



JSPM University Pune

FACULTY OF SCIENCE & TECHNOLOGY

SCHOOL OF ELECTRICAL AND COMMUNICATION SCIENCES

COURSE STRUCTURE (NEP 2020 Aligned)

W. E. F

2026-2027

RELEASE DATE

01/07/2026

MASTER OF TECHNOLOGY (POWER ELECTRONICS AND DRIVES)

REVISION NO.

0.0 (NEP)

SEMESTER III (LEVEL-7)

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 INSEMESTER EVALUATION (100 Marks)			END SEMESTER EXAMINATION (100 / 50 Marks)	CONTINUOUS INSEMESTER EVALUATION (50 Marks)	END SEMESTER EXAMINATION (50 Marks)	CONTINUOUS INSEMESTER EVALUATION (50 Marks)	END SEMESTER EXAMINATION (50 Marks)		
							T1 (30 Marks)	T2 (30 Marks)	Assignments (40 Marks)							
PEC	---	Program Elective Course -I/MOOC	3	-	-	-	30	30	40	100	-	-	-	-	100	3
PEC	---	Program Elective Course -II/MOOC	3	-	-	-	30	30	40	100	-	-	-	-	100	3
IOC	---	Interdisciplinary Open Elective Course -I	2	-	-	-	30	30	40	100	-	-	-	-	100	2
IOC	---	Interdisciplinary Open Elective Course -II	2	-	-	-	30	30	40	100	-	-	-	-	100	2
VEC (HSM C)	230USYB01_03	Behavioral Science and Ethics	2	-	-	-	30	30	40	50	-	-	-	-	50	2
SLC	250GPEM17_03	Seminar	-	-	-	8	-	-	-	-	-	-	50	50	50	2
PROJ	250GPEM18_03	Field Project	-	-	4	8	-	-	-	-	-	-	100	100	100	4
TOTAL			12	0	4	16									600	18



L-Lecture

T-Tutorial

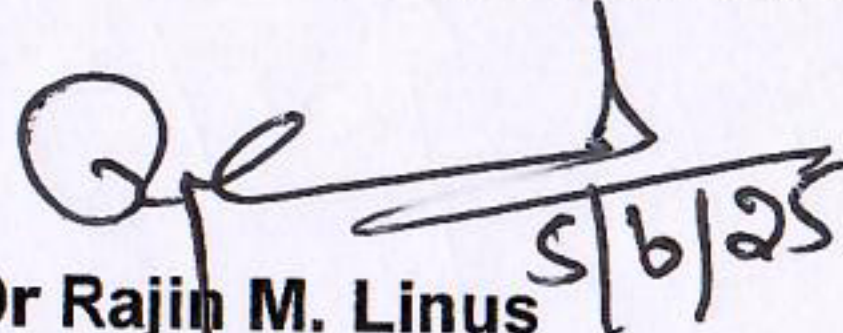
P-Practical Session (Laboratory)

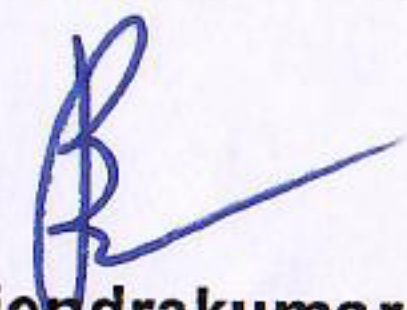
EL-Experiential Learning

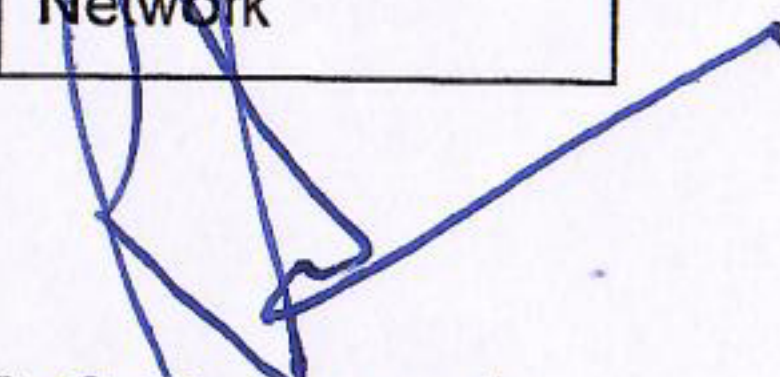
Sem.	Programme Elective Course (PEC- I, II)			
	Specialization/ Verticals	Renewable Energy and Smart Grid	Electric Vehicle (EV) and Control	Energy Management and Audit
III	PEC-I			
	Course Code	250GPEM11_03	250GPEM13_03	250GPE M15_03
	Course Name	Power Electronics for Renewable Energy System	EV Architecture and Power Train Design	Energy Management
	PEC-II			
	Course Code	250GPEM12_03	250GPEM14_03	250GPEM16_03
	Course Name	Energy Storage and Battery Management System	Drives and Control for EV	Energy Audit and Instrumentation
IV	PEC-III			
	Course Code	250GPEM19_04	250GPEM21_04	250GPEM23_04
	Course Name	Modeling and Simulation of Renewable Energy System	EV Charging and Battery Management System	Power Quality and Mitigation
	PEC-IV			
	Course Code	250GPEM20_04	250GPEM22_04	250GPEM24_04
	Course Name	Smart Grid and Communications	EV Simulation and Embedded System	Energy Conservation in Drives

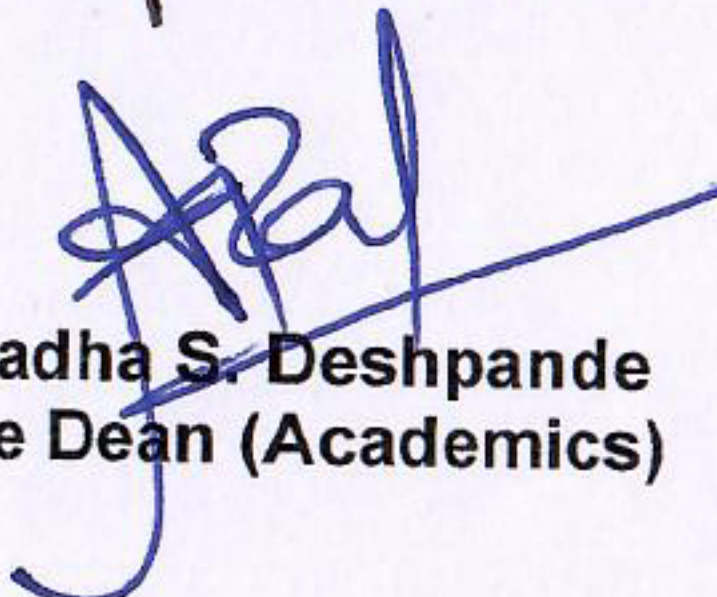
Sem.	Interdisciplinary Open Elective Course -I (IOC-I)			
III	Course Code	230VMSM05_03	230GCSB160_03	230VMSM08_03
	Course Name	Fundamentals of Financial Management	Introduction to Deep Learning	Entrepreneurship and Start up Management

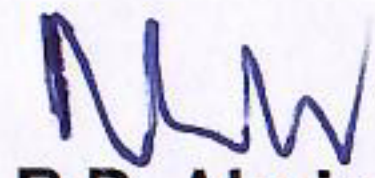
Sem.	Interdisciplinary Open Elective Course -II (IOC-II)			
III	Course Code	230GRAM51_03	230GCSM32_03	230GCSB158_03
	Course Name	Industrial Robotics and Automation	Machine Learning in Practice	Basics of Neural Network


Dr Rajin M. Linus
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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



L-Lecture

T-Tutorial

P-Practical Session (Laboratory)

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			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)	Assign-ments (40 Marks)							
PEC	---	Program Elective Course -III / MOOC	3	-	-	-	30	30	40	100	-	-	-	-	100	3
PEC	---	Program Elective Course -IV/ MOOC	3	-	-	-	30	30	40	100	-	-	-	-	100	3
PROJ	250GPEM25_04	Project / Internship with Project	-	-	12	24	-	-	-	-	200	200	100	100	300	12
TOTAL			6	0	12	24									500	18



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5/6/25

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