

B. Tech Compute Sciences and Engineering (CSE)												
Semester – III												
Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1.	PCC	NYCS301	Discrete Mathematics and Logic	3	--	--	3	50	--	100	--	100
2.	PCC	NYCS302	Computer Graphics	3	--	--	3	50	--	100	--	100
3.	PCC	NYCS303	Data Structures	3	--	--	3	50	--	100	--	100
4.	PCC	NYCS311	Laboratory Practice-I	--	--	2	1	--	25	--	25 <sup>b</sup>	50
5.	OE	-----	Open Elective-I	3	--	--	3	50	--	100	--	100
6.	VEC	NLWV01	The Constitution & Human Rights	2	--	--	2	50	--	100	--	100
7.	MDM	NYCEM01	Minor Course 1 # (Introduction To Embedded Systems)	2	--	--	2	50	--	100	-	100
8.	CEP	NYCS312	Community Engagement Project	--	--	4	2	--	50		50 <sup>a</sup>	100
9.	AEC	NHS11	Key Competencies for Career Growth	0	0	4	2	...	50	...	50 <sup>a</sup>	100
TOTAL				16	00	10	21	300	125	600	125	850
Open Elective I												
6	OE	NYCSO01	Fundamental of Computer Basics	3	--	--	3	50	--	100	--	100
6	OE	NYCSO02	Multimedia System	3	--	--	3	50	--	100	--	100
Value Added Course (Any One)												
10	VAC	-----	Advanced Python Programming	-	--	2	--	--	25	--	--	25
11	VAC	-----	Programming in C++	-	--	2	--	--	25	--	--	25

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**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING**  
**Department of Computer Science and Engineering**  
MAHIRAVANI, TRIMBAK ROAD, TAL & DIST: NASHIK-422213, MAHARASHTRA, INDIA

Assessment for Theory Course (Scaled to allotted marks)		
CIA	Weightage	Description
CIA 1	10%	Home Assignments
CIA 2	20%	Written Exam Components
CIA 3	10%	Activity/Project and Research Based Learning along with Seminar Presentation
CIA 4	10%	Behavioral Attitude and General Discipline (5%), Theory and Practical Attendance (5%)
ESE	50%	End Semester Examination
<b>TOTAL</b>	<b>100%</b>	

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B. Tech Compute Sciences and Engineering (CSE)												
Semester – IV												
Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PCC	NYCS401	Object Oriented Programming using Java	3	--	--	3	50	--	100	--	100
2	PCC	NYCS402	Database Management System	3	--	--	3	50	--	100	--	100
3	PCC	NYCS403	Computer Organization & Architecture	3	--	--	3	50	--	100	--	100
4	PCC	NYCS411	Laboratory Practice-II	--	--	2	1	--	25	--	25	50
5	OE	-----	Open Elective-II	3			3	50	--	100	--	100
6	MDM	-----	Minor course 2 #	2	--	--	2	50	--	100	--	100
7	AEC	NHS12	Strategic Communication for Professionals	--	--	2	4	--	50	--	50	100
TOTAL				14	00	04	19	250	75	500	75	650
Open Elective II (Any One)												
5	OE	NYCSO03	Introduction to Artificial Intelligence	3	--	--	3	50	--	50	--	100
5	OE	NYCSO04	Introducton to DBMS	3	--	--	3	50	--	50	--	100
Value Added Course (Any One)												
8	VAC (VSEC)	-----	Advanced Java Programming	--	--	2	--	--	25	--	--	25
8	VAC (VSEC)	-----	MySql	--	--	2	--	--	25	--	--	25
Course Work (for Exit Criterion to UG Diploma)												
9	EC	NYCSX01	Prompt Engineering for Software Development	3	--	--	3	50	--	100	--	100
10	EC	NYCSX02	Python Programming for AI	3	--	--	3	50	--	100	--	100
11	EC	NYCSX03	Internship (2 Weeks)	--	--	--	2	--	50	--	--	50

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CIA 2	20%	Written Exam Components
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CIA 4	10%	Behavioral Attitude and General Discipline (5%), Theory and Practical Attendance (5%)
ESE	50%	End Semester Examination
<b>TOTAL</b>	<b>100%</b>	

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<b>B. Tech Compute Sciences and Engineering (CSE)</b> <b>Semester –V</b>												
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		Total
								Course	Lab	Course	Lab	
1	PCC	NYCS501	Theory of Computation	3	--	--	3	50	--	100	--	100
2	PCC	NYCS502	Operating System	3	--	--	3	50	--	100	--	100
3	PCC	NYCS503	Data Communication	3	--	--	3	50	--	100	--	100
4	PCC	NYCS511	Laboratory Practice-III	--	--	4	2	--	25	--	25	50
5	PE	NYCS-	Program Elective-I	3	--	--	3	50	--	100	--	100
6	OE	-----	Open Elective III	2	--	--	2	50	--	100	--	100
7	MDM	-----	Minor Course 3#	3	--	--	3	50	--	100	--	100
8	AEC	NHSA13	Essential Aptitude Skills	--	--	4	2	--	50	--	50	100
<b>TOTAL</b>				<b>18</b>	<b>00</b>	<b>8</b>	<b>22</b>	<b>300</b>	<b>50</b>	<b>600</b>	<b>50</b>	<b>750</b>
<b>Open Elective III</b>												
7	OE	NYCSO05	Cyber Law & Ethics	3	--	--	3	50	--	50	--	100
7	OE	NYCSO06	Introduction to Reverse Engineering	3	--	--	3	50	--	50	--	100
<b>Value Added Course (Any One)</b>												
10	VAC (VSEC)	-----	Advanced Java Programming	--	--	2	--	--	50	--	--	50
10	VAC (VSEC)	-----	Networking	--	--	2	--	--	50	--	--	50
<b>Honors Courses (HC)</b>												
11	HC	NYCS-	Advanced DBMS	3	--	--	3	50	--	100	--	100

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CIA 4	10%	Behavioral Attitude and General Discipline (5%), Theory and Practical Attendance (5%)
ESE	50%	End Semester Examination
<b>TOTAL</b>	<b>100%</b>	

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B. Tech Compute Sciences and Engineering (CSE) Semester – VI												
Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1.	PCC	NYCS601	Design and Analysis of Algorithm	3	--	--	3	50	--	100	--	100
2.	PCC	NYCS602	Computer Networks	3	--	--	3	50	--	100	--	100
3.	PCC	NYCS603	Software Engineering	3	--	--	3	50	--	100	--	100
4.	PC	NYCS611	Laboratory Practice-IV	--	--	2	1	--	25	--	25 <sup>b</sup>	50
5.	PE	NYCS-	Program Elective-II	3	--	--	3	50	--	50	--	100
6.	PE	NYCS-	Program Elective-III	3	--	--	3	50	--	50	--	100
7.	MDM	----	Minor Course 4#	2	--	--	2	50	--	50	--	100
8.	AEC	NHSA14	Employability Skills and Career Advancement	--	--	4	2	--	50	--	50	100
TOTAL				17	--	12	22	300	75	300	175	850
Value Added Course (Any One)												
11	VAC (VSEC)	-----	Wireless Sensor Network	--	--	2	--	--	50	--		50
11	VAC (VSEC)	-----	Advanced Web Designing Course	--	--	2	--	--	50	--	--	50
Honors Courses (HC)												
12	HC	NYCS-	Advanced OS	3	--	--	3	50	--	100	--	100
Course Work (for Exit Criterion to UG Diploma) (B. Voc)												
13	CE	NYCSX04	Networking Essentials	3	--	--	3	50	--	100	--	100
14	CE	NYCSX05	Machine Learning with Practical Applications	3	--	--	3	50	--	100	--	100
15	CE	NYCSX06	Internship (4 weeks)	--	--	--	2	--	50	--	--	50

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<b>Assessment for Theory Course</b> <i>(Scaled to allotted marks)</i>		
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ESE	50%	End Semester Examination
<b>TOTAL</b>	<b>100%</b>	

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B. Tech Compute Sciences and Engineering (CSE) Semester – VII												
Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1.	PCC	NYCS701	Compiler Design	3	--	--	3	100	--	100	--	100
2.	PCC	NYCS702	Data Science and Machine Learning	3	--	--	3	100	--	100	--	100
3.	PEC	NYCS-	Program Elective-IV	2	--	--	2	100	--	50	--	100
4.	MDM	---	Minor Course 5#	2	--	--	2	100	--	50	--	100
5.	ELC	NYCS711	Industry Internship*	--	--	--	12	--	100	--	100 <sup>a</sup>	200
6.	AEC	NHSA15	Corporate Readiness & Entrepreneurial Excellence	--	--	2	2	--	50	--	50	100
TOTAL				10	00	06	26	400	200	400	200	800
Value Added Course												
7	VAC (VSEC)	VAC105	Genetic Algorithm & its Applications	--	--	2	--	--	--	--	--	--
Honors Courses (HC)												
8	HC	NYCS-	Advanced CN	3	--	--	3	50	--	100	--	100
*45 Days Internship during summer vacation of 6 <sup>th</sup> Semester												

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**B. Tech Compute Sciences and Engineering (CSE)**  
**Semester – VIII**

B. Tech Compute Sciences and Engineering (CSE) Semester – VIII												
Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1.	PCC	NYCS801	Cryptography and Security	3	--	--	3	50	--	100	--	100
2.	PCC	NYCS802	High Performance Computing	3	--	--	3	50	--	100	--	100
3.	PCC	NYCS-	Program Elective V	2	--	--	2	50	--	100	--	100
4.	PCC	NYCS-	Program Elective VI	3	--	--	3	50	--	100	--	100
5.	ELC	NYCS803	Research Methodology	4	--	--	4	50	100	100	--	100
6.	ELC	NYCS811	Project	--	--	8	4	--		--	100	150
7.	MDM	----	Minor Course 6#	2	--	--	2	50	--	100	--	100
TOTAL				16	00	08	21	300	100	600	100	800
Value Added Course (Any One)												
8	VAC (VSEC)	---	Introduction to Industry4.0/5.0	--	--	2	--	--	--	--	--	--
8	VAC (VSEC)	-----	Cryptography-Practical Approach			2			25			25
Honors Courses (HC)												
9	HC	NYCS	Advanced Compiler Design	3	--	--	3	50	--	100	--	100

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