



**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 Computational Sciences**



**NEP aligned Curriculum Structure**

**for**

**B. Tech - CSE (Artificial Intelligence and machine  
Learning) lateral**

**(Effective from AY: 2024-25)**



# JSPM University Pune

FACULTY OF SCIENCE AND TECHNOLOGY

SCHOOL OF COMPUTATIONAL SCIENCES

SECOND YEAR BACHELOR OF TECHNOLOGY (LATERAL)  
(COMPUTER SCIENCE AND ENGINEERING – AIML)

COURSE STRUCTURE  
(NEP 2020 Aligned)

W. E. F

2024-2025

RELEASE DATE

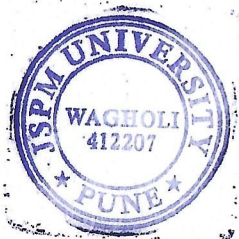
01/07/2024

REVISION NO.

1.0 (NEP)

## SEMESTER III (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 (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	230GMAL01_03	Linear Algebra and Univariate Calculus	3	1	-	-	30	30	40	100	-	-	-	-	100	4	
PCC	230GCSB20_03	Data Structures Using C++	2	-	-	-	30	30	40	50	-	-	-	-	50	2	
	230GAIB81_03	Python Programming Language	2	-	-	2	30	30	40	100	-	-	-	-	100	2.5	
	230GAIB82_03	Introduction to Artificial Intelligence and Machine Learning	3	-	-	-	30	30	40	100	-	-	-	-	100	3	
AEC	230UENB01_03	Effective Communication Skills	1	-	2	-	30	30	40	50	-	-	-	-	50	2	
MMC	---	Multidisciplinary Minor Course	1	-	2	-	-	-	-	-	50	50	50	50	100	2	
IOC	---	Interdisciplinary Open Course	2	-	-	-	30	30	40	100	-	-	-	-	100	2	
VSC	230IDCB01_03	Design Thinking and Creativity	1	-	-	2	-	-	-	-	-	-	50	50	50	1.5	
LC	230GCSB21_03	Data Structures Using C++ Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1	
	230GAIB88_03	Python Programming Language Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1	
TOTAL			15	1	8	4										750	21



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

Multidisciplinary Minor Course (MMC)					
Specialization	Electrical and Communication Sciences	Banking and Finance	Human Resource and Business Management	Cross-Disciplinary	
Course Code	230GMTB01_03	230VBCB09_03	230VHRB21_03	230HFGM26_03	230GMTB52_03
Course Name	Sensors and Actuators	Financial Literacy	Current Trends in Human Resource Management	Digital Investigations and Cyber Forensics	Autotronics
Course Code	230GETB09_04	230VBFB02_04	230VFMB29_04	230UPYB04_04	230GCEB48_04
Course Name	Wireless Sensor Network	Basics of Stock Market	Financial Services	Positive Psychology	Geospatial Tools for Environmental Analysis
Course Code	230GETB34_05	230VBFB04_05	230VFMB28_05	230USYB03_05	230GMEB52_05
Course Name	IoT and Applications	Digital Banking	Basics of Merger and Acquisition	Social Inequality	3D Printing
Course Code	230GETB36_06	230VBCB08_06	230VHRB24_06	230UEEB01_06	230GRAB53_06
Course Name	Microcontroller and Applications	Software for Financial Accounting	Introduction to Industrial Relations	Economics	Robot Operating Systems
Course Code	230GETB41_07	230VBFB07_07	230VFMB24_07	230GCEB43_07	240GFRB55_07
Course Name	Introduction to Embedded Systems	Insurance Model	Corporate Finance	Water Resource Planning and Management	Legal Aspects of Fire Safety Health and Environment

Interdisciplinary Open Course (IOC)					
Specialization	Electrical and Communication Sciences	Banking and Finance	Human Resource and Business Management	Cross-Disciplinary	
Course Code	230GETB10_03	240VBCB02_03	230GCEB58_03	230VMSM09_03	230HFSB16_03
Course Name	Fundamentals of Signals and Systems	Introduction to E-Commerce	Sustainable Development Goals and Policies	Ethics and Sustainability for Business	Biology for Engineers
Course Code	230GETB33_05	230VBCB04_05	230GCEB40_05	230UPYB34_05	230GCEB29_05
Course Name	EV Technology	Basics of Accounting	Intelligent Transport Systems	Psychology at Workplace	Smart Cities
Course Code	230GETB32_07	230VBCB15_07	230GCEB31_07	230VBBB25_07	230GMEB64_07
Course Name	Cyber Physical Systems	Finance for Non-Finance	E-Waste Management	Economics for Management	Smart Materials


  
**Dr. Rahul R. Chakre**  
 Programme Coordinator, BTech-AIML

  
**Prof. G. A. Patil**  
 Director, School of Computational 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  
**Vice Chancellor**  
**JSPM University**  
**Pune**



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SCHOOL OF COMPUTATIONAL SCIENCES

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(NEP 2020 Aligned)

W. E. F

2024-2025

RELEASE DATE

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(COMPUTER SCIENCE AND ENGINEERING – AIML)

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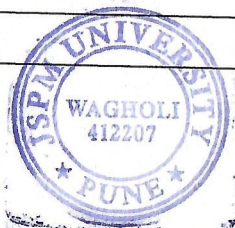
## SEMESTER IV (LEVEL 5)

COURSE

TEACHING  
SCHEME

EXAMINATION SCHEME AND MARKS

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)		TOTAL	CREDITS
			L	T	P	EL	CONTINUOUS INSEMESTER EVALUATION (100 / 25 Marks)			END SEMESTER EXAMINATION (100 / 75 / 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	230GMAL02_04	Multivariate Calculus and Differential Equation	3	1	-	-	30	30	40	100	-	-	-	-	100	4				
PCC	231GCSB50_04	System Programming and Operating Systems	1	-	-	-	30	30	40	50	-	-	-	-	50	1				
	240GAIB81_04	Machine Learning Systems	3	-	-	-	30	30	40	100	-	-	-	-	100	3				
	240GCSB72_04	Object Oriented Programming using Java	2	-	-	-	30	30	40	50	-	-	-	-	50	2				
AEC	230UENB02_04	Communicative Proficiency Skills	1	-	2	-	30	30	40	50	-	-	-	-	50	2				
EEC	230GCEB02_04	Environment and Sustainability	2	-	-	-	30	30	40	50	-	-	-	-	50	2				
MMC	---	Multidisciplinary Minor Course	1	-	2	-	-	-	-	-	50	50	50	50	100	2				
SEC	231GCSB17_04	Development Tools for Artificial Intelligence and Machine Learning	2	-	2	-	-	-	-	-	50	50	50	50	100	3				
LC	240GCSB73_04	Object-Oriented Programming using Java Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1				
LC	240GAIB82_04	Machine Learning Systems Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1				
IITP/FP/CEP	230GCSB16_04	Internship / Field Project / Community Engagement Programme	4 to 6 weeks				-	-	-	-	-	-	50	50	-	50	2			
TOTAL			15	1	10	-									750	23				
DSH	---	Domain Specific Honors	3	-	-	-	25			75	-	-	-	-	100	3				
MLC#	---	Audit Course	1	-	-	-	-	-	50	-	-	-	-	50	1					



**Multidisciplinary Minor Course (MMC)**

Specialization	Electrical and Communication Sciences	Banking and Finance	Human Resource and Business Management	Cross-Disciplinary	
Course Code	230GMTB01_04	230VBCB09_03	230VHRB21_03	230HFGM26_03	230GMTB52_03
Course Name	Sensors and Actuators	Financial Literacy	Current Trends in Human Resource Management	Digital Investigations and Cyber Forensics	Autotronics
Course Code	230GETB36_04	230VBFB02_04	230VFMB29_04	230UPYB04_04	230GRAB55_04
Course Name	Microcontroller and Applications	Basics of Stock Market	Financial Services	Positive Psychology	Industrial Robots
Course Code	230GETB34_05	230VBFB04_05	230VFMB28_05	230USYB03_05	230GMEB52_05
Course Name	IoT and Applications	Digital Banking	Basics of Merger and Acquisition	Social Inequality	3D Printing
Course Code	230GETB09_06	230VBCB08_06	230VHRB24_06	230UEEB01_06	230GRAB53_06
Course Name	Wireless Sensor Network	Software for Financial Accounting	Introduction to Industrial Relations	Economics	Robot Operating Systems
Course Code	230GETB41_07	230VBFB07_07	230VFMB24_07	230GCEB43_07	240GFRB55_07
Course Name	Introduction to Embedded Systems	Insurance Model	Corporate Finance	Water Resource Planning and Management	Legal Aspects of Fire Safety Health and Environment

**Domain Specific Honors (DSH)**

Specialization	Data Science	Cyber Security	Cloud and DevOps	Blockchain Technology
Course Code	230GCSB57_04	240GCSB74_04	240GCSB75_04	240GCSB76_04
Course Name	Data Analytics with Python	Foundations of Cryptography	Computer Networks and Internet Protocol	Blockchain and Its Applications (MOOC)



Mandatory Learning Course (MLC#) Audit Course			
Course Code	240GCSB220_04	240GCSB221_04	240GCSB222_04
Course Name	Microservices with AI	Data Analytics using Tableau	Spring Boot
Course Code	240GCSB223_04	230UPOB02_07	
Course Name	Cloud Computing and its Applications	Introduction to Indian Constitution	

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

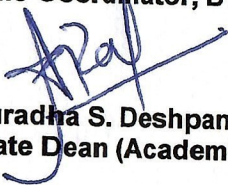
For "Exit" at the end of "Second Year" the student must complete a total of 8 additional credits.

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



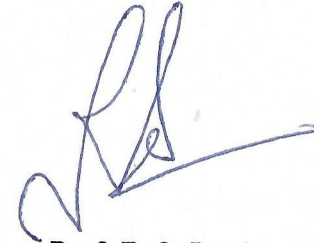
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Programme Coordinator, BTech-AIML



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## SEMESTER V (LEVEL 5.5)

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 / 25 Marks)			END SEMESTER EXAMINATION (100 / 75 / 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)							
PSMC	240GCSB64_05	Probability and Statistics for Machine Learning	2	1	-	-	30	30	40	100	-	-	-	-	100	3
PCC	231GCSB51_05	Computer Algorithms	3	-	-	2	30	30	40	100	-	-	-	-	100	3.5
	231GAIB14_05	Deep Learning Techniques and Applications	3	-	-	-	30	30	40	100	-	-	-	-	100	
PEC	---	Programme Elective Course	3	-	-	-	25			75	-	-	-	-	100	3
HSSM	231VBCB27_05	Finance for Engineers	1	-	-	4	-	-	-	-	-	-	50	50	50	2
MMC	---	Multidisciplinary Minor Course	1	-	2	-	-	-	-	-	50	50	50	50	100	2
IOC	---	Interdisciplinary Open Course	2	-	-	-	30	30	40	100	-	-	-	-	100	2
VSC	230IINB02_05	Innovation	1	-	-	2	-	-	-	-	-	-	50	50	50	1.5
LC	231GCSB52_05	Computer Algorithms Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1
	231GAIB15_05	Deep Learning Techniques and Applications Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1
<b>TOTAL</b>			<b>16</b>	<b>1</b>	<b>6</b>	<b>8</b>					<b>50</b>	<b>50</b>	<b>-</b>	<b>-</b>	<b>50</b>	<b>1</b>
DSH	---	Domain Specific Honors	3	-	-	-	30	30	40	100	-	-	-	-	100	3
LC	---	Domain Specific Honors Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1
DSH	---	Domain Specific Honors	3	-	-	-	30	30	40	100	-	-	-	-	100	3
LC	---	Domain Specific Honors Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1
MLC*	---	Audit Course	1	-	-	-	-	-	-	-	50	50	-	-	50	1
										50	-	-	-	-	50	1

Programme Elective Course (PEC)			
Course Code	230GCSB53_05	230GCSB210_05	230GAIB26_05
Course Name	Cyber Security and Privacy (NPTEL_MOOC)	Foundations of Virtual Reality (NPTEL_MOOC)	Reinforcement Learning (NPTEL_MOOC)

Multidisciplinary Minor Course (MMC)					
Specialization	Electrical and Communication Sciences	Banking and Finance	Human Resource and Business Management	Cross-Disciplinary	
Course Code	230GMTB01_03	230VBCB09_03	230VHRB21_03	230HFGM26_03	230GMTB52_03
Course Name	Sensors and Actuators	Financial Literacy	Current Trends in Human Resource Management	Digital Investigations and Cyber Forensics	Autotronics
Course Code	230GETB09_04	230VBFB02_04	230VFMB29_04	230UPYB04_04	230GCEB48_04
Course Name	Wireless Sensor Network	Basics of Stock Market	Financial Services	Positive Psychology	Geospatial Tools for Environmental Analysis
Course Code	230GETB36_04	230VBFB04_05	230VFMB28_05	230USYB03_05	230GMEB52_05
Course Name	Microcontroller and Applications	Digital Banking	Basics of Merger and Acquisition	Social Inequality	3D Printing
Course Code	230GETB41_05	230VBCB08_05	230VHRB24_05	230UEEB01_05	230GRAB53_05
Course Name	Introduction to Embedded Systems	Software for Financial Accounting	Introduction to Industrial Relations	Economics	Robot Operating Systems
Course Code	230GETB34_06	230VBFB07_07	230VFMB24_07	230GCEB43_07	240GFRB55_07
Course Name	IoT and Applications	Insurance Model	Corporate Finance	Water Resource Planning and Management	Legal Aspects of Fire Safety Health and Environment



**Interdisciplinary Open Course (IOC)**

Specialization	Electrical and Communication Sciences	Banking and Finance	Human Resource and Business Management	Cross-Disciplinary	
Course Code	230GETB10_03	240VBCB02_03	230GCEB58_03	230VMSM09_03	250GBTB01_05
Course Name	Fundamentals of Signals and Systems	Introduction to E-Commerce	Sustainable Development Goals and Policies	Ethics and Sustainability for Business	Bioengineering
Course Code	230GETB33_05	230VBCB04_05	230GCEB40_05	230UPYB34_05	230GCEB29_05
Course Name	EV Technology	Basics of Accounting	Intelligent Transport Systems	Psychology at Workplace	Smart Cities
Course Code	230GETB32_07	230VBCB15_07	230GCEB31_07	230VBBB25_07	230GMEB64_07
Course Name	Cyber Physical Systems	Finance for Non-Finance	E-Waste Management	Economics for Management	Smart Materials

**Domain Specific Honors (DSH)**

Specialization	Data Science	Cyber Security	Cloud and DevOps	Blockchain Technology
Course Code	230GCSB57_04	240GCSB74_04	240GCSB75_04	240GCSB76_04
Course Name	Data Analytics with Python	Foundations of Cryptography	Computer Networks and Internet Protocol	Blockchain and Its Applications (MOOC)
Course Code	230GDSB97_05	230GCSB63_05	230GCSB59_05	240GCSB12_05
Course Name	Applied Statistics	IT Applications and Data Security	Cloud Computing	Design Thinking for Block Chain
Course Code	230GDSB98_05	230GCSB64_05	240GCSB20_05	240GCSB14_05
Course Name	Descriptive Analytics	IT Network Security	Cloud Architecture & Services	Block Chain Tools
Course Code	230GDSB99_06	230GCSB65_06	240GCSB22_06	240GCSB15_06
Course Name	Predictive Analytics	Ethical Hacking and Vulnerability Management	Cloud Application Development & Deployment	Solidity Programming
Course Code	230GDSB100_07	230GCSB66_07	240GCSB23_07	240GCSB18_07
Course Name	Big Data Analytics	Digital Forensics and Investigation	Cloud Automation Tools & Applications	Bit Coin & Crypto Currency Technology

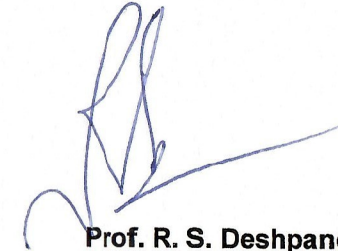
Mandatory Learning Course (MLC#) Audit Course			
Course Code	240GCSB220_05	240GCSB221_05	240GCSB222_05
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Course Name	Cloud Computing and its Applications	Introduction to Indian Constitution	



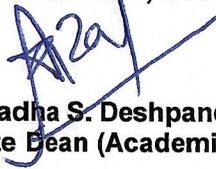
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## SEMESTER VI (LEVEL 5.5)

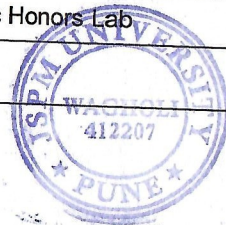
COURSE

TEACHING  
SCHEME

EXAMINATION SCHEME AND MARKS

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)		TOTAL	CREDITS
			L	T	P	EL	CONTINUOUS INSEMESTER EVALUATION (100/ 25 Marks)			END SEMESTER EXAMINATION (100 / 75 / 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)										
PCC	240GAIB10_06	Introduction to Transfer Learning	2	-	-	2	30	30	40	100	-	-	-	-	100	2.5			
	230GAIB85_06	Computational Linguistics and Natural Language Processing	3	-	-	-	30	30	40	100	-	-	-	-	100	3			
	230GCSB28_06	Database Management Systems	2	-	-	-	30	30	40	50	-	-	-	-	50	2			
PEC	---	Programme Elective Course	3	-	-	-	25			75	-	-	-	-	50	2			
AEC	230UENB03_06	Soft Skill Development	1	-	2	-	30	30	40	50	-	-	-	-	100	3			
HSSM	230UEEB19_06	Engineering Economics	1	-	2	-	30	30	40	50	-	-	-	-	50	2			
MMC	---	Multidisciplinary Minor Course	1	-	2	-	-	-	-	50	-	-	-	-	50	2			
VSC	230IESB03_06	Entrepreneurship	1	-	-	2	-	-	-	-	50	50	50	50	100	2			
LC	230GAIB91_06	Computational Linguistics and Natural Language Processing Lab	-	-	2	-	-	-	-	-	-	-	50	50	50	1.5			
	230GCSB35_06	Database Management Systems Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1			
IITP/ FP/ CEP	230GCSB36_06	Internship / Field Project / Community Engagement Programme	4 to 6 weeks				-	-	-	-	-	-	50	50	50	2			
<b>TOTAL</b>			<b>14</b>	<b>-</b>	<b>10</b>	<b>4</b>										<b>750</b>	<b>22</b>		
DSH	---	Domain Specific Honors	3	-	-	-	30	30	40	100	-	-	-	-	100	3			
LC	---	Domain Specific Honors Lab	-	-	2	-	-	-	-	-	50	50	-	-	50	1			
MLC#	---	Audit Course	1	-	-	-	-	-	-	50	-	-	-	-	50	1			

L-Lecture  
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EL-Experiential Learning  
Page 1 of 3

Program Elective Course (PEC)			
Course Code	230GCSB30_05	230GCSB210_05	230GAIB26_05
Course Name	Cyber Security and Privacy (NPTEL_MOOC)	Foundations of Virtual Reality (NPTEL_MOOC)	Reinforcement Learning (NPTEL_MOOC)
Course Code	230GCSB55_06	230GCSB56_06	230GCSB212_06
Course Name	Human Computer Interaction (NPTEL_MOOC)	Business Intelligence and Analytics (NPTEL_MOOC)	Computer Vision and Image Processing - Fundamentals and Applications (NPTEL_MOOC)

Multidisciplinary Minor Course (MMC)					
Specialization	Electrical and Communication Sciences	Banking and Finance	Human Resource and Business Management	Cross-Disciplinary	
Course Code	230GMTB01_03	230VBCB09_03	230VHRB21_03	230HFGM26_03	230GMTB52_03
Course Name	Sensors and Actuators	Financial Literacy	Current Trends in Human Resource Management	Digital Investigations and Cyber Forensics	Autotronics
Course Code	230GETB36_04	230VBFB02_04	230VFMB29_04	230UPYB04_04	230GCEB48_04
Course Name	Microcontroller and Applications	Basics of Stock Market	Financial Services	Positive Psychology	Geospatial Tools for Environmental Analysis
Course Code	230GETB41_05	230VBFB04_05	230VFMB28_05	230USYB03_05	230GMEB52_05
Course Name	Introduction to Embedded Systems	Digital Banking	Basics of Merger and Acquisition	Social Inequality	3D Printing
Course Code	230GETB34_06	230VBCB08_06	230VHRB24_06	230UEEB01_06	230GRAB53_06
Course Name	IoT and Applications	Software for Financial Accounting	Introduction to Industrial Relations	Economics	Robot Operating Systems
Course Code	230GETB09_07	230VBFB07_07	230VFMB24_07	230GCEB43_07	240GFRB55_07
Course Name	Wireless Sensor Network	Insurance Model	Corporate Finance	Water Resource Planning and Management	Legal Aspects of Fire Safety Health and Environment



Specialization	Domain Specific Honors (DSH)			
Course Code	<b>Data Science</b> 230GCSB57_04	<b>Cyber Security</b> 240GCSB74_04	<b>Cloud and DevOps</b> 240GCSB75_04	<b>Blockchain Technology</b> 240GCSB76_04
Course Name	Data Analytics with Python	Foundations of Cryptography	Computer Networks and Internet Protocol	Blockchain and Its Applications (MOOC)
Course Code	230GDSB97_05	230GCSB63_05	230GCSB59_05	240GCSB12_05
Course Name	Applied Statistics	IT Applications and Data Security	Cloud Computing	Design Thinking for Block Chain
Course Code	230GDSB98_05	230GCSB64_05	240GCSB20_05	240GCSB14_05
Course Name	Descriptive Analytics	IT Network Security	Cloud Architecture & Services	Block Chain Tools
Course Code	230GDSB99_06	230GCSB65_06	240GCSB22_06	240GCSB15_06
Course Name	Predictive Analytics	Ethical Hacking and Vulnerability Management	Cloud Application Development & Deployment	Solidity Programming
Course Code	230GDSB100_07	230GCSB66_07	240GCSB22_07	240GCSB18_07
Course Name	Big Data Analytics	Digital Forensics and Investigation	Cloud Automation Tools & Applications	Bit Coin & Crypto Currency Technology

Mandatory Learning Course (MLC#) Audit Course			
Course Code	240GCSB220_06	240GCSB221_06	240GCSB222_06
Course Name	Microservices with AI	Data Analytics using Tableau	Spring Boot
Course Code	240GCSB223_06	230UPOB02_07	
Course Name	Cloud Computing and its Applications	Introduction to Indian Constitution	

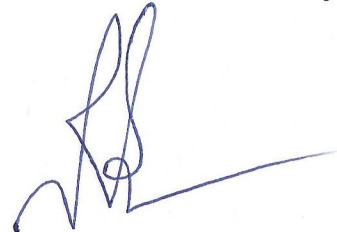
Note: A Bachelor's Degree in Vocation (B. Voc.) or B. Sc. (Engg. /Tech.) will be awarded if a student exits after third year. For Exit at the end of third year the student must complete the: (Total credits = 8)

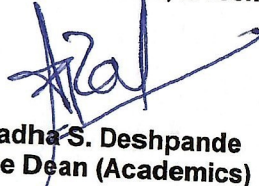
a) An internship / OJT of 8 - 10 weeks (4 credits)

b) Additional Course 1 (4 credits) (Vocational Skill Course (VSC) / Skill Enhancement Course (SEC))


  
Dr. Rahul R. Chakre  
Programme Coordinator, BTech-AIML

  
Prof. G. A. Patil  
Director, School of Computational 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  
Vice Chancellor  
JSPM University  
Pune