Shriram Shikshan Sanstha's
Shriram Institute of Information Technology, Paniv
Tal – Malshiras, Dist. – Solapur, [MH] 413113
NAAC Accredited with 'B' Grade

Name of the Courses that include experiential learning through project work.

Sr. No	Class Name
1	B.Sc(ECS) – III
2	B.C.A - III
3	M.Sc.-I
4	M.Sc.-II

Principal
Shriram Institute of Information Technology
Paniv, Tal.Malshiras,Dist.Solapur

Faculty of Science and Technology
Syllabus of B.Sc. (ECS)-III (CBCS) (w.e.f. 2021-22)

Subject/ Core Course	Name and Type of the Paper		No. of Papers/ Practical	Hrs./ Week			Total Marks per Paper	UA	CA	Credits
	Type	Name		L	T	P				
Class:	**B.Sc. (Entire Computer Science)- III Semester – V**									
Ability Enhancement Course	Paper – II Part A	English (Business English)	Paper II Part A	4	--	--	50	40	10	2.0
Core	DSE 1 A	Data Communication and Networking	Paper IX	4	--	--	100	80	20	4.0
	DSE 2 A	Theory of Computer Science	Paper X	4	--	--	100	80	20	4.0
	DSE 3 A	Visual Programming	Paper XI	4	--	--	100	80	20	4.0
	DSE 4 A	Advanced Java	Paper XII	4	--	--	100	80	20	4.0
Skill Enhancement Course	SEC 3	Advanced Python Programming	Paper XIII	4	--	--	100	80	20	4.0
Total Theory Semester-V				**24**			**550**	**440**	**110**	**22**
Class:	**B.Sc. (Entire Computer Science)- III Semester – VI**									
Ability Enhancement Course	Paper – II Part B	English (Business English)	Paper II Part B	4	--	--	50	40	10	2.0
Core	DSE 1 B	System Security	Paper XIV	4	--	--	100	80	20	4.0
	DSE 2 B	Compiler Construction	Paper XV	4	--	--	100	80	20	4.0
	DSE 3 B	Internet Programming using ASP.Net	Paper XVI	4	--	--	100	80	20	4.0
	DSE 4 B	Angular JS	Paper XVII	4	--	--	100	80	20	4.0
Skill Enhancement Course	SEC 4	Mobile Application Development	Paper XVIII	4	--	--	100	80	20	4.0
Total Theory Semester-VI				**24**			**550**	**440**	**110**	**22**
Practical's on	DSE 2 A and DSE 2 B		Practical IV	--	--	5	100	80	20	4.0
	DSE 3 A and DSE 3 B		Practical V	--	---	5	100	80	20	4.0
	DSE 4 A and DSE 4 B		Practical VI	--	--	5	100	80	20	4.0
	Project work		Practical VII	--	--	5	100	80	20	4.0
Total (practical's)						**20**	**400**	**320**	**80**	**16**
Grand Total				**48**	--	**20**	**1500**	**1200**	**300**	**60**

Abbreviations:

L: Lectures, T: Tutorials, P: Practical, UA : University Assessment, CA : College Assessment, CC: Core Course, AEC : Ability Enhancement Course, DSE : Discipline Specific Elective Paper, SEC : Skill Enhancement Course

Choice Based Credit System (CBCS), (w. e. f. June-2021)

Syllabus for B. C. A. – Part III (Science)

Type of thePaper and paper code		Title of Paper	Hrs/We e		Total Marks per paper	UA	CA	Credits
Type	**Code**		**L**	**P**				
B. C. A. – III Semester V								
Ability Enhance ment Course	Paper – II Part A	English (Business English)	4	-	50	40	10	2.0
DSE 1 A	Paper IX	Core Java	4	-	100	80	20	4.0
DSE 2 A	Paper X	Visual Programming	4	-	100	80	20	4.0
DSE 3 A	Paper XI	Computer Graphics	4	-	100	80	20	4.0
DSE 4 A	Paper XII	Recent Trends in IT	4	-	100	80	20	4.0
SEC 3	Paper XIII	Linux and Shell Programming	4	-	100	80	20	4.0
	Total (Theory)		**24**	**-**	**550**	**440**	**110**	**22.0**
B. C. A. – III Semester VI								
Ability Enhance ment Course	Paper – II Part B	English (Business English)	4	-	50	40	10	2.0
DSE 1 B	Paper XIV	Advanced Java	4	-	100	80	20	4.0
DSE 2 B	Paper XV	Dot Net Technology	4	-	100	80	20	4.0
DSE 3 B	Paper XVI	Data Warehouse and Data Mining	4	-	100	80	20	4.0
DSE 4 B	Paper XVII	Cryptography and Network Security	4	-	100	80	20	4.0
SEC 4	Paper XVIII	Advanced Python	4	-	100	80	20	4.0
	Total (Theory)		**24**	**-**	**550**	**440**	**110**	**22.0**
Practical								
DSE 1A &1B	Practical IV	Practical On Core Java and Advance Java	-	5	100	80	20	4.0
DSE 2A &2B	Practical V	Practical on Visual Programming and .Net Technology	-	5	100	80	20	4.0
DSE 3A &3B	Practical VI	Practical on Computer Graphics And DM & DW	-	5	100	80	20	4.0
	Practical VII	Project	-	5	100	80	20	4.0
	Total (Practicals)		**-**	**20**	**400**	**320**	**80**	**16**
Grand Total			48	20	1500	1200	300	60

6. Structure of the Syllabus – M.Sc. (Computer Science):

Part – I Semester-I

Paper Code	Title of the Paper	Hrs / week	Distribution of Marks for Examination			Credits
			Internal	University	Total	
Hard Core - Theory						
HCT 1.1	Object Oriented Programming using C++	04	20	80	100	4
HCT 1.2	Advanced DBMS	04	20	80	100	4
HCT 1.3	Data Structures and Algorithms	04	20	80	100	4
Soft Core – Theory (Any One)						
SCT 1.1	Software Engineering	04	20	80	100	4
SCT 1.2	UML					
Hard core Lab / Project						
HCP 1.1	Practical based on HCT 1.1	04	10	40	50	2
HCP 1.2	Practical based on HCT 1.2	04	10	40	50	2
HCP 1.3	Practical based on HCT 1.3	04	10	40	50	2
HCP 1.4	Project – I	02	10	40	50	2
	Tutorial	02	25	-	25	1
Total		**32**	**145**	**480**	**625**	**25**

Part – I Semester-II

Paper Code	Title of the Paper	Hrs / week	Distribution of Marks for Examination			Credits
			Internal	University	Total	
Hard Core – Theory						
HCT 2.1	Java Programming	04	20	80	100	4
HCT 2.2	Python Programming	04	20	80	100	4
Soft Core – Theory (Any One)						
SCT 1.1	Computer Communication Network	04	20	80	100	4
SCT 1.2	Artificial Intelligence	04	20	80	100	4
Open Elective – Theory (Any One)						
OET 2.1	Office Automation	04	20	80	100	4
OET 2.2	SWAYAM Course*	--	--	--	--	4
Hard core Lab / Project						
HCP 2.1	Practical based on HCT 2.1	04	10	40	50	2
HCP 2.2	Practical based on HCT 2.2	04	10	40	50	2
HCP 2.3	Project – II	02	10	40	50	2
Open Elective (Any One)						
OEP 2.1	Practical Based on OET 2.1	04	10	40	50	2
OEP 2.2	Practical / Seminar / Viva based on SWAYAM course OET2.2					
Others	Tutorial	02	25	-	25	1
Total		**32**	**145**	**480**	**625**	**25**

**** : The credits will be transferred as per university policy and UGC guidelines after submitting the completion certificate / mark list from the SWAYAM.***

M.Sc. (Computer Science) Part – II Semester-III

Paper Code	Title of the Paper	Hrs / week	Distribution of Marks for Examination			Credits
			Internal	University	Total	
Hard Core - Theory						
HCT 3.1	Digital Image Processing	04	20	80	100	4
HCT 3.2	Open Source Technologies (PHP, MySql)	04	20	80	100	4
Soft Core – Theory (Any One)						
SCT 3.1	Network Security	04	20	80	100	4
SCT 3.2	Cloud Computing					
SCT 3.3	Mobile Computing					
Open Elective – Theory (Any One)						
OET 3.1	Fundamental of Web Designing	04	20	80	100	4
OET 3.2	SWAYAM Course*					
Hard core Lab / Project						
HCP 3.1	Practical based on HCT 3.1	04	10	40	50	2
HCP 3.2	Practical based on HCT 3.2	04	10	40	50	2
HCP 3.3	Project – III	02	10	40	50	2
Open Elective (Any One)						
OEP 3.1	Practical Based on OET 3.1	04	10	40	50	2
OEP 3.2	Practical / Seminar / Viva based on SWAYAM course OET 3.2					
Others	Tutorial	02	25	-	25	1
Total of Sem. III		**32**	**145**	**480**	**625**	**25**
Add on Skill Course : Website Design using WordPress		**Theory : 50 marks, Practical : 50 marks**				4

Part – II Semester-IV

Paper Code	Title of the Paper	Hrs / week	Distribution of Marks for Examination			Credits
			Internal	University	Total	
Hard Core – Theory						
HCT 4.1	•Net Technology	04	20	80	100	4
HCT 4.2	Machine Learning	04	20	80	100	4
HCT 4.3	Data Warehouse and Mining	04	20	80	100	4
Soft Core – Theory (Any One)						
SCT 4.1	Soft Computing	04	20	80	100	4
SCT 4.2	Block chain Technology					
Hard core Lab / Project						
HCP 4.1	Practical based on HCT 4.1	04	10	40	50	2
HCP 4.2	Practical based on HCT 4.2	04	10	40	50	2
HCP 4.3	Practical based on HCT 4.3	04	10	40	50	2
HCP 4.4	Project – IV	02	10	40	50	2
Others	Tutorial	02	25	-	25	1
Total of Sem. IV		**32**	**145**	**480**	**625**	**25**

: The credits will be transferred as per university policy and UGC guidelines after submitting the completion certificate / mark list from the SWAYAM.