D.Y.PATIL COLLEGE OF ENGINEERING & TECHNOLOGY
KASABA BAWADA, KOLHAPUR-416006
(An Autonomous Institute)
F. Y. B. Tech. Curriculum
w.e.f. 2020-2021
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D. Y. Patil College of Engineering and Technology

Kasaba Bawada, Kolhapur

(An Autonomous Institute)

Accredited by NAAC with 'A' Grade

B. Tech Programme Structure

Department of
Computer Science and Engineering

2020-21

D. Y. PATIL COLLEGE OF ENGINEERING & TECHNOLOGY, KOLHAPUR
Teaching and Evaluation Scheme from Year 2020-21
Second Year B. Tech. Computer Science & Engineering
SEMESTER-III

Sr. No.	Course Code	Course Type	Name of the Course	Teaching Scheme per Week				Total Marks	Evaluation Scheme			
				Lecture	Tutorial	Practical	Credits		Type	Max. Marks	Min. for Passing	
1	201CSL201	ESC	Software Engineering	3			3	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
2	201CSL202	BSC	Discrete Mathematics & Structures	3	1		4	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
3	201CSL203	ESC	Computer Organization & Microprocessors	3			3	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
4	201CSL204	PCC	Data Structures	3			3	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
5	201CSP205	PCC	Advanced C Programming	2		4	4	100	ISE	50	20	40
									ESE-POE	50	20	
6	201CSP206	ESC	Computer Organization & Microprocessors Lab			2	1	25	ISE	25	10	10
7	201CSP207	PCC	Data Structures Lab			2	1	75	ISE	25	10	30
									ESE-POE	50	20	
8	201CSP208	HSMC	Soft Skills			2	1	50	ISE	25	10	20
									ESE-OE	25	10	
9	201CSMC209	MC	Environmental Studies	2								
			Total	16	1	10	20	650				260

ISE: In Semester Evaluation MSE: Mid Semester Examination   ESE: End Semester Examination

Note 1 : Tutorials and practical shall be conducted in batches with batch strength not exceeding 20 students.

Note 2 : ESE will be conducted for 100 marks and converted to 50 marks

D. Y. PATIL COLLEGE OF ENGINEERING & TECHNOLOGY, KOLHAPUR

Teaching and Evaluation Scheme from Year 2020-21

Second Year B. Tech. Computer Science & Engineering

SEMESTER-IV

Sr. No.	Course Code	Course Type	Name of the Course	Lecture	Tutorial	Practical	Credits	Total Marks	Type	Max. Marks	Min. for Passing	
1	201CSL210	BSC	Statistics & Fuzzy System	3			3	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
2	201CSL211	PCC	Operating Systems	3			3	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
3	201CSL212	PCC	Computer Networks	3			3	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
4	201CSL213	PCC	Automata Theory	3	1		4	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
5	201CSP214	PCC	Java Programming	2		4	4	75	ISE	25	10	30
									ESE-POE	50	20	
6	201CSP215	PCC	Operating Systems Lab			2	1	25	ISE	25	10	10
7	201CSP216	PCC	Computer Networks Lab			2	1	75	ISE	25	10	30
									ESE-POE	50	20	
8	201CSP217	PROJ	Project-I			4	2	75	ISE	25	10	30
									ESE-OE	50	20	
9	201CSMC218	MC	Economics and Management	2								
			Total	16	1	12	21	650				260

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*** 4 to 6 week internship mandatory in summer vacation of SEM-IV or SEM-VI (Credits will be considered in VII semester)

Internship Guidelines

The students are expected to undergo 4 to 6 weeks internship in the industry and work on the relevant area as assigned by the Industry. The work done should be monitored and evaluated by the concerned industry expert based on the report prepared by the student. The department has to assign faculty mentors to a student who has to communicate with the industry and monitor the entire internship related work periodically.

The scheme of evaluation will be as under:-
a) Industry expert/ supervisor: - 70%
b) Department & Faculty mentor: - 30%

It consist of presentation and submission of report to the department at the beginning of the subsequent semester.
1) The internship can be availed by the students during the summer vacations after completion of semester IV or VI.
2) The credits of the internships will be considered in semester VII.
3) The industry experts/ supervisor are expected to assign the work worth minimum 100 to 120 hours for 4 to 6 weeks duration and should monitor and evaluate periodically.
4) At the completion of internship work the student is expected to prepare a report on the work done and get a certificate from the industry expert.

D. Y. PATIL COLLEGE OF ENGINEERING & TECHNOLOGY, KOLHAPUR
Teaching and Evaluation Scheme from Year 2020-21
Third Year B. Tech. Computer Science & Engineering
SEMESTER-V

Sr. No.	Course Code	Course Type	Name of the Course	Lecture	Tutorial	Practical	Credits	Total Marks	Type	Max. Marks	Min. for Passing	
									ISE	20		
1	201CSL301	ESC	Design and Analysis of Algorithms	3	1		4	100	MSE	30	20	40
									ESE	50	20	
									ISE	20		
2	201CSL302	PCC	Distributed Systems & Cloud Computing	3			3	100	MSE	30	20	40
									ESE	50	20	
									ISE	20		
3	201CSL303	PCC	Database Engineering	3			3	100	MSE	30	20	40
									ESE	50	20	
									ISE	20		
4	201CSL304	PEC	Professional Elective-I	3	1		4	100	MSE	30	20	40
									ESE	50	20	
									ISE	25	10	
5	201CSP305	PCC	Python Programming	2		2	3	75	ESE-POE	50	20	30
6	201CSP306	PCC	Distributed Systems & Cloud Computing Lab			2	1	25	ISE	25	10	10
									ISE	25	10	
7	201CSP307	PCC	Database Engineering Lab			2	1	75	ESE-POE	50	20	30
									ISE	25	10	
8	201CSP308	PROJ	Project-II			2	1	75	ESE-OE	50	20	30
9	201CSMC309	MC	Intellectual Property Rights	2								
			Total	16	2	8	20	650				260

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Note 1 : Tutorials and practical shall be conducted in batches with batch strength not exceeding 15 students.

Note 2 : ESE will be conducted for 100 marks and converted to 50 marks

Professional Elective-I	1. Wireless Sensor Networks
	2. Software Defined Networks

D. Y. PATIL COLLEGE OF ENGINEERING & TECHNOLOGY, KOLHAPUR
Teaching and Evaluation Scheme from Year 2020-21
Third Year B. Tech. Computer Science & Engineering
SEMESTER-VI

Sr. No.	Course Code	Course Type	Name of the Course	Lecture	Tutorial	Practical	Credits	Total Marks	Type	Max. Marks	Min. for Passing	
1	201CSL310	PCC	Information Security	3			3	100	ISE	20		40
									MSE	30	20	
									ESE	50	20	
2	201CSL311	PCC	System Programming & Compilers	3			3	100	ISE	20		40
									MSE	30	20	
									ESE	50	20	
3	201CSL312	PEC	Professional Elective-II	3			3	100	ISE	20		40
									MSE	30	20	
									ESE	50	20	
4	201CSL313	OEC	Open Elective I	3	1		4	100	ISE	20		40
									MSE	30	20	
									ESE	50	20	
5	201CSP314	PCC	Web Technology	2		4	4	75	ISE	25	10	30
									ESE-POE	50	20	
6	201CSP315	HSMC	Technical Communication			2	1	50	ISE	25	10	20
									ESE-OE	25	10	
7	201CSP316	PCC	Information Security Lab			2	1	25	ISE	25	10	10
8	201CSP317	PCC	System Programming & Compilers Lab			2	1	25	ISE	25	10	10
9	201CSP318	PROJ	Project III			2	1	75	ISE	25	10	30
									ESE-OE	50	20	
			Total	14	1	12	21	650				260

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Professional Elective-II	Open Elective I
1.Internet of Things	1. E- Commerce & Digital Marketing
2.Artificial Intelligence	2. Python Programming

D. Y. PATIL COLLEGE OF ENGINEERING & TECHNOLOGY, KOLHAPUR
Teaching and Evaluation Scheme from Year 2020-21
Final Year B. Tech. Computer Science & Engineering
SEMESTER-VII

Sr. No.	Course Code	Course Type	Name of the Course	Lecture	Tutorial	Practical	Credits	Total Marks	Type	Max. Marks	Min. for Passing	
1	201CSL401	PEC	Professional Elective-III	3			3	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
2	201CSL402	PEC	Professional Elective -IV	3	1		4	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
3	201CSL403	OEC	Open Elective -II	3	1		4	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
4	201CSP404	PCC	Advanced Web Technology	2		4	4	75	ISE	25	10	30
									ESE-POE	50	20	
5	201CSP405	PEC	Professional Elective-III Lab			2	1	75	ISE	25	10	30
									ESE-POE	50	20	
6	201CSP406	PROJ	Project-IV			4	2	150	ISE	75	30	60
									ESE-OE	75	30	
7	201CSP407	PROJ	Internship				4					
			Total	11	2	10	22	600				240

ISE: In Semester Evaluation MSE: Mid Semester Examination ESE: End Semester Examination
Note 1 : Tutorials and practical shall be conducted in batches with batch strength not exceeding 15 students.
Note 2 : ESE will be conducted for 100 marks and converted to 50 marks

Professional Elective-III:	Open Elective–II
1. Software Architectures	1. Security & Privacy in Social Networks
2. Machine and Deep Learning	2. Web Applications Development

Professional Elective-IV:
1. Data Science & Analytics
2. Image Processing and Pattern Recognition

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Teaching and Evaluation Scheme from Year 2020-21
Final Year B. Tech. Computer Science & Engineering
SEMESTER-VIII

Sr. No.	Course Code	Course Type	Name of the Course	Lecture	Tutorial	Practical	Credits	Total Marks	Type	Max. Marks	Min. for Passing	
1	201CSL408	PCC	Service Oriented Architecture	3			3	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
2	201CSL409	PCC	Advanced Database Systems	3			3	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
3	201CSL410	PEC	Professional Elective-V	3			3	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
4	201CSL411	PEC	Professional Elective-VI	3	1		4	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
5	201CSP412	PCC	Service Oriented Architecture Lab			2	1	75	ISE	25	10	30
									ESE POE	50	20	
6	201CSP413	PCC	Advanced Database Systems Lab			2	1	75	ISE	25	10	30
									ESE POE	50	20	
7	201CSP414	HSMC	Community Services			2	1	25	ISE	25	10	10
8	201CSP415	PROJ	Project-V			4	2	150	ISE	75	30	30
									ESE-OE	75	30	30
			Total	12	1	10	18	725				290

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Professional Elective-V:
1. Symantec Web and Social Networks
2. Cyber Security & Forensics Science

Professional Elective-VI:
1. Real Time Systems
2. Search Engine Design and Optimization

D Y PATIL COLLEGE OF ENGINEERING AND TECHNOLOGY

KASABA BAWADA, KOLHAPUR.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Curriculum Comparison and subject Distribution with AICTE

Course Code	Category	Subjects	AICTE Breakup of Credits	FY B.Tech. Credits	CSE Dept. Credits	Total
HSMC	Humanities and Social Sciences including Management courses	Soft Skills, Technical Communication, Community Services	12	4	3	7
BSC	Basic Science Courses	Statistics & Fuzzy System, Discrete Mathematics & Structures	24	16	7	23
ESC	Engineering Science courses including workshop, drawing, basics of electrical / mechanical/ computer etc.	Software Engineering, Design and Analysis of Algorithms, Computer Organization & Microprocessors	29	18	11	29
PCC-CS	Professional core courses	Data Structures, Advanced C Programming, Automata Theory, Operating Systems, Computer Networks, Python Programming, Information Security, Database Engineering, Java Programming, Distributed Systems & Cloud Computing, System Programming & Compilers, Web Technology, Advanced Web Technology, Service Oriented Architecture,Advanced Database Systems	49		59	59
PEC-CS	Professional Elective courses relevant to chosen specialization/branch	Professional Elective-I, Professional Elective II, Professional Elective III, Professional Elective IV, Professional Elective V, Professional Elective VI	18		22	22
OEC-CS	Open subjects–Electives from other technical and/or emerging subjects	Open Elective I, Open Elective –II	12		8	8

PROJ	Project work, seminar and internship in industry or appropriate work place/ academic and research institutions in India/abroad	Project-I, Project-II, Project III, Project IV, Internship, Project-V	15		12	12
MC	Mandatory Courses [Environmental Sciences, Induction program, Indian Constitution, Essence of Indian Knowledge Tradition]	Environment Studies, Economics and Management, IPR	(Non-Credit)	-	-	-
	Total		**159**	**38**	**122**	**160**