

D. Y. Patil College of Engineering and Technology

Kasaba Bawada, Kolhapur

(An Autonomous Institute)

Accredited by NAAC with 'A' Grade

Accredited by NBA



F.Y. B. Tech.

Structure and Curriculum

Department of First Year Engineering

w. e. f. A.Y.: 2023-24



D. Y. PATIL COLLEGE OF ENGINEERING & TECHNOLOGY

Kasaba Bawada, Kolhapur

(An Autonomous Institute)

Department of First Year Engineering

F. Y. B. Tech. Curriculum

w.e.f. A.Y. 2023-2024

F. Y. B. Tech. Scheme of Teaching and Examination w. e. f. A. Y. 2023-2024 (As Per National Education Policy 2020)

Semester-I (Physics Cycle)

Sr. No	Course Code	Course Type	Name of the Course	Teaching Scheme Per Week			Credits	Total Marks	Evaluation Scheme			
				L	T	P			Type	Max. Marks	Minimum Marks For Passing	
Students Induction Program As Per AICTE Guidelines												
1	231FYL101	BSC	Linear Algebra and Calculus	03	01	--	04	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
2	231FYL102	BSC	Applied Physics	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
3	231FYL103	ESC	Computer Programming & Problem Solving	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
4	231FYL104	ESC	Elements of Civil Engineering & Mechanics	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
5	231FYL105	VSEC	Design Thinking Through Innovation	01	--	--	01	25	ISE	25	10	10
6	231FYL106	IKS	Historical Places in and Around Kolhapur District	02	--	--	02	20	ISE	20	20	20
								30	MSE	30		
7	231FYP107	BSC	Applied Physics Laboratory	--	--	02	01	25	ISE	25	10	10
8	231FYP108	ESC	Computer Programming & Problem Solving Laboratory	--	--	02	01	25	ISE	25	10	10
9	231FYP109	ESC	Elements of Civil Engineering & Mechanics Laboratory	--	--	02	01	25	ISE	25	10	10
10	231FYP110	VSEC	Design Thinking Through Innovation Laboratory	--	--	02	01	25	ISE	25	10	10
Total				15	01	08	20	575	--	--	--	--
Mandatory Courses												
1	231FYM122	MC	Rural/Social Internship	--	--	--	--	50	ISE	Grade	--	--
2.	231FYM123	MC	Fundamentals of Aptitude and Technical-I	03	--	--	--	50	ISE	Grade	--	--



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F. Y. B. Tech. Scheme of Teaching and Examination w. e. f. A. Y. 2023-2024

(As Per National Education Policy 2020)

Semester -II (Physics Cycle)

Sr. No	Course Code	Course Type	Name of the Course	Teaching Scheme Per Week			Credits	Total Marks	Evaluation Scheme			
				L	T	P			Type	Max. Marks	Minimum Marks For Passing	
1	231FYL111	BSC	Differential Equations and Numerical Techniques	03	01	--	04	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
2	231FYL112	BSC	Applied Chemistry	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
3	231FYL113	ESC	Elements of Electrical and Electronics Engineering	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
4	231FYL114	ESC	Computer Aided Engineering Graphics	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
5	231FYL115	AEC	Professional Communication	01	--	--	01	25	ISE	25	10	10
6	231FYP116	BSC	Applied Chemistry Laboratory	--	--	02	01	25	ISE	25	10	10
7	231FYP117	ESC	Elements of Electrical and Electronics Engineering Laboratory	--	--	02	01	25	ISE	25	10	10
8	231FYP118	ESC	Computer Aided Engineering Graphics Laboratory	--	--	02	01	25	ISE	25	10	10
9	231FYP119	AEC	Professional Communication Laboratory	--	--	02	01	25	ISE	25	10	10
10	231FYP120	CCA	Liberal Learning Course	--	--	04	02	50	ISE	50	20	20
11	231FYL121	PCC	# Departmental Core Course	02	--	--	02	50	ISE	20	20	20
									MSE	30		
Total				15	01	12	22	625	--	--	--	--
Mandatory Courses												
1	231FYM124	MC	Capstone Project	--	--	--	--	50	ISE	Grade	--	--
2.	231FYM125	MC	Fundamentals of Aptitude and Technical-II	03	--	--	--	50	ISE	Grade	--	--

Departmental Core Courses List

1. Computer Science & Engineering (CSE, DS, AIML): Web Designing
2. Electronics & Telecommunication Engineering: Instrumentation & Control System
3. Mechanical Engineering: Foundation of Mechanical Engineering-I
4. Chemical Engineering: Chemical Process Instrumentation & Plant Utility
5. Civil Engineering: Engineering Mechanics



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F. Y. B. Tech. Scheme of Teaching and Examination w. e. f. A. Y. 2022-2023

(As Per National Education Policy 2020)

Semester -I (Chemistry Cycle)

Sr. No	Course Code	Course Type	Name of the Course	Teaching Scheme Per Week			Credits	Total Marks	Evaluation Scheme			
				L	T	P			Type	Max. Marks	Minimum Marks For Passing	
Students Induction Program As Per AICTE Guidelines												
1	231FYL101	BSC	Linear Algebra and Calculus	03	01	--	04	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
2	231FYL112	BSC	Applied Chemistry	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
3	231FYL113	ESC	Elements of Electrical and Electronics Engineering	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
4	231FYL114	ESC	Computer Aided Engineering Graphics	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
5	231FYL115	AEC	Professional Communication	01	--	--	01	25	ISE	25	10	10
6	231FYP116	BSC	Applied Chemistry Laboratory	--	--	02	01	25	ISE	25	10	10
7	231FYP117	ESC	Elements of Electrical and Electronics Engineering Laboratory	--	--	02	01	25	ISE	25	10	10
8	231FYP118	ESC	Computer Aided Engineering Graphics Laboratory	--	--	02	01	25	ISE	25	10	10
9	231FYP119	AEC	Professional Communication Laboratory	--	--	02	01	25	ISE	25	10	10
10	231FYP120	CCA	Liberal Learning Course	--	--	04	02	50	ISE	50	20	20
Total				13	01	12	20	575	--	--	--	--
Mandatory Courses												
1	231FYM122	MC	Rural/Social Internship	--	--	--	--	50	ISE	Grade	--	--
2.	231FYM123	MC	Fundamentals of Aptitude and Technical-I	03	--	--	--	50	ISE	Grade	--	--



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F. Y. B. Tech. Scheme of Teaching and Examination w. e. f. A. Y. 2022-2023

(As Per National Education Policy 2020)

Semester -II (Chemistry Cycle)

Sr. No	Course Code	Course Type	Name of the Course	Teaching Scheme Per Week			Credits	Total Marks	Evaluation Scheme			
				L	T	P			Type	Max. Marks	Minimum Marks For Passing	
1	231FYL111	BSC	Differential Equations and Numerical Techniques	03	01	--	04	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
2	231FYL102	BSC	Applied Physics	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
3	231FYL103	ESC	Computer Programming & Problem Solving	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
4	231FYL104	ESC	Elements of Civil Engineering & Mechanics	03	--	--	03	100	ISE	20	20	40
									MSE	30		
									ESE	50	20	
5	231FYL105	VSEC	Design Thinking Through Innovation	01	--	--	01	25	ISE	25	10	10
6	231FYL106	IKS	Historical Places in and Around Kolhapur District	02	--	--	02	50	ISE	20	20	20
									MSE	30		
7	231FYP107	BSC	Applied Physics Laboratory	--	--	02	01	25	ISE	25	10	10
8	231FYP108	ESC	Computer Programming & Problem Solving Laboratory	--	--	02	01	25	ISE	25	10	10
9	231FYP109	ESC	Elements of Civil Engineering & Mechanics Laboratory	--	--	02	01	25	ISE	25	10	10
10	231FYP110	VSEC	Design Thinking Through Innovation Laboratory	--	--	02	01	25	ISE	25	10	10
11	231FYL121	PCC	# Departmental Core Course	02	--	--	02	50	ISE	20	20	20
									MSE	30		
Total				17	01	08	22	625	--	--	--	--
Mandatory Courses												
1	221FYM124	MC	Capstone Project	--	--	--	--	50	ISE	Grade	--	--
2.	221FYM125	MC	Fundamentals of Aptitude and Technical-II	03	--	--	--	50	ISE	Grade	--	--

Departmental Core Courses List

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