



JSPM's
RAJARSHI SHAHU COLLEGE OF ENGINEERING
TATHAWADE, PUNE-33
(An Autonomous Institute Affiliated to Savitribai Phule Pune University, Pune)



Department of Computer Science and Business Systems (CSBS)

Department of Computer Science and Business Systems (CSBS)

Structure & Syllabi
2023 Pattern Version 2
w.e.f. Academic Year 2025-2026



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F. Y. B. Tech (Pattern 2023)

Structure for Group 3

F. Y. B. Tech. Computer Science and Business System

Academic Year -2024-2025 (Semester –I)

Course	Course Code	Course	Teaching Scheme				Credit	Examination Scheme				Total Marks	Ownership	
			L	T	P	Hr		C	ISE	MSE	ESE			TW
BSC	ES1203T	Linear Algebra	3	1	-	4	4	20	30	50	50	150	Mathematics	
ESC	EE1201T	Introduction to Electrical Engineering	3	-	-	3	3	20	30	50	-	100	Electrical	
ESC	EE1201L	Introduction to Electrical Engineering Laboratory	-	-	2	2	1	ISCE: 30		20	-	50	Electrical	
ESC	CS1203T	Fundamentals of Computer Programming	1	-	-	1	1	20	10	20	-	50	Computer and IT	
ESC	CS1203L	Fundamentals of Computer Programming Laboratory	-	-	4	4	2	ISCE: 60		40	-	100	Computer and IT	
HSSM (AEC)	HS1202T/ HS1203T/ HS1204T/ HS1205T	Professional English Communication/ English Language skills German/ Japanese	2	-	-	2	2	20	30	50	-	100	Humanities	
	HS1202L/ HS1203L/ HS1204L/ HS1205L	Professional English Communication lab English Language skills Lab German lab Japanese lab	-	-	2	2	1	ISCE: 30		20	-	50	Humanities	
	SSM (VSEC)	ES1208L	Introduction to Engineering and Engineering Products	0	0	2	2	1	ISCE: 30		20	-	50	Engineering Sciences
	HSSM	HS1209T	Economics	2	-	-	2	2	20	30	50	-	100	Humanities
HSSM	HS1210L	Business Communication and Value Science-I	-	-	-	2	1	ISCE: 50			-	50	Humanities	
CC	ES1211L	Co-curricular Course	-	1	-	1	1	ISCE: 50		-	-	50	Humanities	
HSSM	HS1208T	Universal Human values	3	-	-	3	3	20	30	50	-	100	Humanities	
HSSM	HS1201	Induction Training	Non-credit course											
		Total	14	2	10	28	22					950		

Dr. S.M. Yadav
Engg Sciences and Humanities

Dr. Ram Joshi
Dean Academics



Dr. R. K. Jain
Director RSCOE, Pune



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F. Y. B. Tech (Pattern 2023)

Structure for Group 3

F. Y. B. Tech. Computer Science and Business System

Academic Year -2024-2025 (Semester –II)

Course	Course Code	Course	Teaching Scheme				Credit	Examination Scheme				Total Marks	Ownership
			L	T	P	Hr		C	ISE	MSE	ESE		
BSC	ES1204T	Discrete Mathematics	3	1	-	4	4	20	30	50	50	150	Mathematics
BSC	ES1206T	Physics for Engineers	3	-	-	3	3	20	30	50	-	100	Physics
BSC	ES1206L	Physics for Engineers Laboratory	-	-	2	2	1	ISCE: 30		20	-	50	Physics
ESC	EC1201T	Basic Electronics Engineering	2	-	-	2	2	20	30	50	-	100	E&TC
ESC	EC1201L	Basic Electronics Engineering Laboratory	-	-	2	2	1	ISCE: 30		20		50	E&TC
ESC	ES1205T	Probability and Statistics	3	1	-	4	4	20	30	50	50	150	Mathematics
ESC	CS1204T	Object Oriented Programming	1	-	-	1	1	20	10	20	-	50	Computer and IT
ESC	CS1204L	Object Oriented Programming Laboratory	-	-	4	4	2	ISCE: 60		40	-	100	Computer and IT
CEP	ES1209L	Community Engagement Project	0	0	4	4	2	ISCE: 50		50	-	100	Engineering Sciences
HSSM (IKS)	HS1207T	Indian Knowledge Systems	2	-	-	2	2	20		30	50	100	Humanities
HSSM	HS1206	Indian Constitution	Non-credit course										
	Total		14	2	12	28	22					950	

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Abbreviations

L	:	Lecture	P	:	Practical
T	:	Tutorial	C	:	Credits
Hr	:	Hours			
In Course Code T	:	Theory	In Course Code L	:	Lab
BSC	:	Basic Science Courses			
ESC	:	Engineering Science Courses			
HSSM	:	Humanities Social Science and Management Courses			
VSEC	:	Vocational Skill Enhancement Courses			
CEP	:	Community Engagement Project			
CC	:	Co-curricular activities			
ISE	:	In Semester Evaluation			
MSE	:	Mid Semester Evaluation			
ESE	:	End Semester Evaluation			

Notes: For Theory courses: There shall be MSE, ISE and ESE. The ESE is a separate head of passing.

For Lab courses: There shall be continuous assessment (ISCE consists of ISE and MSE).

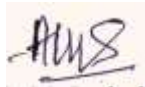
The ESE is a Separate head of passing.

List of Exit Courses after completion of Semester I and II

1. Exit option is available for students those who have earned the total 44 credits at the End of Second Semester.
2. Student who wants to avail the exit option after first year have to earn additional 8 credits from the list of courses shown below.
3. These courses student have to complete within summer vacation after 1 st Year.
4. After fulfillment as mentioned in 1 to 3 above, Students can earn **U.G Certificate** and same will be issued by the Institute.



Prof. K. P. Moholkar
BoS, CSBS



Dr. A.M. Badadhe
Dean Academics



Dr. Santosh Bhosle
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S. Y. B. Tech (Computer Science Business Systems)
Semester -III Structure (AY-2025-26)

Course	Course Code	Course	Teaching Scheme				Credit	Examination Scheme				Total Marks	Ownership
			L	T	P	Hr		ISE	MSE	ESE	TW		
PCC	CB2201T	Formal Language & Automata Theory	3	-	-	3	3	20	30	50	-	100	CSBS
PCC	CB2202T	Software Engineering	3	-	-	3	3	20	30	50	-	100	CSBS
PCC	CB2202L	Software Engineering Lab	-	-	2	2	1	ISCE: 30		20	-	50	CSBS
PCC	CB2203T	Data structures and Algorithms	3	-	-	3	3	20	30	50	-	100	CSBS
PCC	CB2203L	Data structures and Algorithms Laboratory	-	-	2	2	1	ISCE: 30		20	-	50	CSBS
PCC	CB2204T	Operating Systems	3	-	-	3	3	20	30	50	-	100	CSBS
PCC	CB2204L	Operating Systems Laboratory	-	-	2	2	1	ISCE: 30		20	-	50	CSBS
HSSM	HS2204T	Fundamentals of Management and Business Strategy	2	-	-	2	2	20	30	50	-	100	CSBS
PCC	CB2205L	Design Thinking & Innovation	-	-	2	2	1	ISCE: 30		20	-	50	CSBS
HSSM (VEC)	ES2206T	Environmental Science and Engineering	2	-	-	2	2	20	30	50	-	100	Humanities
Skill Course (VEC)	CB2206L	Skill Development Lab I (Java)	-	-	2	2	1	ISCE: 30		20	-	50	CSBS
HSSM (VSEC)	HS3202	Business Communication and Value Science II	-	-	2	2	1	ISCE: 30		20	-	50	Humanities
Total			16	0	12	28	22					900	

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S. Y. B. Tech (CSBS Science and Business Systems)

Academic Year -2025-2026 (Semester –IV)

Proposed Structure Semester -IV

(Level 5 - UG-Diploma/ Diploma-Eng) -Semester III

Course	Course Code	Course	Teaching Scheme				Credit C	Examination Scheme				Total Marks	Ownership
			L	T	P	Hr		ISE	MSE	ESE	TW		
PCC	CB2207T	Design and Analysis of Algorithm	3	-	-	3	3	20	30	50	-	100	CSBS
PCC	CB2207L	Design and Analysis of Algorithm Laboratory	-	-	2	2	1	ISCE: 30		20	-	50	CSBS
PCC	CB2208T	Database Management Systems	3	-	-	3	3	20	30	50	-	100	CSBS
PCC	CB2208L	Database Management Systems Laboratory	-	-	2	2	1	ISCE: 30		20	-	50	CSBS
PCC	CB2209T	Computer Organization and Architecture	2	-	-	2	2	20	30	50	-	100	CSBS
PCC	CB2210L	Data Analysis and Visualization Lab	-	-	4	4	2	ISCE: 30		20	-	50	CSBS
MDM		Multi-Disciplinary Minor-I	3	-	-	3	3	20	30	50	-	100	Other department
HSSM	CB2211T	Introduction to Innovation, IP management & IPR	2	-	-	2	2	20	30	50	-	100	CSBS
HSSM (VSEC)	HS2210L	Business Communication and Value Science III	-		2	2	1	ISCE: 30		20	-	50	Humanities
CC	CB2212L	Co-curricular Course	-	-	2	2	1	ISCE: 50			-	50	Respective Department
	CB2213T	Software Testing	3	-	-	3	3	20	30	50	-	100	CSBS
Total			16	-	12	28	22					850	

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Draft T. Y. B. Tech (CSBS Science and Business Systems)
Academic Year -2026-2027 (Semester –V)
Proposed Structure Semester -V
(Level 5.5 - B.Voc./ B.Sc. Engg) -Semester V

Course	Course Code	Course	Teaching Scheme				Credit	Examination Scheme			Total Marks	Ownership
			L	T	P	Hr		ISE	MSE	ESE		
PCC	CB3201T	Computer Networks	3	-	-	3	3	20	30	50	100	CSBS
PCC	CB3201L	Computer Networks Lab	-	-	2	2	1	ISCE: 30		20	50	CSBS
PCC	CB3202T	Machine Learning	3	-	-	3	3	20	30	50	100	CSBS
PCC	CB3202L	Machine Learning Laboratory	-	-	2	2	1	ISCE-30		20	50	CSBS
MDM	CBM3201T	Multi-Disciplinary Minor-II	3	-	-	3	3	20	30	50	100	Other department
MDM	CBM3201L	Multi-Disciplinary Minor-II Lab	-	-	2	2	1	ISCE: 30		20	50	Other department
OE	CBO3201T	Open Elective I	3	-	-	3	3	20	30	50	100	Other department
PEC	CB3203T	Professional Elective-I	3	-	-	3	3	20	30	50	100	CSBS
PEC	CB3203L	Professional Elective-I Laboratory	-	-	2	2	1	ISCE: 30		20	50	CSBS
AEC	CB3204L	Skill Development Lab II	-	-	2	2	1	ISCE: 30		20	50	CSBS
	CB3205L	Seminar and Technical Communication	-	-	2	2	1	ISCE: 30		20	50	CSBS
	CB3206L	Business Communication and Value Science-IV			2	2	1	ISCE: 30		20	50	CSBS
	Total		15	-	14	29	22				850	

*Open Elective list is attached separately.

Professional Elective I		Professional Elective I Lab	
Course Code	Course Name	Course Code	Course Name
CB3203T-A	Artificial Intelligence	CB3203-A	Artificial Intelligence Lab
CB3203T-B	Information Security	CB3203L-B	Information Security Lab
CB3203T-C	Financial and Cost Accounting	CB3203L-C	Financial and Cost Accounting Lab
CB3203T-D	MOOC		MOOC Lab

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T. Y. B. Tech (CSBS Science and Business Systems)
Academic Year -2026-2027 (Semester –VI)
Proposed Structure Semester -VI
(Level 5.5 - B.Voc./ B.Sc. Engg) -Semester VI

Course	Course Code	Course	Teaching Scheme				Credit	Examination Scheme			Total Marks	Ownership
			L	T	P	Hr		ISE	MSE	ESE		
MDM	CBM3202T	Multi-Disciplinary Minor-III	3	-	-	3	3	20	30	50	100	Other department
OE	CBM3202L	Open Elective II: Business Strategy	3	-	-	3	3	20	30	50	100	Other department
PCC	CB3209T	Business Analytics	2	-	-	2	2	20	30	50	100	CSBS
Skill Course (VSEC)	CB3209L	Business Analytics Lab			2	2	1	ISCE: 30		20	50	
PEC	CB3206T	Professional Elective-II	3	-	-	3	3	20	30	50	100	CSBS
PEC	CB3206L	Professional Elective-II Laboratory	-	-	2	2	1	ISCE: 30		20	50	CSBS
HSSM	CB3207T	Professional Elective-III	3	-	-	3	3	20	30	50	100	CSBS
PCC	CB3208T	Cloud Computing	2	-	-	2	2	20	30	50	100	CSBS
PCC	CB3208L	Cloud Computing lab			2	2	1	ISCE: 30		20	50	
CEP	CB3209L	Engineering Innovation and Society-I (Project II)	-	-	4	4	2	ISCE: 30		20	50	CSBS
CC	CB3210L	Co-curricular Course	-	-	2	2	1	ISCE: 50			50	CSBS
Total			16	-	12	28	22				850	

Professional Elective II		Professional Elective II Lab	
Course Code	Course Name	Course Code	Course Name
CB3206T-A	Deep Learning	CB3206L-A	Deep Learning Lab
CB3206T-B	Cyber Security and Digital Forensic	CB3206L-B	Cyber security and Digital Forensic Lab
CB3206T-C	Operation research	CB3206L-C	Operation research Lab
CB3206T-D	MOOC		MOOC Lab

Professional Elective III	
	Course Name
CB3207T-A	Enterprise System
CB3207T-B	Finance Management
CB3207T-C	Marketing Research and Marketing Management
CB3207T-D	Compiler Design

Notes:

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