

Progressive Education Society's
Modern College of Arts, Science and Commerce (Autonomous),
Shivajinagar, Pune 5

(An Autonomous College Affiliated to Savitribai Phule Pune University)

Framework of Syllabus

For

B.B.A. (CA)

(Based on NEP 2020 framework)

(To be implemented from the Academic Year 2023-24)

Semester 1 (First Year)

Course Type	Course	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	ESE	Total
Major Mandatory (4 + 2)	Major Paper 1 (Theory)	23BaBbcU1101	Procedure Oriented Programming Using C Language (T + P)	2	4	40	60	100
	Major Paper 1 (Practical)			4				
	Major Paper 2 (Theory)	23BaBbcU1102	Programming Principles & Algorithm & Computer Fundamentals	2	2	20	30	50
Major Electives	--	--	--	--	--	--	--	--
Minor	--	--	--	--	--	--	--	--
OE (2 + 2)		23BaBbcU1401	Office Administration I (Microsoft Word)	2	2	20	30	50
		23CpCopU1402	Democracy, Election and Governance	2	2	20	30	50
VSC (2)	Major Specific Practical I	23BaBbcU1501	Lab Course on Web Design - I	4	2	20	30	50
SEC (2)	Skill Paper I (Practical)	23BaBbcU1601	Lab Course on Statistical Tools Using R Package	4	2	20	30	50
AEC(2)	MIL	23CpCopU1701 / 23CpCopU1702	MIL (Hindi) I/ MIL (Marathi) I	2	2	20	30	50
VEC (2)	EVS Theory	23CpCopU1801	Environment Science - I	2	2	20	30	50
IKS (2)	Major Specific Theory	23BaBbcU1901	Generic IKS	2	2	20	30	50
CC (2)	CC-I Course	23CpCopU1001	Online Course Based on Yoga	2	2	20	30	50
Total				28	22	220	330	550

Semester 2 (First Year)

Course Type	Course	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	ESE	Total
Major Mandatory (4 + 2)	Major Paper 3 (Theory) Section 1	23BaBbcU2101	Advance C Programming & Database Management System	2	4	40	60	100
	Major Paper 3 (Theory) Section 2			2				
	Major Paper 4 (Practical)	23BaBbcU2102	Lab Course on 23BaBbcU2101	4	2	20	30	50
Major Electives	--	--	--	--	--	--	--	--
Minor	Minor Paper I	23BaBbcU2301	Computer Technology - I (Data Warehousing)	2	2	20	30	50
OE (2 + 2)	Theory	23BaBbcU2401	Office Administration II (MS Power Point)	2	2	20	30	50
		23CpCopU2402	Fundamentals of Music	2	2	20	30	50
VSC (2)	Major Specific Practical II	23BaBbcU2501	Lab Course on Web Design - II	4	2	20	30	50
SEC (2)	Skill Paper II (Practical)	23BaBbcU2601	Lab Course on Operations Research	4	2	20	30	50
AEC(2),	Theory	23CpCopU2703	English Communication Skills I	2	2	20	30	50
VEC (2)	EVS Theory	23CpCopU2801	Environment Science - II	2	2	20	30	50
IKS (2)	--	--	--	--	--	--	--	--
CC (2)	CC-II Course	23CpCopU2001 / 23CpCopU2011 / 23CpCopU2021 / 23CpCopU2031 / 23CpCopU2041 / 23CpCopU2051 / 23CpCopU2061 / 23CpCopU2071	Physical Education / Cultural Activities / NSS / NCC / Fine Arts / Applied Arts / Visual Arts / Performing Arts	2	2	20	30	50
Total				28	22	220	330	550

Semester 3 (Second Year)

Course Type	Course	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	ESE	Total
Major Mandatory (4 + 4)	Major Core Paper 5 (Theory) Section 1	23BaBbcU3101	Data Structure Using C and Relational Database Management System	4	4	40	60	100
	Major Core Paper 5 (Theory) Section 2							
	Major Paper 6 (Practical)	23BaBbcU3102	Lab Course on 23BaBbcU3101	4	2	20	30	50
	Major Paper 7 (Theory)	23BaBbcU1901	Vedic Mathematics	2	2	20	30	50
Major Electives	--	--	--	--	--	--	--	--
Minor (4)	Minor Paper II	23BaBbcU3301	Computer Technology - II (IoT)	4	4	40	60	100
OE (2)		23BaBbcU3401	Office Administration III (Basics Of MS Excel)	2	2	20	30	50
VSC (2)	Major Specific Practical III	23BaBbcU3501	Social Media Marketing	4	2	20	30	50
SEC (2)	--	--	--	--	--	--	--	--
AEC(2),	English Theory	23CpCopU2703	English Communication Skills II	2	2	20	30	50
VEC (2)	--	--	--	--	--	--	--	--
IKS (2)	--	--	--	--	--	--	--	--
FP/CEP (2)	FP –I	23BaBbcU3002	Field Project I	2	2	20	30	50
CC(2)	CC-III	23CpCopU3001	Fitness	2	2	20	30	50
Total				28	22	220	330	550

Semester 4 (Second Year)

Course Type	Course	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	ESE	Total
Major Mandatory (4 + 4)	Major Core Paper 8 (Theory)	23BaBbcU4101	Object Oriented Programming concepts using Java (T + P)	2	4	40	60	100
	Major Core Paper 8 (Practical)			4				
	Major Paper 9 (Theory)	23BaBbcU4102	Python (T + P)	2	4	40	60	100
	Major Paper 9 (Practical)			4				
Major Electives	--	--	--	--	--	--	--	--
Minor (4)	Minor Paper III	23BaBbcU4301	Computer Technology - III (Artificial Intelligence)	4	4	40	60	100
OE (2)		23BaBbcU4401	Office Administration IV (Advanced Excel)	2	2	20	30	50
VSC (2)	--	--	--	--	--	--	--	--
SEC (2)	Skill Paper III	23BaBbcU4601	Basics of Management	2	2	20	30	50
AEC(2),	MIL	23CpCopU4701/ 23CpCopU4702	MIL (Hindi) II/ MIL (Marathi) II	2	2	20	30	50
VEC (2)	--	--	--	--	--	--	--	--
IKS (2)	--	--	--	--	--	--	--	--
FP/CEP (2)	CEP –I	23BaBbcU4003	Community Engagement Project	4	2	20	30	50
CC(2)	CC-IV	23CpCopU4001	Health and Wellness	2	2	20	30	50
Total				28	22	220	330	550

Semester 5 (Third Year)

Course Type	Course	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	ESE	Total
Major Mandatory (4 + 4 + 2)	Major Core Paper 10 (Theory + Practical)	23BaBbcU5101	Advanced Java (T + P)	2	4	40	60	100
				4				
	Major Paper 11 (Theory + Practical)	23BaBbcU5102	Web Technology (T + P)	2	4	40	60	100
				4				
	Major Paper 12 (Theory)	23BaBbcU5103	Object Oriented Software Engineering	2	2	20	30	50
Major Electives	Elective I	23BaBbcU5201	Operating System Concepts	4	4	40	60	100
	Elective II	23BaBbcU5202	Software Testing	4	4	40	60	100
Minor (4)	Minor Paper IV	23BaBbcU5301	Computer Technology - IV (Cloud Computing)	4	4	40	60	100
OE (2 + 2)	--	--	--	--	--	--	--	--
VSC (2)	Major Specific Practical IV	23BaBbcU5501	Lab Course on Software Testing Tools	4	2	20	30	50
SEC (2)	--	--	--	--	--	--	--	--
AEC(2),	--	--	--	--	--	--	--	--
VEC (2)	--	--	--	--	--	--	--	--
IKS (2)	--	--	--	--	--	--	--	--
FP / CEP(2)	FP –II	23BaBbcU5002	Field Project II	4	2	20	30	50
Total				30	22	220	330	550

Semester 6 (Third Year)

Course Type	Course	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	ESE	Total
Major Mandatory (4 + 4 + 2)	Major Paper 13 (Theory + Practical)	23BaBbcU6101	Mobile Application Development (T + P)	2	4	40	60	100
				4				
	Major Paper 14 (Theory + Practical)	23BaBbcU6102	Angular JS (T + P)	2	4	40	60	100
				4				
	Major Paper 15 (Theory)	23BaBbcU6103	Information Security Systems	2	2	20	30	50
	Major Electives	Elective III	23BaBbcU6201	Computer Networks	4	4	40	60
Elective IV		23BaBbcU6202	Software Project Management	4	4	40	60	100
Minor (4)	Minor Paper V	23BaBbcU6301	Computer Technology - V (Block Chain)	4	4	40	60	100
OE (2 + 2)	--	--	--	--	--	--	--	--
VSC (2)	--	--	--	--	--	--	--	--
SEC (2)	--	--	--	--	--	--	--	--
AEC(2),	--	--	--	--	--	--	--	--
VEC (2)	--	--	--	--	--	--	--	--
OJT (4)	OJT	23BaBbcOJTU6004	On job Training	8	4	40	60	100
FP / CEP(2)	--	--	--	--	--	--	--	--
Total				30	22	220	330	550

OE : Open Elective

AEC: Ability Enhancement Course

VEC: value Education Courses

CC : Co-Curricular Courses

IKS : Indian Knowledge System

OJT : On Job Training

FP : Field Project

VSC : Vocational Skill Courses

CEP : Community Engagement Project