

SVKM's NIMMS
School Name: Mukesh Patel School of Technology Management & Engineering (Mumbai, Shirpur, Navi Mumbai, Indore Campus)
Teaching Scheme for Academic Year: 2023-24 (Batch: 2023-27)
(As approved in the Academic Council dated 21st June 2022)

Sr. No.	Module / Subject Code	Name of the Module	Area / Discipline	Theory Hours per week	Practicals Hours per week	Tutorials Hours per week	Total no. of hours for the subject in a term	Credit/s	Duration of Examination (Hrs)		Mode of Exam	Examination Scheme (Weightage)				Temp. Codes	Category	GR applicable (Yes/No)	Remarks	Academic council date and page number						
									Term End Examination	Only ICA		Test I	Test II	Term work *	Total Marks (Marks)						Scaled to (Marks)	Marks on (Question Paper)	Scaled to (Marks) (ICA+ TEE)	Weightage %	Total	
																										Written/Offline/Computer based/Practical/Viva/Jury/Presentation
									Year of the Programme: First Year	Semester: I																
1	702BS0C001	Calculus	BSh-Mathematics	3	0	1	60	4	3	--	Written	10	10	30	50	50	100	100	7031	COMP	Yes	#				
2	702BS0C002	Physics	BSh-Physics	3	2	0	75	4	3	--	Written	10	10	30	50	50	100	100	7031	COMP	Yes	#				
3	702BS0C049	Elements of Biology	BSh-Biology	3	0	0	45	3	3	--	Written	10	10	30	50	50	100	100	7031	COMP	Yes	#				
4	702C00C001	Programming for Problem Solving	Computer Engineering	2	4	0	90	4	3	--	Written	10	10	30	50	50	100	100	7031	COMP	Yes	#	21-06-2022, 292,562,576,447, 761,439,631			
5	702ME0C001	Engineering Graphics and Design	Mechanical Engineering	2	2	0	60	3	3	--	Practical	10	10	30	50	50	100	100	7031	COMP	Yes	#				
6	702BS0C005	Professional Ethics	BSh-Other	1	0	0	15	1	--	--	--	10	10	30	50	50	100	100	7032	COMP	No	Only ICA				
7	702BS0C006	Constitution of India	BSh-Other	1	0	0	15	0	--	--	--	--	--	50	50	50	100	100	7032	COMP	No	Only ICA				
8	702BS0C007	Critical Thinking	BSh-Other	2	0	0	30	0	--	--	--	--	--	50	50	50	100	100	7032	COMP	No	Only ICA				
				Total	17	8	1	390	19	15		60	60	280	400	400	500	250								

* Term Work = Viva / Presentations/ Journals/ assignments/ quizzes / MCQs/Business plans/Role plans etc.
 ** NUE = Non University Examination (Term End Examination conducted at school level)

- # Calculus, Programming for Problem Solving, Syllabus common for B Tech/ MBA Tech (all programs) except CSBS and CSEDS (311)-VT, can use common question paper.
- # Elements of Biology - Syllabus common for B Tech (all programs) except Civil, CSBS and CSCDS (311)-VT, can use common question paper.
- # Physics - Syllabus common for B Tech/ MBA Tech (all programs) except Civil, Mechanical, CSBS and CSEDS (311)-VT, can use common question paper.
- # Engineering Graphics and Design - Syllabus common for B Tech (all programs) except Civil, CSBS and CSCDS (311)-VT, can use common question paper.
- # Professional Ethics - This course focuses on instilling professional ethics, which are taught and assessed throughout the semester.
- # Constitution of India - This course focuses on making the students aware of the Constitution of India, which is taught and assessed throughout the semester.
- # Critical Thinking - This course inculcates and encourages Critical thinking behaviour, which is taught and assessed throughout the semester.

Alka Mahajan

Dr. Alka Mahajan
Dean, MPSTME

Dr. Ajay Phirke

Dr. Ajay Phirke
HoD, BSH- Department

Pritha / Jayanti

Pritha / Jayanti
Prepared / Verified by

Date : 24.07.2023

No Change

SVKM's NMIMS
 Campus Mumbai, Shilpur, Navi Mumbai, In-Jore Campus)
 Teaching Scheme for Academic Year 2023-24 (Batch: 2023-27)
 (As approved in the Academic Council dated 14th October 2022)

Semester: II

Sl. No.	Module / Subject Code	Name of the Module	Area / Discipline	Theory Hours per week	Practicals Hours per week	Tutorials Hours per week	Total no. of hours for the subject in a term	Credits	Duration of Examination (Hrs)		Mode of Exam			Distribution of ICA Marks			Examination Scheme (Weightage)			Template Codes	Category	GR applicable (Yes/No)	Remark	Academic council date and page number				
									Term End Examination	Only ICA	Written/Offline/Computer based/Practical/Viva/Viva/ Presentation	Test I	Test II	Term work	Scaled to Marks	Marks (Question Paper)	Scaled to Marks (Marks)	Scaled to Marks (ICA+ TEE)	Total						Marks	Scaled to Marks	Weightage %	
																												Term End Examination
1	702BS0C051	Linear Algebra and Differential Equations	BSEH-Mathematics	3	0	1	60	4	3	--	Written	10	10	30	50	100	100	100	7031	COMP	Yes	#						
2	702BS0C009	Quantum and Statistical Physics	BSEH-Physics	2	2	0	60	3	3	--	Written	10	10	30	50	100	100	100	7031	COMP	Yes	#						
3	702BS0C059	English Communication	BSEH-English	0	2	0	30	1	--	--	--	--	--	50	50	--	--	50	7032	COMP	No	Only ICA						
4	702EX0C001	Basic Electrical and Electronics Engineering	Electronics & Telecommunication	2	2	0	60	3	3	--	Written	10	10	30	50	100	100	100	7031	COMP	Yes	#						
5	702IF0C001	Management Accounting for Engineers	Technology Management-Finance	2	0	0	30	2	3	--	Written	10	10	30	50	100	100	100	7032	COMP	No	Only ICA						
6	702CI0C014	Environmental Science	Civil Engineering	1	0	1	30	2	--	--	--	10	10	30	50	100	100	100	7032	COMP	No	Only ICA						
7	702ME0C016	Digital Manufacturing Laboratory	Mechanical Engineering	0	2	0	30	1	--	--	--	--	50	50	50	--	--	50	7032	COMP	No	Only ICA						
8	702EX0C021	Electrical and Electronics Workshop	Electronics & Telecommunication	0	2	0	30	1	--	--	--	--	50	50	50	--	--	50	7032	COMP	No	Only ICA						
9	702BS0C011	Design Thinking	BSEH-Other	2	0	0	30	0	--	--	Practical	10	10	30	50	100	100	100	7031	COMP	Yes	#						
10	702AI0C004	Python Programming	Artificial Intelligence	0	2	0	30	1	3	--	--	60	60	380	500	500	250	750										
				Total				390	18	15	--																	

* Term Work = Viva / Presentations/ Journals/ assignments/ quizzes / MCQs/Business plans/Role plans etc.

** NUE = Non University Examination (Term End Examination conducted at school level)

Syllabus common for B Tech all program except Civil, Mechanical, CSBS and CSDS, can use common question paper.

English Communication - This course focuses on introducing the students to the basics of English language and formal communication, which requires to be assessed continuously throughout the semester.

Environmental Science - The course is for the general awareness about the environment.

Digital Manufacturing Laboratory - This course is a practice-oriented course. The evaluation is purely based on periodic assessments based on the jobs prepared by the students.

Electrical and Electronics Workshop - This course empowers students to gather practical knowledge and skills using Internal Continues Assessment (ICA) throughout the semester.

Design Thinking - This course helps to develop a human-centric approach to problem-solving, which requires to be assessed continuously throughout the semester.

Date: 06.10.2023
 Prepared / Verified by
 Pritha / Jayanti

Dr. Ajay Phirke
 HoD, BSH- Department

Dr. Alka Mahajan
 Dean, MPSTME

Alka Mahajan

Ajay Phirke

AC
 14.10.2022.
 page 540,542

Name of the Programme: B Tech (COMPUTER SCIENCE)										Semester: III																
Sl. No.	Module/Subject Code	Name of the Module	Area/Discipline	Theory Hours per week	Practicals Hours per week	Tutorials Hours per week	Total no. of hours for the subject in a term	Credits	Duration of Examination (Hrs)		Examination Scheme (Weightage)				Template Codes	GR applicable (Yes/No)	Remarks	Academic council date and page number								
									Term End Examination	Only ICA	Mode of Exam	Distribution of ICA Marks		Term End Examination					Total							
										Test I	Test II	Term work	Total Marks	Marks (Question Paper)	Scaled to (Marks)	Scaled Marks (ICA+ TEB)	Weightage %									
1	702BSOC04	Probability and Statistics	BSH-Mathematics	2	2	0	60	3	-	Written/Offline/Online/Computer based/Practical/Viva/Fluency/Presentation	10	10	30	50	100	50	100	100	7031	COMP	Yes	Yes	#			
2	702CSOC01	Essentials of Computer Science	Computer Science/Technology Management-General Management	2	0	0	30	2	-	Written	10	10	30	50	100	50	100	100	7031	COMP	Yes	Yes				
3	702TGOC01	Principles of Economics and Management	Management-General Management	3	0	0	45	3	-	Written	10	10	30	50	100	50	100	100	7031	COMP	Yes	Yes	#			
4	702CSOC02	Digital Circuits and Computer Architecture	Computer Science	3	2	0	75	4	-	Written	10	10	30	50	100	50	100	100	7031	COMP	Yes	Yes		AC dated 14.10.2022, Pg. no. 345		
5	702AIOC07	Computer Networks	Artificial Intelligence	2	2	0	60	3	-	Written	10	10	30	50	100	50	100	100	7031	COMP	Yes	Yes	#			
6	702COOC03	Data Extraction and Processing	Computer Engineering	1	2	0	45	2	-	-	10	10	30	50	50	-	-	50	100	7032	COMP	No	Only ICA*			
7	702BSOC02	Technical Communication	BSH-English	0	0	1	15	1	-	-	-	-	50	50	-	-	-	50	100	7032	COMP	No	Only ICA**			
8	702COOC01	Data Structures and Algorithms	Computer Engineering	3	2	0	75	4	-	Written	10	10	30	50	100	50	100	100	7031	COMP	Yes	Yes	#			
9	702BSOC056	Community Service	BSH-General	0	0	0	0	0	-	Presentation	-	-	-	-	50	50	50	100	7033	COMP	No	NUE**		AC dated 14.10.2023, Pg. no. 345		
Total				16	10	1	405	22			70	70	260	400	400	650	350	750								

* Term Work = Viva/Presentations/ Journals/ assignments/ quizzes/ MCQs/Business plans/role plans etc.

** NUE- Non University Examination (examination conducted at school level)

Syllabus common for B Tech (Computer Science) and B. Tech/MBA Tech(Computer Engineering), can use common question paper.

**Technical Communication - The topics included in this 1 credit course requires comprehensive and rigorous continuous assessment to ensure in-depth understanding, including formative (Topic based) and summative (end of unit) assessment that eliminates the need for term end Assessment

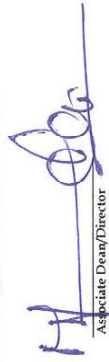
*Data Extraction and Processing: This course imparts knowledge of data extraction and how to process it. It is practical based course and hands on is expected from the students for better understanding. The ICA mode of evaluation, enables to access practical knowledge gained throughout the semester

**Community Service - course provides students a real-life hands on experience in the community and sensitizes them towards the societal challenges like poverty, illiteracy, hunger, child labor and inequality.

Date: July 17, 2023


 Head of the Department




 Associate Dean/Director

SVKM'S NMIMS
SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING (Campus: Shirpur)
Teaching Scheme for Academic Year: 2023-24 (Batch 2022-26)
(As approved in the Academic Council dated 14.10.2022 Page No 548)

Sr. No.	Module/Subject Code	Name of the Module	Area / Discipline	Theory Hours per week	Practical Hours per week	Tutorials per week	Total no. of hours for the subject in a term	Credits	Duration of Examination		Mode of Exam	Examination Scheme (Weightage)						Template Codes	Category	GR applicable (Yes/No)	Remarks	Academic council date and page number						
									Term End Examination	Term End		Distribution of ICA Marks			Term End								Total					
												Test I	Test II	Term work	Total Marks	Scaled to (Marks)	Marks (Question Paper)							Scaled to (Marks)	Scaled Marks (ICA+ TEE)	Weightage %		
1	702BS0C057	Complex Variables and Transforms	BSh- Mathematics	3	0	1	60	4	3	-	Written	10	10	30	50	50	100	100	100	100	100	7031	COMP	Yes				
2	702BS0C047	Discrete Mathematics	BSh-Mathematics	2	0	1	45	3	3	-	Written	10	10	30	50	50	100	100	100	100	100	7031	COMP	Yes				
3	702C00C010	Design and Analysis of Algorithms	Computer Engineering	2	2	0	60	3	3	-	Written	10	10	30	50	50	100	100	100	100	100	7031	COMP	Yes				
4	702A10C001	Database Management Systems	Artificial Intelligence	2	2	0	60	3	3	-	Written	10	10	30	50	50	100	100	100	100	100	7031	COMP	Yes	14.10.2022	Page No 548		
5	702CS90C003	Design and Applications of Internet of Things	Computer Science	3	2	0	75	4	3	---	Written	10	10	30	50	50	100	100	100	100	100	7031	COMP	Yes				
6	702C00C011	Theoretical Computer Science	Computer Engineering	2	0	1	45	3	3	-	Written	10	10	30	50	50	100	100	100	100	100	7031	COMP	Yes				
7	702A10E005	Web Programming	Artificial Intelligence	2	2	0	60	3	3	-	Practical	10	10	30	50	50	100	100	100	100	100	7031	COMP	Yes				
8	702C00C038	Object Oriented Programming through JAVA	Computer Engineering	0	2	0	30	1	2	-	Practical	10	10	30	50	50	100	100	100	100	100	7031	COMP	Yes				
				15	10	3	435	24	23			80	80	240	400	400	750	400	800									

Term work = Viva / Presentations / Journals / Assignments / Quizzes / MCQs / Business Plans / Role plans etc.

Date: April 13, 2024



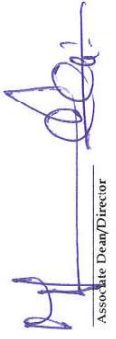
(Signature)
Associate Dean/Director

(Signature)
Head of the Department

Name of the Programme: B.Tech (COMPUTER SCIENCE)													Semester: V									
Sr. No.	Module/ Subject Code	Name of the Module	Area / Discipline	Theory Hours per week	Practicals Hours per week	Tutorials Hours per week	Total no. of hours for the subject in a term	Credits	Duration of Examination (Hrs)		Mode of Exam	Examination Scheme (Weightage)			Template Codes	Category	GR applicability (Yes/No)	Remarks	Academic council date and page number			
									Term End Examination	Only ICA		Distribution of ICA Marks	Term End Examination	Marks (Question Paper)						Scaled to (Marks)	Total Marks (ICA+ TEE)	Weightage %
1	702TDC016	Software Engineering	Information Science / Technology	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	COMP	Yes	#	
2	702CS014	Compiler Design	Computer Science	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	COMP	Yes	#	
3	702EX014	Image and Video Processing	Electronics & Telecommunication Engineering	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	COMP	Yes	#	
4		Operating Systems	Computer Engineering	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	COMP	Yes	#	
5		1) Department Elective I																				
	702CO014	Advanced Web Programming	Computer Engineering	2	2	0	60	3	3	-	Practical	10	10	30	50	100	100	7031	ELEC	Yes	#	
	702CO013	Operations Research	Computer Engineering	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	ELEC	Yes	#	
	702T0126	Advanced Database Management Systems	Information Science/Technology	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	ELEC	Yes	#	
	702CS011	Mobile Computing	Computer Engineering	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	ELEC	Yes	#	
6		Open Elective I		X	X	X	X	3	3	-	Written	10	10	30	50	100	100	7031	INTD	Yes	#	
7		Open Elective II		X	X	X	X	3	3	-	Written	10	10	30	50	100	100	7031	INTD	Yes	#	
				16	16	0	480	30	30			100	100	300	500	500	1000	1000				

* Term Work = Viva / Presentations/ Journals/ assignments/ quizzes / MCQs/Business plans/Role plans etc.

Syllabus common for B.Tech (Computer) and B.Tech Computer Science- can use common question paper.


 Associate Dean/Director




 Head of the Department

Date: July 17, 2023

Sr. No.	Module / Subject Code	Name of the Module	Area / Discipline	Theory Hours per week	Practicals Hours per week	Tutorials Hours per week	Total no. of hours for the subject in a	Duration of Examination (Hrs)			Mode of Exam	Examination Scheme (Weightage)					GR applicable (Yes/No)	Academic council date and page number				
								Term End Examination	Credits	Only ICA		Distribution of ICA Marks			Term End				Template Codes	Category	Remark	
												Test I	Test II	Term work	Scaled to (Marks)	Marked on (Question Paper)						Scaled to ICA+ (Marks)
1	702CC002	Artificial Intelligence	Computer Engineering	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	COMP	Yes	#	
2	702AUB04	Cyber Security	Artificial Intelligence	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	COMP	Yes	#	
3	702CC004	Distributed Computing	Computer Engineering	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	COMP	Yes	#	
4		1) Department Elective II	Computer Engineering/Information Science /Technology	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	ELEC	Yes	#	
5		2) Department Elective III	Computer Engineering/Information Science /Technology	2	2	0	60	3	3	-	Written	10	10	30	50	100	100	7031	ELEC	Yes	#	
6		3) Open Elective III		X	X	X	X	3	3	-	Written	10	10	30	50	100	100	7031	INTD	Yes		
7		4) Open Elective IV		X	X	X	X	3	3	-	Written	10	10	30	50	100	100	7031	INTD	Yes		
8	702BS1C063	Interpersonal Skills	BS-I-English	0	2	0	30	1	-	-	-	-	-	50	50	-	50	7032	COMP	NO	Only ICA*	
Total				10	12	0	330	22				70	70	260	400	400	700	350	750			

* Term Work = Viva/ Presentations/ Journals/ assignments/ quizzes/ MCQs/Business Plans/Role plays etc.

Syllabus common for B Tech (Computer) and MBA Tech Computer, can use common question paper.

1 & 2 Course to be selected from the basket of Department Electives/ Open Electives as per the course requirement.

3 & 4 Course to be selected from a common open elective basket of interdisciplinary courses offered by different departments. Scheme will be as per the course requirement.

5 & 6 Course to be selected from a common open elective basket of interdisciplinary courses offered by different departments. Scheme will be as per the course requirement.

* Interpersonal Skills - This 1 credit practical course requires rigorous formative and summative internal assessment continuously, to ensure the students have acquired specific interpersonal skills, thereby eliminating the need for term end assessment.

Code	Subject	Area/ Discipline
702IT0122	Software Quality Assurance	Information Science / Technology
702COE010	Microservices and Architecture	Computer Engineering
702IT0127	E-Commerce	Information Science / Technology

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Head of the Department

Code	Subject	Area/ Discipline
702COE007	Human Computer Interaction	Computer Engineering
702IT0026	Cloud Computing	Information Science / Technology
702COE017	IoT and Applications	Computer Engineering

[Signature]
Associate Dean/Director



Date: April 13, 2024

Name of the Programme: B Tech (Computer Science)		Semester VII																								
Sr. No.	Module / Subject Code	Name of the Module	Area / Discipline	Theory Hours per week	Practicals Hours per week	Tutorials Hours per week	Total no. of hours for the subject in a term	Credits	Duration of Examination (Hrs)		Mode of Exam	Examination Scheme (Weightage)				Total	Template Codes	CR applicable (Yes/No)	Remarks	Academic council date and page number						
									Term End Examination	Only ICA		Test I	Test II	Term work	Total Marks						Marks (Question Paper)	Scaled to (Marks)	Scaled to (ICA-weightage)			
1	702TUC02h	Cloud Computing	Information Science / Technology	2	2	0	60	3	3	-	Written / Offline/Computer based / Practical/Viva /Jury/Presentation	10	10	30	50	100	50	100	100	7031	COMP	Yes				
2		Department Elective-IV	Artificial Intelligence / Computer Engineering	2	2	0	60	3	3	-	Written	10	10	30	50	100	50	100	100	7031	ELEC	Yes				
3		Department Elective-V	Artificial Intelligence / Information Science / Technology / Mechatronics	2	2	0	60	3	3	-	Written	10	10	30	50	100	50	100	100	7031	ELEC	Yes				
4		Department Elective-VI	Data Science / Information Science / Technology / Mechatronics	2	2	0	60	3	3	-	Written / Computer based	10	10	30	50	100	50	100	100	7031	ELEC	Yes				
5		Open Elective-V		X	X	X	X	3	3	-	Written	10	10	30	50	100	50	100	100	7031	INTD	Yes				
6	702E0C002	Capstone Project	Engineering	0	8	0	120	4	0	---	---	0	0	100	100	0	0	100	100	7032	COMP	No	Only ICA*	AC dtd 20th Jan 2023 Pg.143		
Total				8	16	0		19				50	50	250	350	500	250	600								

* Term Work = Viva / Presentations/ Journals/ assignments/ quizzes / MCQs/Business plans/Role plans etc.

**NUE = Non University Examination (examination conducted at school level)

Syllabus common for B Tech (Computer) and MBA Tech Computer, can use common question paper.

¹Course to be selected from the basket of Department Elective IV/V/VI. Schemes will be as per the course requirement.

²Course to be selected from a common open elective basket of interdisciplinary courses offered by different departments. Scheme will be as per the course requirement.

**Capstone Project - Course is project based learning. There will presentation at the end of the semester.

Department Elective IV	
Code	Name of the course
702A0C008	Deep Learning
702A0E017	Cryptography and Network Security
702C0E017	IoT and Applications

Department Elective V	
Code	Name of the Course
702A0C009	Natural Language Processing
702T0E028	Ethical Hacking
702T0E016	Blockchain Technology

Department Elective VI	
Code	Name of the Area/Discipline
702DB0C029	Big Data Analytics
702T0E024	Cyber Forensics Information Science/ Technology
702MH0E013	Robotic Process Automation

Note: The subject of Robotics Process Automation has been adopted or approved in Mechatronics department AC dated 20th January 2023 as a nomenclature 'Robotic Process Automation'

Date: July 17, 2023

[Signature]
 Head of the department

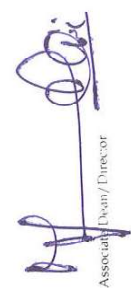


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 Associate Dean/Director

Semester: VIII																					
Sr. No.	Module/Subject Code	Name of the Module	Area/Discipline	Theory Hours per week	Practicals Hours per week	Tutorials Hours per week	Total no. of hours for the subject in a term	Year of the Programme: Fourth year		Examination Scheme (Weightage)						Template Codes	Category	GR applicable (Yes/No)	Remarks	Academic council date and page number	
								Duration of Examination (Hrs)	Modes of Exam	Test I	Test II	Term work	Total Marks	Scaled to (Marks) Paper	Marks (Question Paper)						Scaled to (Marks)
1	202EEDC005	Project	Engineering	-	-	-	10	10	0	0	0	0	200	200	0	0	200	100	200	Only ICA	AC 13th Oct 2023 Pg.81
		Total		0	0	0	10	10					200	200	0	0	200				

* Term Work = Viva / Presentations / Journals / assignments / quizzes / MCQs / Business plans / Role plans etc.
 - Project - course is project based learning. There will be presentation at the end of the semester.


 Head of the Department


 Associate Dean/Director



Date: April 13, 2024