

D.Y. PATIL COLLEGE OF ENGINEERING AND TECHNOLOGY, KOLHAPUR  
Teaching and Evaluation Scheme From Year 2024-25 (as per NEP 2020)  
Second Year B. Tech Chemical Engineering  
Semester - III

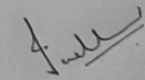
Sr. No.	Course Code	Course Type	Name of the Course	Teaching Scheme Per Week				Theory			Practical		Total Marks
				Credits	Contact Hrs			ISE	MSE	ESE	INT	OE/P OE	
					L	P	T						
1	231CHPCCL201	PCC	Fluid Flow Operations	3	3	-	-	20	30	50	-	-	100
2	231CHPCCL202	PCC	Mechanical Operations	3	3	-	-	20	30	50	-	-	100
3	231CHPCCL203	PCC	Process Calculations	2	2	-	-	-	-	50	-	-	50
4	231CHPCCP201	PCC	Fluid Flow Operations Lab	1	-	2	-	-	-	-	25	25	50
5	231CHPCCP202	PCC	Mechanical Operations Lab	1	-	2	-	-	-	-	25	25	50
6	231CHCEPP201	CEP/FP	Environmental Ethics and Sustainability	2	-	4	-	-	-	-	50	-	50
7	231CHMDML201	MDM-1	Petroleum Refinery Engineering	2	2	-	-	20	-	30	-	-	50
8	231CHVECL201	VEC	Leadership and Ethical Decision Making	2	2	-	-	20	30	-	-	-	50
9	231CHOECL201	OEC-1	Research & Innovations (ODL Only*)	4	3 <sup>S</sup>	2	-	20	30	50	25	-	125
10	231CHHSSML201	HSSM	Start-up Fundamentals and Financing	1	1	-	-	-	25	-	-	-	25
11	231CHHSSMP201	HSSM	Start-up Fundamentals and Financing	1	-	2	-	-	-	-	25	-	25
12	231CHMCL201	MC	Finishing School Training III	Audit	3*	-	-	50*	-	-	-	-	Grade
13	231CHCCAL201	CCA	Liberal Learning	Audit	-	-	-	50*	-	-	-	-	Grade
<b>Total</b>				<b>22</b>	<b>13</b>	<b>10</b>	<b>-</b>	<b>200</b>	<b>145</b>	<b>230</b>	<b>150</b>	<b>50</b>	<b>675</b>

S - Contact Hours for online Courses

\* - Values not Included in Total

Min. Marks for Passing- 40 % of Total Marks of Individual Course



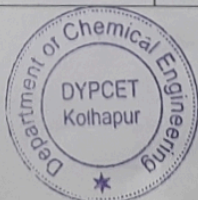
  
 Head of Department  
 Dept. of Chemical Engg.  
 D.Y. Patil College of Engg. & Tech.  
 Kasaba Bavada, Kolhapur-416006

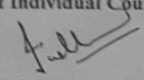
D.Y. PATIL COLLEGE OF ENGINEERING AND TECHNOLOGY, KOLHAPUR  
Teaching and Evaluation Scheme From Year 2024-25 (as per NEP 2020)  
Second Year B. Tech Chemical Engineering  
Semester - IV

Sr. No.	Course Code	Course Type	Name of the Course	Teaching Scheme Per Week				Theory			Practical		Total Marks
				Credits	Contact Hrs			ISE	MSE	ESE	INT	OE/POE	
					L	P	T						
1	231CHPCCL204	PCC	Heat Transfer	3	3	-	-	20	30	50	-	-	100
2	231CHPCCL205	PCC	Chemical Equipment Design	2	2	-	-	-	-	50	-	-	50
3	231CHPCCL206	PCC	Chemical Engineering Thermodynamics	3	3	-	-	20	30	50	-	-	100
4	231CHPCCP204	PCC	Heat Transfer Lab	1	-	2	-	-	-	-	25	25	50
5	231CHPCCP205	PCC	Chemical Equipment Design Lab	1	-	2	-	-	-	-	25	25	50
6	231CHMDML202	MDM-2	Petrochemical Technology	2	2	-	-	20	-	30	-	-	50
7	231CHVECL202	VEC	Environmental Studies	2	2	-	-	-	-	50	-	-	50
8	231CHHSSML202	HSSM	Innovation and Product Development	2	2	-	-	25	-	-	25	-	50
9	231CHAECL201	AEC	Problem-solving and Analytical Skills	1	1	-	-	-	25	-	-	-	25
	231CHAECP201	AEC	Problem-solving and Analytical Skills	1	-	2	-	-	-	-	25	-	25
10	231CHOECL202	OEC-II	Waste Management	2	2	-	-	-	-	50	-	-	50
11	231CHVSECL201	VSEC	Public Speaking and Presentation Skills	1	1	-	-	25	-	-	-	-	25
	231CHVSECP201	VSEC	Public Speaking and Presentation Skills	1	-	2	-	-	-	-	25	-	25
12	231CHMCL202	MC	Finishing School Training IV	-	2*	-	-	50*	-	-	-	-	Grade
13	231CHCCAL202	CCA	Liberal Learning	Audit	-	-	-	50*	-	-	-	-	Grade
			<b>Total</b>	<b>22</b>	<b>18</b>	<b>8</b>	<b>-</b>	<b>210</b>	<b>85</b>	<b>280</b>	<b>125</b>	<b>50</b>	<b>650</b>

\*- Values not Included in Total

Min. Marks for Passing- 40 % of Total Marks of Individual Course



  
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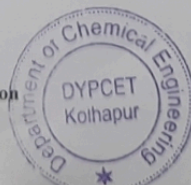
D.Y. PATIL COLLEGE OF ENGINEERING AND TECHNOLOGY, KOLHAPUR  
Teaching and Evaluation Scheme From Year 2024-25 (as per NEP 2020)  
Third Year B. Tech Chemical Engineering  
Semester - V

Sr.No.	Course Code	Course Type	Name of the Course	Teaching Scheme Per Week			Theory			Practical		Total Marks	
				Credits	Contact Hrs			ISE	MSE	ESE	INT		OE/P OE
					L	P	T						
1	231CHPCCL301	PCC	Mass Transfer	3	3	-	-	-	25	50	-	-	75
2	231CHPCCL302	PCC	Advance Manufacturing Process	3	3	-	-	-	25	50	-	-	75
3	231CHPCCL303	PCC	Modeling & Simulation in Chemical Engineering	3	3	-	-	-	25	50	-	-	75
4	231CHPCCP301	PCC	Mass Transfer Lab	1	-	2	-	-	-	-	25	25	50
5	231CHPCCP302	PCC	Advance Manufacturing Process Lab	1	-	2	-	-	-	-	25	-	25
6	231CHPCCP303	PCC	Modeling & Simulation in Chemical Engineering Lab	1	-	2	-	-	-	-	25	25	50
7	231CHMDML301	MDM-3	Green Fuel Technology	3	3	-	-	20	30	50	-	-	100
8	231CHMDMP301	MDM-3	Green Fuel Technology	1	-	2	-	-	-	-	25	-	25
9	231CHOECL301	OCE-III	Corporate Skills & Behavior	2	2	-	-	-	-	50	-	-	50
10	231CHPECL301	PEC 1	Plant Utilities / Waste to Energy Conversion	3	3	-	-	20	30	50	-	-	100
11	231CHPECP301	PEC 1	Plant Utilities / Waste to Energy Conversion	1	-	2	-	-	-	-	25	-	25
12	231CHMCL301	MC	Finishing School Training V	-	3*	-	-	50*	-	-	-	-	Grade
13	231CHCCAL301	CCA	Liberal Learning	Audit	-	-	-	50*	-	-	-	-	Grade
Total				22	17	10	-	140	135	300	125	50	650

\*- Values not Included in Total

PEC 1 - 1. Plant Utilities

2. Waste to Energy Conversion



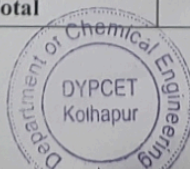
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D.Y. PATIL COLLEGE OF ENGINEERING AND TECHNOLOGY, KOLHAPUR  
Teaching and Evaluation Scheme From Year 2024-25 (as per NEP 2020)  
Third Year B. Tech Chemical Engineering  
Semester - VI

Sr.No.	Course Code	Course Type	Name of the Course	Teaching Scheme Per Week				Theory			Practical		Total Marks
				Credits	Contact Hrs			ISE	MSE	ESE	INT	OE/POE	
					L	P	T						
1	231CHPCCL304	PCC	Chemical Reaction Engineering	3	3	-	-	-	25	50	-	-	75
2	231CHPCCL305	PCC	Process Control	3	3	-	-	-	25	50	-	-	75
3	231CHPCC306	PCC	Transport Phenomena	3	3	-	-	-	25	50	25	-	100
4	231CHPCCP304	PCC	Chemical Reaction Engineering Lab	1	-	2	-	-	-	-	25	25	50
5	231CHPCCP305	PCC	Process Control Lab	1	-	2	-	-	-	-	25	25	50
6	231CHMDML302	MDM-4	Hydrogen Technology	2	2	-	-	20	-	30	-	-	50
7	231CHPECL302	PEC-2	Material & Energy Balance / Multiphase Reaction Engineering	3	3	-	-	20	30	50	-	-	100
8	231CHPECP302	PEC-2	Material & Energy Balance / Multiphase Reaction Engineering	1	-	2	-	-	-	-	25	-	25
9	231CHPECL303	PEC-3	Chemical Process Safety / Analytical Techniques in Chemical Engineering	3	3	-	-	20	30	50	-	-	100
10	231CHPECP303	PEC-3	Chemical Process Safety / Analytical Techniques in Chemical Engineering	1	-	2	-	-	-	-	25	-	25
11	231CHVSECL301	VSEC	Financial Management and Accounting	2	1	2	-	25	-	-	25	-	50
12	231CHMCL302	MC	Finishing School Training VI	-	3*	-	-	50*	-	-	-	-	Grade
13	231CHCCAL302	CCA	Liberal Learning	Audit	-	-	-	25*	-	25*	-	-	Grade
<b>Total</b>				<b>23</b>	<b>18</b>	<b>10</b>	<b>-</b>	<b>160</b>	<b>135</b>	<b>305</b>	<b>150</b>	<b>50</b>	<b>700</b>

\*- Values not Included in Total



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PEC 2 - 1. Material & Energy Balance    2. Multiphase Reaction Engineering  
PEC 3 - 1. Chemical Process Safety        2. Analytical Techniques in Chemical Engineering

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Teaching and Evaluation Scheme From Year 2024-25 (as per NEP 2020)  
Final Year B. Tech Chemical Engineering  
Semester - VII

Sr. No.	Course Code	Course Type	Name of the Course	Teaching Scheme Per Week			Theory			Practical		Total Marks	
				Credits	Contact Hrs			ISE	MSE	ESE	INT		OE/POE
					L	P	T						
1	231CHPCCL401	PCC	Process Economics & Project Engineering	2	2	-	-	-	-	50	-	-	50
2	231CHPCCL402	PCC	Chemical Process Design	3	3	-	-	-	25	50	-	-	75
3	231CHPCCP402	PCC	Chemical Process Design Lab	1	-	2	-	-	-	-	25	25	50
4	231CHMDML401	MDM-5	Future Technologies for Clean & Renewable Energy Production	2	2	-	-	20	-	30	-	-	50
5	231CHRML401	RM	IPR & Research Ethics (ODL Only)	4 <sup>s</sup>	-	-	-	20	30	50	25	-	125
6	231CHPECL401	PEC-4	Energy Conservation and Audit/ Industrial Safety & Management	3	3	-	-	20	30	50	-	-	100
7	231CHPECL402	PEC-5	Distillation / Separation Processes	3	3	-	-	20	30	50	-	-	100
8	231CHPRP401	PR	Project Work	4	-	4	-	-	-	-	75	50	125
9	231CHCCAL401	CCA	Liberal Learning	Audit	-	-	-	25	-	25	-	-	50
Total				22	13	6	-	105	115	305	125	75	725

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PEC 4 - 1. Energy Conservation and Audit

2. Industrial Safety & Management

PEC 5 - 1. Distillation

2. Separation Processes



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Final Year B. Tech Chemical Engineering  
Semester - VIII

Sr. No.	Course Code	Course Type	Name of the Course	Teaching Scheme Per Week				Theory			Practical		Total Marks
				Credits	Contact Hrs			ISE	MS E	ESE	INT	OE/P OE	
1	231CHPCCL403	PCC	Artificial Intelligence in Chemical Engineering (ODL only*)	4	-	-	-	20	30	50	25	-	125
2	231CHPECL403	PEC-6	Process Design / Piping Engineering (ODL only*)	2 <sup>s</sup>	-	-	-	-	-	50	-	-	50
3	231CHINTL401	INT	Internship	12	-	12	-	-	-	-	200	200	400
4	231CHMDML402	MDM-6	Case Studies / Mini Project (ODL only *)	2 <sup>s</sup>	-	-	-	-	-	50	-	-	50
<b>Total</b>				<b>20</b>	<b>5</b>	<b>14</b>	<b>-</b>	<b>20</b>	<b>30</b>	<b>150</b>	<b>225</b>	<b>200</b>	<b>625</b>

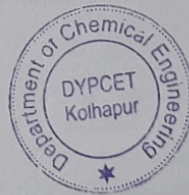
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PEC 6 - 1 Process Design

2. Piping Engineering (ODL only\*)



*(Signature)*  
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