

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. Sc. (Statistics)

Choice Based Credit System (CBCS) Syllabus Under National Education Policy
(NEP)

To be implemented from Academic Year 2024-2025

Level 4.5 (First Year) Semester I

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	Total
Subject 1 T(2) + (T/P) (2) or T(4)	24ScStaU1101	Descriptive Statistics	2		2		20	30	50
	24ScStaU1102	Lab Course on 24ScStaU1101		2		4	20	30	50
Subject 2 T(2) + (T/P) (2) or T(4)	24Sc***U1201	<<Subject 2 Theory>>	2		2		20	30	50
	24Sc***U1202	<<Subject 2 Practical>>		2		4	20	30	50
Subject 3 T(2)+ (T/P) (2) or T(4)	24Sc***U1301	<<Subject 3 Theory>>	2		2		20	30	50
	24Sc***U1302	<<Subject 3 Practical>>		2		4	20	30	50
IKS T(2)	24CpCopU1901	Generic IKS	2		2		20	30	50
GE/OE (T/P) (2)	24ScStaU1401	Fundamentals of Statistics-I	2		2		20	30	50
SEC (P) (2)	24ScStaU1601	Lab Course on Data Analysis Using MS-EXCEL		2		4	20	30	50
AEC T(2)	24CpCopU1701 / 24CpCopU1702	MIL-I (Hindi) / MIL-I (Marathi)	2		2		20	30	50
VECT (2)	24CpCopU1801	Environment Science	2		2		20	30	50
Total			14	08	14	16			550

Level 4.5 (First Year) Semester II

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	Total
Subject 1 T(2)+ T/P(2) or T(4)	24ScStaU2101	Discrete Probability Distributions	2		2		20	30	50
	24ScStaU2102	Lab Course on 24ScStaU2101		2		4	20	30	50
Subject 2 T(2) + P(2)	24Sc***U2201	<<Subject 2 Theory>>	2		2		20	30	50
	24Sc***U2202	<<Subject 2 Practical>>		2		4	20	30	50
Subject 3 T(2)+ P(2)	24Sc***U2301	<<Subject 3 Theory>>	2		2		20	30	50
	24Sc***U2302	<<Subject 3 Practical>>		2		4	20	30	50
GE/OE (T/P)(2)	24ScStaU2401	Fundamentals of Statistics-II	2		2		20	30	50
SEC P(2)	24ScStaU2601	Lab Course on MS-EXCEL for Discrete Probability Models		2		4	20	30	50
AEC T(2)	24CpCopU2703	English Communication Skills I	2		2		20	30	50
VEC T(2)	24CpCopU2801	Democracy, Election and Governance	2		2		20	30	50
CC(2)	24CpCopU2001/24CpCopU2011 /24CpCopU2021 /24CpCopU2031/ 24CpCopU2041 /24CpCopU2051 / 24CpCopU2061 /24CpCopU2071	Physical Education / Cultural Activities / NSS /NCC /Fine Arts / Applied Arts /Visual Arts / Performing Arts	2		2		20	30	50
Total			14	08	14	16			550

Level 5.0 (Second Year) Semester III

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2 or 4), (T/P)(2)	24ScStaU3101	Discrete Probability Distributions and Time Series Analysis	4		4		40	60	100
	24ScStaU3102	Lab Course on 24ScStaU3101		2		4	20	30	50
VSC P(2)	24ScStaU3501	Statistics Using R Software I		2		4	20	30	50
IKS (T/P)(2)	24ScStaU3901	Indian official Statistics	2		2		20	30	50
FP P(2)	24ScStaU3002	Field Project I		2		4	20	30	50
Minor (T/P)(2+2 or 4)	24ScStaU3301	Standard Continuous Probability Distributions	2		2		20	30	50
	24ScStaU3302	Lab Course on 24ScStaU3301		2		4	20	30	50
GE/OE (T/P) (2)	24ScStaU3401	Applied Statistics-I	2		2		20	30	50
AEC T(2)	24CpCopU3703	English Communication Skills II	2		2		20	30	50
CC T(2)	24CpCopU3001	Online Course on Yoga	2		2		20	30	50
Total			14	8	14	16			550

Level 5.0 (Second Year) Semester IV

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2 or 4), (T/P)(2)	24ScStaU4101	Continuous Probability Distributions	4		4		40	60	100
	24ScStaU4102	Lab Course on 24ScStaU4101		2		4	20	30	50
VSC P(2)	24ScStaU4501	Statistics Using R Software II		2		4	20	30	50
CEP P(2)	24CpCopU4003	Community Engagement Project		2		4	20	30	50
Minor (T/P)(2+2 or 4)	24ScStaU4301	Testing of hypothesis	2		2		20	30	50
	24ScStaU4302	Lab Course on 24ScStaU4301		2		4	20	30	50
GE/OE (T/P) (2)	24ScStaU4401	Applied Statistics-II	2		2		20	30	50
SEC T(2)	24ScStaU4601	Lab Course on C Programming		2		4	20	30	50
AEC T(2)	24CpCopU4701 / 24CpCopU4702	MIL-II (Hindi) / MIL-II (Marathi)	2		2		20	30	50
CC T(2)	24CpCopU4001	Health and Wellness	2		2		20	30	50
Total			12	10	12	20			550

Level 5.5 (Third Year) Semester V

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2+2+2 or 4 + 2+2 or 4 + 4) P(2+2 or 4)	24ScStaU5101	Distribution Theory	4		4		40	60	100
	24ScStaU5102	Statistical Inference	4		4		40	60	100
	24ScStaU5103	Data Mining	2		2		20	30	50
	24ScStaU5104	Lab Course on 24ScStaU5101, 24ScStaU5102 and 24ScStaU5103		2		4	20	30	50
Major Elective (T/P) (2+2 or 4)	24ScStaU5201	Regression Analysis	2		2		20	30	50
	24ScStaU5202	Lab Course on 24ScStaU5201		2		4	20	30	50
	OR								
	24ScStaU5203	Stochastic Processes	2		2		20	30	50
	24ScStaU5204	Lab Course on 24ScStaU5203		2		4	20	30	50
VSC P(2)	24ScStaU5501	Lab Course on Statistical Analysis using Python Programming		2		4	20	30	50
FP (2)	24ScStaU5001	Field Project II		2		4	20	30	50
Minor (T/P) (2)	24ScStaU5301	Applied Statistics	2		2		20	30	50
Total			14	08	16	16	220	330	550

Level 5.5 (Third Year) Semester VI

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2+2+2 or 4+2+2 or 4+4) P(2+2 or 4)	24ScStaU6101	Sampling Theory and Statistical Quality Control	4		4		40	60	100
	24ScStaU6102	Reliability Theory and Survival Analysis	4		4		40	60	100
	24ScStaU6103	Actuarial Statistics	2		2		20	30	50
	24ScStaU6104	Lab Course on 23ScStaU6101, 23ScStaU6102 and 23ScStaU6103		2		4	20	30	50
Major Elective (T/P) (2+2 or 4)	24ScStaU6201	Design of Experiments	2		2		20	30	50
	24ScStaU6202	Lab Course on 24ScStaU6201		2		4	20	30	50
	OR								
	24ScStaU6203	Medical Statistics	2		2		20	30	50
	24ScStaU6204	Lab Course on 24ScStaU6203		2		4	20	30	50
VSC P(2)	24ScStaU6501	Lab Course on Operations Research		2		4	20	30	50
OJT (2)	24ScStaU6004	On Job Training		4		8	40	60	100
Total			12	10	12	20	220	330	550

