

B.Sc. (COMPUTER SCIENCE)

F.Y.B.Sc. (Computer Science) - Eligibility Criteria :

- H.S.C. (10+2) level examination in science with Mathematics or
- Three Years Diploma Course, after S.S.C. (10th Standard) of Board of Technical Education conducted by Government of Maharashtra or its equivalent.

F.Y.BSc(CS)

SEMESTER - I			SEMESTER - II		
Paper Code	Paper Title	Credits	Paper Code	Paper Title	Credits
CSST-111	Descriptive Statistics I	2	CSST-121	Methods of Applied Statistics	2
CSST-112	Mathematical Statistics	2	CSST-122	Continuous Probability Distributions & Testing of Hypothesis	2
CSST-113	Statistics Practical Paper I	1.5		Statistical Paper II	1.5
MTC-111	Matrix Algebra	2	MTC-121	Linear Algebra	2
MTC-112	Discrete Mathematics	2	MTC-122	Graph Theory	2
MTC-113	Mathematics Practical	1.5	MTC-123	Mathematics Practical	1.5
CS-111	Problem solving using Computer & 'C' Programming	2	CS-121	Advanced 'C' Programming	2
CS-112	Database Management System	2	CS-122	Relational Database Management System	2
CS-113	Practical Course Based on CS111 and CS 112	1.5	CS-123	Practical Course based on CS-121 and CS-122	1.5
ELC-111	Semiconductor Devices & Basic Electronic System	2	ELC-121	Instrumentation System	2
ELC-112	Principles of Digital Electronics	2	ELC-122	Basics of Computer Organization	2
ELC-113	Electronics Lab IA	1.5	ELC-123	Electronics Lab IB	1.5

S.Y.BSc (CS)

SEMESTER - III			SEMESTER - IV		
Paper Code	Paper Title	Credits	Paper Code	Paper Title	Credits
CS-231	Data Structure and Algorithm-I	2	CS-241	Data Structure and Algorithm-II	2
CS-232	Software Engineering	2	CS-242	Computer Networking-I	2
CS-233	Practical course based on CS 231	2	CS-243	Practical course based on CS 241	2
EL-211	Microcontroller Architecture and Programming	2	EL-221	Raspberry pi	2
EL-212	Digital Communication and Networking	2	EL-222	Wireless Communication and IOT	2
EL-213	Electronics Practical	2	EL-223	Electronics Practical	2
MT-231	Group Theory	2	MT-241	Calculus	2
MT-232	Numerical Analysis	2	MT-242	Operations Research	2
MT-233	Mathematics Practical	2	MT-243	Mathematics Practical	2
	Environment Science - I	2		Environment Science - II	2
	Language Communication - I	2		Language Communication - II	2

T.Y.BSc (CS)

SEMESTER V			SEMESTER VI		
Paper Code	Paper Title	Credits	Paper Code	Paper Title	Credits
CS-351	Operating Systems - I	2	CS-361	Operating Systems - II	2
CS-352	Computer Networks - II	2	CS-362	Software Testing	2
CS-353	Web Technologies - I	2	CS-363	Web Technologies - II	2
CS-354	Foundations of Data Science	2	CS-364	Data Analytics	2
CS-355	Object Oriented Programming - I (Core Java)	2	CS-365	Object Oriented Programming - II (Advanced Java)	2
CS-356	Theoretical Computer Science and Compiler Construction-I	2	CS-366	Theoretical Computer Science and Compiler Construction - II	2
CS-357	Practical course based on CS351	2	CS-367	Practical course based on CS 361	2
CS-358	Practical course based on CS 353 and CS 354	2	CS-368	Practical course based on CS 363 and CS 364	2
CS-359	Practical Course based on CS 355	2	CS-369	Practical Course based on CS 365	2
CS-3510	Python Programming	2	CS-3610	Software Testing Tools	2
CS-3511	Blockchain Technology	2	CS-3611	Project	2

M.SC. (COMPUTER SCIENCE)

Eligibility Criteria

- B.Sc.Comp.Sci., BCS wit 50% marks college and 45% marks for Reserved Category.
- A Bachelor of Engineering in Computer Science/Information Technology / Electronic Telecommunication with 50% marks.

F.Y.MSc(CS)

SEMESTER - I		
Paper Code	Paper Title	Credits
CSUT111	Paradigm of Programming Languages	4
CSUT112	Design and Analysis of Algorithm	4
CSUT113	Database Technologies	4
CSDT114A	Cloud computing	2
CSDP114A	Cloud Computing Practical	2
	OR	
CSDT114B	Artificial Intelligence	2
CSDP114B	Artificial Intelligence Practical	2
	OR	
CSDT114C	Web Services	2
CSDP114C	Web Services Practical	
CSUP115	PPL and Database Technologies Practical	4

SEMESTER - II		
Paper Code	Paper Title	Credits
CSUT121	Advanced Operating System	4
CSUT122	Mobile Technologies	4
CSUT123	Software Project Management	4
CSDT124A	Project	2
CSDP124A	Project related Assignments	2
	OR	
CSDT124B	Human Computer Interaction	2
CSDP124B	Human Computer Interaction Practical	2
	OR	
CSDT124C	Soft Computing	2
CSDP124C	Soft Computing Practical	2
CSUP125	Practical on Advanced OS & Mobile Technologies	4

SYMSc(CS)

SEMESTER - III		
Paper Code	Paper Title	Credits
CSUT231	Software Architecture & Design Pattern	4
CSUT232	Machine Learning	4
CSUT233	Web Frameworks	4
CSDT234A	Big Data Analytics	2
CSDP234A	Big Data Analytics Practical	2
	OR	
CSDT234B	Web Analytics	2
CSDP234B	Web Analytics Practical	2
	OR	
CSDT234C	Project	2
CSDP234C	Project related Assignments	
CSUP235	Practical on CSUT231, CSUT232 and CSUT233	4

SEMESTER - IV		
Paper Code	Paper Title	Credits
CSUIT241	Industrial Training /Institutional project	20

M.Sc(Computer Application)

Eligibility Criteria

A Bachelor Degree in Science/Technology/Engineering with minimum 50% marks or equivalent for student belonging to Unreserved Category and minimum 45% or equivalent for students belonging to reserved category.

F.Y.MSc (CA)

SEMESTER - I			SEMESTER - II		
Paper Code	Paper Title	Credits	Paper Code	Paper Title	Credits
CACCTP-1	Web Technology Computer	4	CACCTP-4	Data Mining and Ware Housing	4
CACCTP-2	Advance Databases	4	CACCTP-5	Operating Systems	4
CACCTP-3	Design and Analysis of Algorithm	4	CACCTP-6	Computer Networks	4
CACBOTP-1 A	Object Oriented Programming with C++	2	CACBOTP-2 A	Java Programming	2
CACBOPP-1 A	Object Oriented Programming with C++ Laboratory	2	CACBOPP-2 A	Java Programming Laboratory	2
CACCPP-1	Web Technology Laboratory	4		OR	
	OR		CACBOTP-2B	Web Services	2
CACBOTP-1B	ASP.NET	2	CACBOPP-2B	Web Services Laboratory	2
CACBOPP-1B	ASP.NET Laboratory	4		OR	
	OR		CACBOTP-2C	Software Testing (Automated)	2
CACBOTP-1C	Software Testing (Manual)	2	CACBOPP-2C	Software Testing (Automated) Laboratory	2
CACBOPP-1 C	Software Testing (Manual) Laboratory	4	CACCPP-2	Data Mining and Ware Housing Laboratory	4

S.Y.MSc(CA)

SEMESTER - III			SEMESTER - IV		
Paper Code	Paper Title	Credits	Paper Code	Paper Title	Credits
CACCTP -7	Mobile Application Development Using Android	4	CA-CCUP I	Industrial Training/OnCampus Project	20
CACCTP-8	Internet of Things	4			
CACCTP-9	Artificial Intelligence	4			
CACBOTP-3 A	Python Programming	2			
CACBOPP-3 A	Python Programming Laboratory	4			
CACCPP-3	Android Programming Laboratory	8			
	OR				
CACBOTP-3B	B Big Data	2			
CACBOPP-3B	B Big Data Laboratory	4			
	OR				
CACBOTP-3 C	Django	2			
CACBOPP-3C	Django Laboratory	4			