(Electrical Engineering)**

**(AY: 2023-24 and AY: 2024-25 )**



# JSPM University Pune

FACULTY OF SCIENCE & TECHNOLOGY

SCHOOL OF ELECTRICAL AND COMMUNICATION SCIENCES

Doctor of Philosophy  
(ELECTRICAL ENGINEERING)

COURSE STRUCTURE  
(NEP 2020 Aligned)

W. E. F

2023-2024

RELEASE DATE

01/07/2023

REVISION NO.

0.0 (NEP)

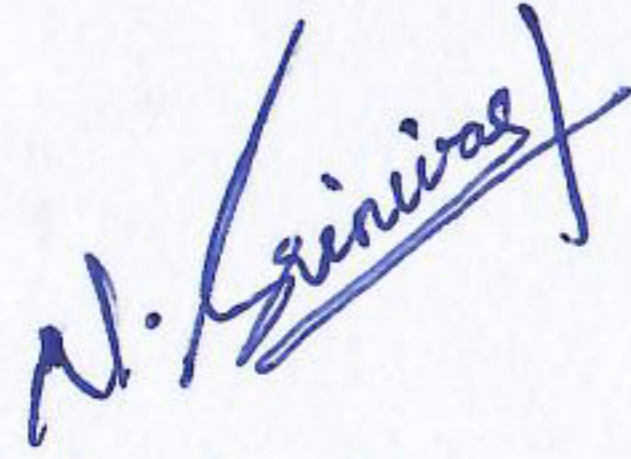
## SEMESTER I (LEVEL 8)

COURSE			TEACHING SCHEME				EXAMINATION SCHEME AND MARKS								TOTAL	CREDITS
TYPE	CODE	COURSE NAME	Hours / Week				THEORY (Equal Weightage for CIE and ESE)			PRACTICAL (Equal Weightage for CIE and ESE)		ORAL (Equal Weightage for CIE and ESE)				
			L	T	P	EL	CONTINUOUS IN SEMESTER EVALUATION (100 Marks)			END SEMESTER EXAMINATION (100 / 50 Marks)	CONTINUOUS IN SEMESTER EVALUATION (50 Marks)	END SEMESTER EXAMINATION (50 Marks)	CONTINUOUS IN SEMESTER EVALUATION (50 Marks)	END SEMESTER EXAMINATION (50 Marks)		
							T1 (30 Marks)	T2 (30 Marks)	Assignments (40 Marks)							
PCC	-	Domain Specific Course-1 / MOOC	3	-	-	-	30	30	40	100	-	-	-	-	100	3
PCC	-	Domain Specific Course-2 / MOOC	3	-	-	-	30	30	40	100	-	-	-	-	100	3
PSMC	230GMAD01	Foundations of Mathematical Modelling and Statistical Techniques	3	-	-	-	30	30	40	100	-	-	-	-	100	3
RMC	231IRMD01	Research Publication and Ethics	2	-	-	-	30	30	40	50	-	-	-	-	50	2
RMC	231IRMD02	Research Proposal Writing	1	1	-	-	-	-	-	-	-	-	50	50	50	2
RMC	231IRMD03	Writing Literature Review	2	-	-	-	-	-	-	-	-	-	50	50	50	2
SLC	231ISR01	Seminar	-	-	-	4	-	-	-	-	-	-	50	50	50	1
<b>TOTAL</b>			<b>14</b>	<b>1</b>	<b>0</b>	<b>4</b>									<b>500</b>	<b>16</b>



Sem.	PCC (Domain Specific Course-1 / MOOC)	
III	Course Code	230GEED01
	Course Name	Smart Grid: Basics to Advanced Technologies/ MOOC
	Course Code	230GETD06
	Course Name	Fundamentals of Artificial Intelligence/MOOC

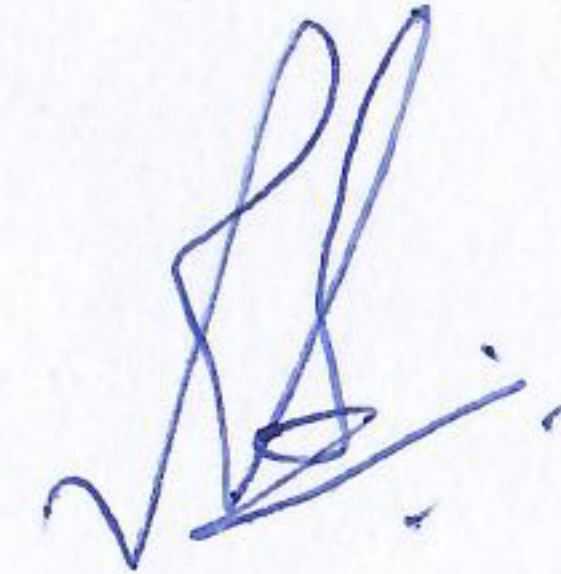
Sem.	PCC (Domain Specific Course-2 / MOOC)				
III	Course Code	230GEED02	230GEED03	230GEED04	230GEED05
	Course Name	Power Quality/ MOOC	Introduction to Electric and Hybrid Electric Vehicle/ MOOC	Sustainable Power Generation Systems/ MOOC	Design of Photovoltaic Systems/ MOOC
	Course Code	230GEED06			
	Course Name	Power Electronics Application in Power System /MOOC			



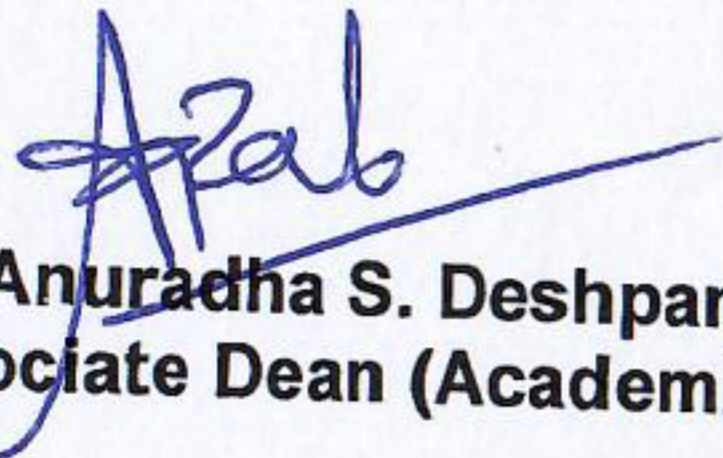
**Dr. Srinivas Nagaballi**  
Programme Coordinator, SECS



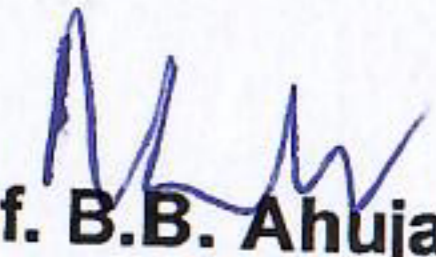
**Prof. Rajendrakumar A. Patil**  
Director, School of Electrical & Communication Sciences



**Prof. R. S. Deshpande**  
Dean, Faculty of Science and Technology



**Dr. Anuradha S. Deshpande**  
Associate Dean (Academics)

**Prof. B.B. Ahuja**  
Vice Chancellor, JSPM University Pune



# JSPM University Pune

FACULTY OF SCIENCE & TECHNOLOGY  
SCHOOL OF ELECTRICAL AND COMMUNICATION SCIENCES

Doctor of Philosophy  
(ELECTRICAL ENGINEERING)

COURSE STRUCTURE  
(NEP 2020 Aligned)

W. E. F

2024-2025

RELEASE DATE

01/07/2024

REVISION NO.

0.0 (NEP)

## SEMESTER I (LEVEL 8)

TYPE	CODE	COURSE NAME	TEACHING SCHEME				EXAMINATION SCHEME AND MARKS										TOTAL	CREDITS
			Hours / Week				THEORY (Equal Weightage for CIE and ESE)				PRACTICAL (Equal Weightage for CIE and ESE)		ORAL (Equal Weightage for CIE and ESE)					
			L	T	P	EL	CONTINUOUS IN SEMESTER EVALUATION (100 Marks)			END SEMESTER EXAMINATION (100 / 50 Marks)	CONTINUOUS IN SEMESTER EVALUATION (50 Marks)	END SEMESTER EXAMINATION (50 Marks)	CONTINUOUS IN SEMESTER EVALUATION (50 Marks)	END SEMESTER EXAMINATION (50 Marks)				
							T1 (30 Marks)	T2 (30 Marks)	Assignments (40 Marks)									
PCC	-	Domain Specific Course-1 / MOOC	3	-	-	-	30	30	40	100	-	-	-	-	100	3		
PCC	-	Domain Specific Course-2 / MOOC	3	-	-	-	30	30	40	100	-	-	-	-	100	3		
PSMC	230GMAD01	Foundations of Mathematical Modelling and Statistical Techniques	3	-	-	-	30	30	40	100	-	-	-	-	100	3		
RMC	231IRMD01	Research Publication and Ethics	2	-	-	-	30	30	40	50	-	-	-	-	100	3		
RMC	231IRMD02	Research Proposal Writing	1	1	-	-	-	-	-	-	-	-	-	-	50	2		
RMC	231IRMD03	Writing Literature Review	2	-	-	-	-	-	-	-	-	-	50	50	50	2		
SLC	231ISRD01	Seminar	-	-	-	4	-	-	-	-	-	-	50	50	50	2		
TOTAL			14	1	0	4							50	50	50	1		
															500	16		



L-Lecture  
Format No.: JSPMUni/ACAD/001

T-Tutorial  
Rev. No.:0.0

P-Practical Session (Laboratory)  
Rev. Date:01/07/2024

EL-Experiential Learning  
Page 1 of 2

Sem.	PCC (Domain Specific Course-1 / MOOC)	
III	Course Code	230GEED01
	Course Name	Smart Grid: Basics to Advanced Technologies/ MOOC
	Course Code	230GETD06
	Course Name	Fundamentals of Artificial Intelligence/MOOC
	Course Code	230GEED09
	Course Name	Introduction to Machine Learning

Sem.	PCC (Domain Specific Course-2 / MOOC)				
III	Course Code	230GEED02	230GEED03	230GEED04	230GEED05
	Course Name	Power Quality/ MOOC	Introduction to Electric and Hybrid Electric Vehicle/ MOOC	Sustainable Power Generation Systems/ MOOC	Design of Photovoltaic Systems/ MOOC
	Course Code	230GEED06	230GEED07	230GEED08	
	Course Name	Power Electronics Application in Power System /MOOC	Renewable Energy Engineering	Advance Power Electronics	

*N. Srinivas*

**Dr. Srinivas Nagaballi**  
Programme Coordinator, SECS

*R*

**Prof. Rajendrakumar A. Patil**  
Director, School of Electrical & Communication Sciences

*R.S.*

**Prof. R. S. Deshpande**  
Dean, Faculty of Science and Technology

*A.S.*

**Dr. Anuradha S. Deshpande**  
Associate Dean (Academics)

*B.B.*

**Prof. B.B. Ahuja**  
Vice Chancellor, JSPM University Pune

