



JSPM UNIVERSITY PUNE

Recognized by UGC u/s 2 (f) of UGC Act 1956 and enacted by the
State Government of Maharashtra - JSPM University Act, 2022 (Mah.IV of 2023)

JSPM University Pune
Faculty of Science and Technology
School of Basic and Applied Sciences



NEP aligned Curriculum Structure

for

B.Sc (CS)

(Effective from AY: 2024-25)



JSPM University Pune

FACULTY OF SCIENCE & TECHNOLOGY

SCHOOL OF BASICS AND APPLIED SCIENCES

COURSE STRUCTURE
(NEP 2020 Aligned)

W. E. F

2024-2025

RELEASE DATE

01/07/2024

FIRST YEAR BACHELOR OF SCIENCE IN COMPUTER SCIENCE

REVISION NO.

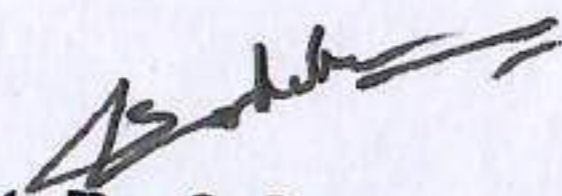
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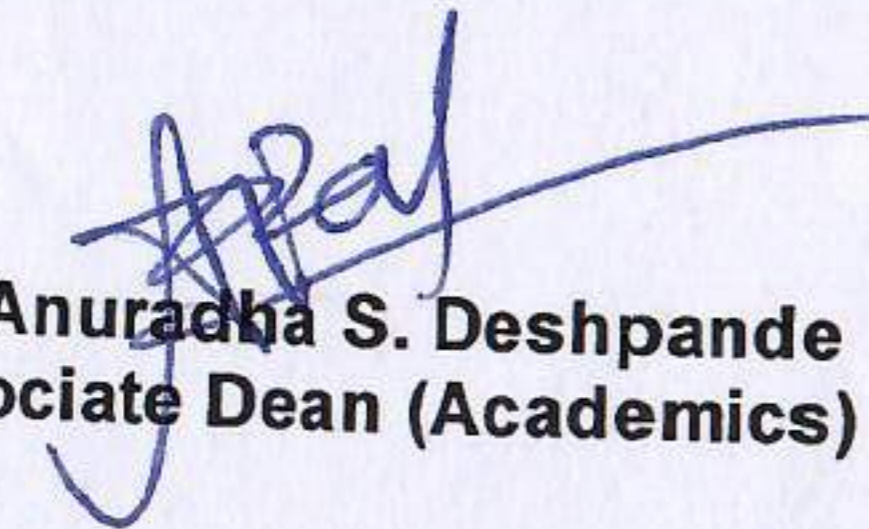
SEMESTER I (LEVEL 4.5)


COURSE		TEACHING SCHEME	EXAMINATION SCHEME AND MARKS													C R E D I T S
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)		T O T A L	
			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)							
BSC	230GMAB02_01	Discrete Mathematics	2	1	-	-	30	30	40	100	-	-	-	-	100	3
PCC	231GSCB02_01	Database Management Systems	2	-	-	-	30	30	40	50	-	-	-	-	50	2
IOC	---	Interdisciplinary Open Course	2	-	-	-	30	30	40	100	-	-	-	-	100	2
SEC	240GSCB01_01	Problem Solving using C Programming	2	-	2	-	-	-	-	-	50	50	50	50	100	3
VSC	230IDCB01_01	Design Thinking and Creativity	1	-	-	2	-	-	-	-	-	-	50	50	50	1.5
AEC	230UENB01_01	Effective Communication Skills	1	-	2	-	30	30	40	50	-	-	-	-	50	2
IKS	230UHIB02_01	Wisdom through Ancient Indian History	2	-	-	-	30	30	40	50	-	-	-	-	50	2
VEC	230GCEB02_01	Environment and Sustainability	2	-	-	-	30	30	40	50	-	-	-	-	50	2
LC	230GSCB04_01	Database Management Systems Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1
	240GDIB01_01	Data Manipulation and Representation using Excel	1	-	2	-	-	-	-	-	50	50	-	-	50	2
LLC	231UPYB02_01	Mindfulness and Well-being	1	-	-	2	-	-	-	-	-	-	50	-	50	1.5
TOTAL			16	1	8	4									700	22




Interdisciplinary Open Course (IOC)	
Course Code	240GPHB03_01
Course Name	Semiconductor Physics
Course Code	240VBBB06_03
Course Name	Introduction to Digital Marketing
Course Code	230VBCB14_06
Course Name	E-Commerce

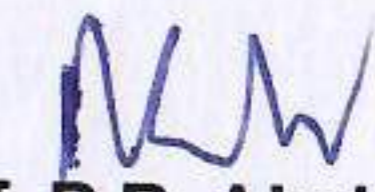

Asst. Prof. Sangram Kakade
 Programme Coordinator, B.Sc. CS


Dr. Anuradha S. Deshpande
 Associate Dean (Academics)


Dr. G. A. Patil
 Director, School of Computational Sciences




Dr. R. S. Deshpande
 Dean, Faculty of Science and Technology


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



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2024-2025

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FIRST YEAR BACHELOR OF SCIENCE IN COMPUTER SCIENCE

REVISION NO.

0.0 (NEP)

SEMESTER II (LEVEL 4.5)

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 INSEMESTER EVALUATION (100 Marks)			END SEMESTER EXAMINATION (100 / 50 marks)	CONTINUOUS INSEMESTER EVALUATION (50marks)	END SEMESTER EXAMINATION (50 marks)	CONTINUOUS INSEMESTER EVALUATION (50marks)	END SEMESTER EXAMINATION (50 marks)			
							T1 (30 Marks)	T2 (30 Marks)	Assignments (40 Marks)								
BSC	230GMAB03_02	Linear Algebra	2	1	-	-	30	30	40	100	-	-	-	-	100	3	
PCC	231GSCB06_02	Relational Database Management Systems	2	-	-	-	30	30	40	50	-	-	-	-	50	2	
	230GSCB13_02	Data Communication Networks	2	-	-	2	30	30	40	100	-	-	-	-	100	2.5	
MDM	---	Multi-Disciplinary Minor	2	-	-	-	30	30	40	50	-	-	-	-	50	2	
SEC	240GSCB02_02	Programming using Python	2	-	2	-	-	-	-	-	50	50	50	50	100	3	
AEC	230UENB02_02	Communicative Proficiency Skills	1	-	2	-	30	30	40	50	-	-	-	-	50	2	
VEC	230UPYB03_02	Ethics and Moral Values	2	-	-	-	30	30	40	50	-	-	-	-	50	2	
LC	230GSCB07_02	Relational Database Management Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1	
	---	Multi-Disciplinary Minor Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1	
LLC	231UPYB01_02	Yoga and Fitness	-	-	2	2	-	-	-	-	-	-	50	-	50	1.5	
IITP/ FP/ CEP	230GSCB08_02	Internship / Field Project / Community Engagement Programme	4 to 6 weeks				-	-	-	-	-	-	-	50	-	50	2
TOTAL			13	1	10	4								50	50	700	22

Note: A Certificate will be awarded if a student exits after first year.

For "Exit" at the end of First Year the student must complete a total of 8 additional credits.

a) An internship / OJT of 8 - 10 weeks (4 credits) over and above semester 2 internship of minimum 4 weeks.

b) Additional one Course of 4 credits (Course offered will be Vocational Skill Course (VSC) or Skill Enhancement Course (SEC) or a mini project).

L-Lecture

Format No.: JSPMUni/ACAD/001

T-Tutorial

Rev. No.:1.0

P-Practical Session (Laboratory)

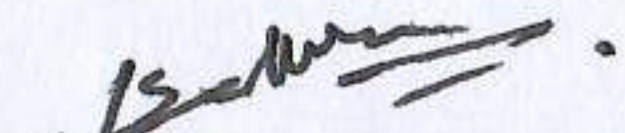
Rev. Date:01/07/2024


EL-Experiential Learning

Page 1 of 2

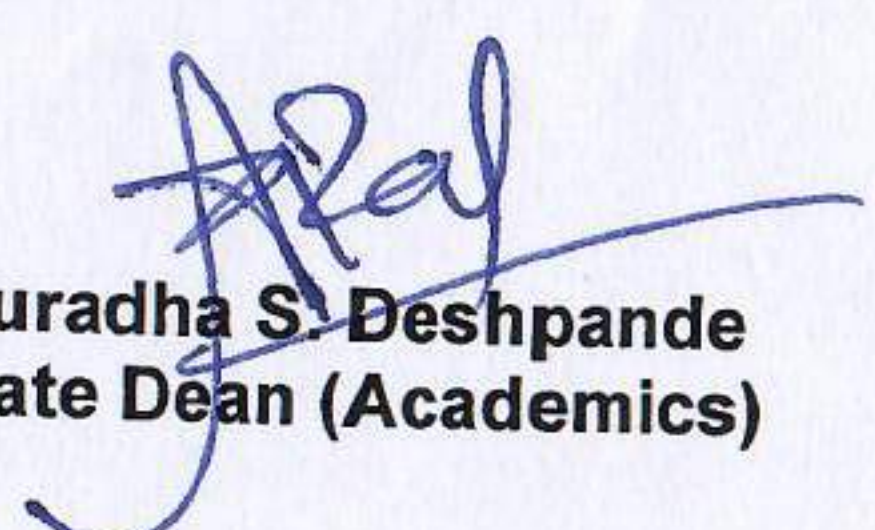


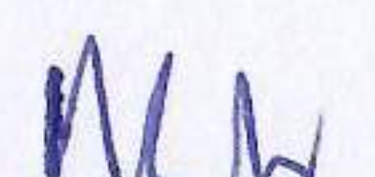
Sem.	Multi-Disciplinary Minor (MDM)	
	Specialization	IoT and Application
II	Course Code	230GETB103_02
	Course Name	Introduction to Electronics
	Course Code	230GETB104_02
	Course Name	Introduction to Electronics Lab
III	Course Code	230GETB58_03
	Course Name	Sensors and Interfacing
	Course Code	230GETB59_03
	Course Name	Sensors and Interfacing Lab
IV	Course Code	230GETB60_04
	Course Name	Foundations of IoT
	Course Code	230GETB61_04
	Course Name	Foundations of IoT Lab
V	Course Code	230GETB62_05
	Course Name	Wireless Technologies for IoT
	Course Code	230GETB63_05
	Course Name	Wireless Technologies for IoT Lab
VI	Course Code	230GETB64_06
	Course Name	Industrial Internet of Things


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(NEP 2020 Aligned)

W. E. F

2025-2026

RELEASE DATE

01/07/2025

REVISION NO.

0.0 (NEP)

SECOND YEAR BACHELOR OF SCIENCE IN COMPUTER SCIENCE

SEMESTER III (LEVEL 5)

TYPE	CODE	COURSE NAME	TEACHING SCHEME				EXAMINATION SCHEME AND MARKS										CREDITS
			Hours / Week				THEORY (Equal Weightage for CIE and ESE)				PRACTICAL (Equal Weightage for CIE and ESE)		ORAL (Equal Weightage for CIE and ESE)		TOTAL		
			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)								
BSC	230GMAB04_03	Applied Statistics	2	1	-	-	30	30	40	100	-	-	-	-	100	3	
PCC	231GSCB10_03	Foundations of Software Engineering	3	-	-	-	30	30	40	100	-	-	-	-	100	3	
	240GSCB03_03	Cloud Computing Fundamentals	2	-	-	-	30	30	40	50	-	-	-	-	50	2	
AEC	230UENB03_03	Soft Skill Development	1	-	2	-	30	30	40	50	-	-	-	-	50	2	
MDM	---	Multi-Disciplinary Minor	2	-	-	-	30	30	40	50	-	-	-	-	50	2	
IOC	---	Interdisciplinary Open Course	2	-	-	-	30	30	40	100	-	-	-	-	100	2	
SEC	231GSCB09_03	Data Structures Using C	2	-	2	-	-	-	-	-	50	50	50	50	100	3	
VSC	230IINB02_03	Innovation	1	-	-	2	-	-	-	-	-	-	50	50	50	1.5	
LC	---	Multi-Disciplinary Minor Lab	-	-	2	4	-	-	-	-	50	50	-	-	50	2	
LLC	230HFSB80_03	Health and Nutrition	1	-	-	2	-	-	-	-	50	50	-	-	50	2	
TOTAL			16	1	6	8							50	50	50	1.5	
															700	22	

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


T-Tutorial
Rev. No.:0.0


P-Practical Session (Laboratory)
Rev. Date:01/07/2025

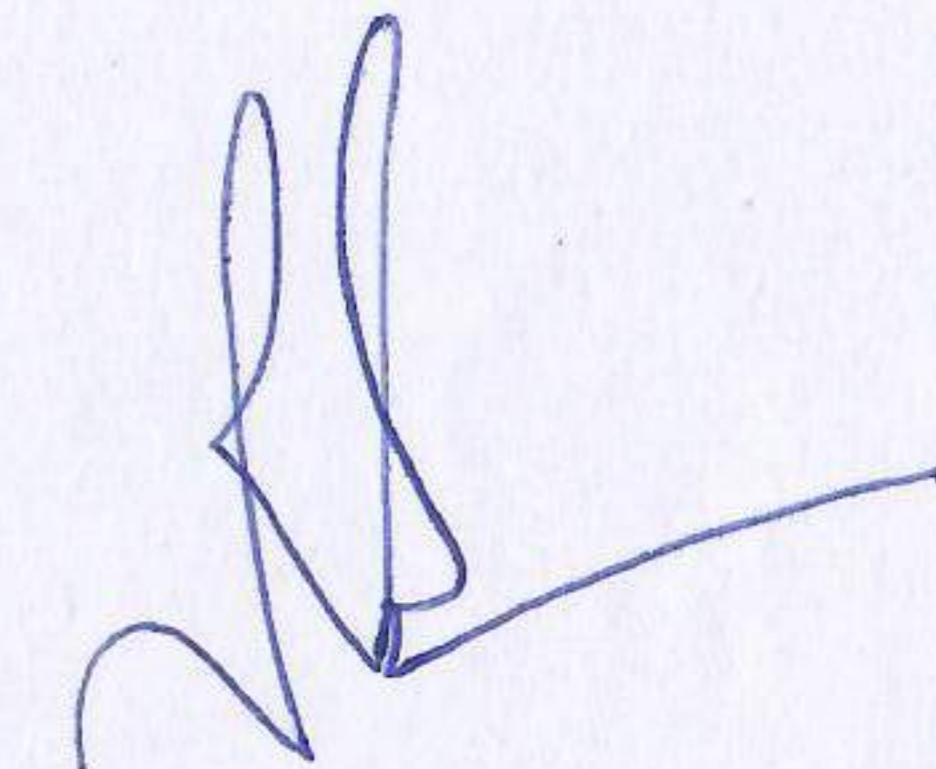
EL-Experiential Learning
Page 1 of 2

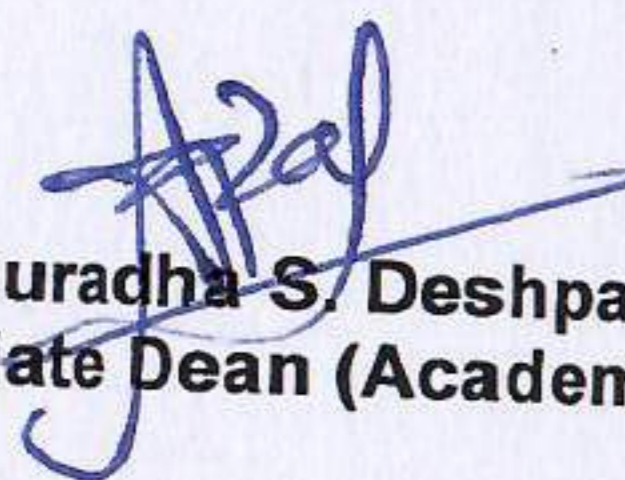
Sem.	Multi-Disciplinary Minor (MDM)	
	Specialization	IoT and Application
II	Course Code	230GETB103_02
	Course Name	Introduction to Electronics
	Course Code	230GETB104_02
	Course Name	Introduction to Electronics Lab
III	Course Code	230GETB58_03
	Course Name	Sensors and Interfacing
	Course Code	230GETB59_03
	Course Name	Sensors and Interfacing Lab
IV	Course Code	230GETB60_04
	Course Name	Foundations of IoT
	Course Code	230GETB61_04
	Course Name	Foundations of IoT Lab
V	Course Code	230GETB62_05
	Course Name	Wireless Technologies for IoT
	Course Code	230GETB63_05
	Course Name	Wireless Technologies for IoT Lab
VI	Course Code	230GETB64_06
	Course Name	Industrial Internet of Things

Interdisciplinary Open Course (IOC)	
Course Code	240GPHB03_01
Course Name	Semiconductor Physics
Course Code	240VBBB06_03
Course Name	Introduction to Digital Marketing
Course Code	230VBCB14_06
Course Name	E-Commerce



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SEMESTER IV (LEVEL 5)

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 INSEMESTER EVALUATION (100 Marks)			END SEMESTER EXAMINATION (100 / 50 marks)	CONTINUOUS INSEMESTER EVALUATION (50marks)	END SEMESTER EXAMINATION (50 marks)	CONTINUOUS INSEMESTER EVALUATION (50marks)	END SEMESTER EXAMINATION (50 marks)				
							T1 (30 Marks)	T2 (30 Marks)	Assignments (40 Marks)									
PCC	230GSCB12_04	Operating System Concepts	3	-	-	-	30	30	40	100	-	-	-	-	100	3		
	240GSCB04_04	Artificial Intelligence Fundamentals	2	-	-	2	30	30	40	100	-	-	-	-	100	2.5		
	240GSCB05_04	Unified Modeling Language	2	-	-	-	30	30	40	50	-	-	-	-	50	2		
	231GCAB06_04	Programming with C++	2	-	-	-	30	30	40	50	-	-	-	-	50	2		
AEC	230UENB04_04	Verbal Aptitude through Literature	1	-	2	-	30	30	40	50	-	-	-	-	50	2		
MDM	---	Multi-Disciplinary Minor	2	-	-	-	30	30	40	50	-	-	-	-	50	2		
LC	230GSCB14_04	Operating System Concepts Lab	-	-	2	-	-	-	-	-	-	-	-	50	2			
	240GSCB06_04	Artificial Intelligence Fundamentals Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1		
	250GSCB01_04	Programming with C++ Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1		
	---	Multi-Disciplinary Minor Lab	-	-	2	4	-	-	-	-	50	50	-	-	50	1		
LLC	240VBBB02_04	Theatre and Performing Arts	-	-	2	2	-	-	-	-	50	50	-	-	50	2		
IITP/FP/CEP	230GSCB15_04	Internship / Field Project / Community Engagement Programme	(4 to 6 Weeks)				-	-	-	-	-	-	-	50	-	50	1.5	
TOTAL			12	-	12	8	-	-	-	-	-	-	-	50	50	50	2	
MLC#	---	Audit Course	1	-	-	-	-	-	-	50	-	-	-	-	-	50	1	

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

T-Tutorial
Rev. No.:0.0

P-Practical Session (Laboratory)
Rev. Date:01/07/2025

EL-Experiential Learning
Page 1 of 2

Note: A **Diploma** will be awarded if a student exits after second year.

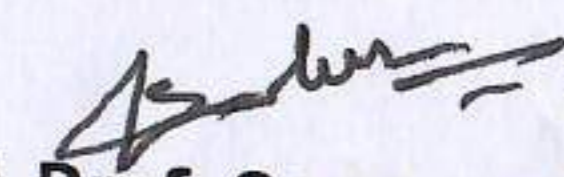
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a) An internship / OJT of 8 - 10 weeks (4 credits) over and above semester 4 internship of minimum 4 weeks.


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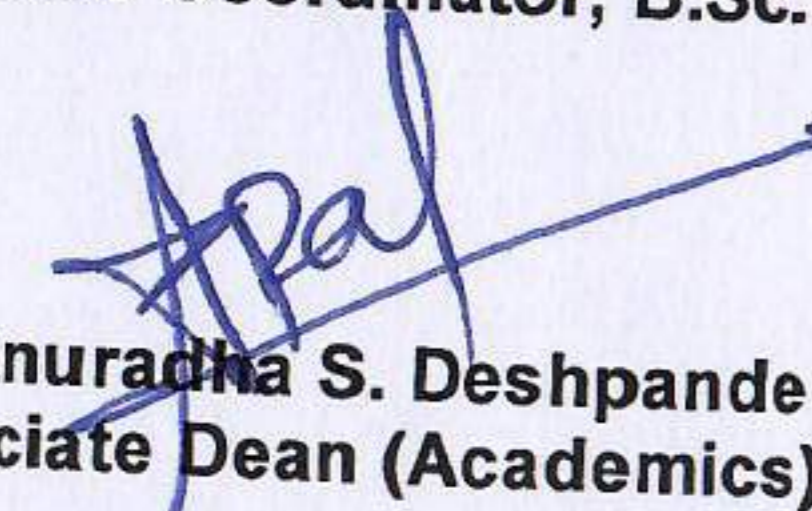
Sem.	Multi-Disciplinary Minor (MDM)	
	Specialization	IoT and Application
II	Course Code	230GETB103_02
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	Course Code	230GETB104_02
	Course Name	Introduction to Electronics Lab
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	Course Code	230GETB59_03
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	Course Name	Foundations of IoT
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	Course Name	Wireless Technologies for IoT
	Course Code	230GETB63_05
	Course Name	Wireless Technologies for IoT Lab
VI	Course Code	230GETB64_06
	Course Name	Industrial Internet of Things

Mandatory Learning Course (MLC#) Audit Course	
Course Code	230UPOB02_04
Course Name	Introduction to Indian Constitution
Course Code	240GCAB92_05
Course Name	German Language
Course Code	240GSCB131_06
Course Name	Salesforce Admin 201
Course Code	240GSCB132_07
Course Name	Testing Automation Tools

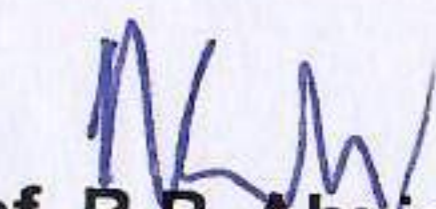

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