

Semester-Wise Course Structure
(w.e.f. 2026-27)
Program: B. Tech in Chemical Engineering
Batch 2026-30

Semester 1 (First Year: Odd Sem)							
Sl.	Course_Title	Course_Code	Course Category	L	T	P	Credit
1	Classical Physics	PY111	IS	3	1	0	11
2	Inorganic & Physical Chemistry	CY121	IS	3	1	0	11
3	Applied Mathematics-1	MA123	IS	3	1	0	11
4	Engineering Thermodynamics	CH161	IE	3	1	0	11
5	Physics Lab	PY111L	IS	0	0	2	1
6	Chemistry Lab	CY111L	IS	0	0	2	1
7	Workshop Practices	ME131	EP	0	0	3	3
8	Chemical Engineering Practices	CH111	EP	1	0	2	5
9	Universal Human Values	HU101	HU	1	1	0	5
							59
	*Basic English	LM101	LM	1	2	0	7

*Basic English to be taken by a student by recommendation after Diagnostic Test

Semester 2 (First Year: Even Sem)							
Sl.	Course_Title	Course_Code	Course Category	L	T	P	Credit
1	Modern Physics	PY121	IS	2	1	0	8
2	Organic and Hydrocarbon Chemistry	CY111	IS	3	1	0	11
3	Applied Mathematics-2	MA124	IS	3	1	0	11
4	Computer Programing	CS101	IE	3	1	0	11
5	Fluid Mechanics	CH121	IE	3	1	0	11
6	Physics Lab	PY121L	IS	0	0	2	1
7	Chemistry Lab	CY121L	IS	0	0	2	1
8	Computer Programing Lab	CS101L	IE	0	0	2	2
9	Engineering Visulization	ME121	EP	0	1	3	5
							61

Summer Term 1st Year (After 2nd Sem)							
Sl.	Course_Title	Course_Code	Course Category	L	T	P	Credit
1	Summer Internship (Two Weeks)	CH217	DP	0	0	14	2

Semester 3 (Second Year: Odd Sem)							
Sl.	Course_Title	Course_Code	Course Category	L	T	P	Credit
1	Applied Mathematics-3	MA222	IS	3	1	0	11
2	Fundamentals of Electronics Engineering	ECE102	IE	3	1	2	13
3	Chemical Engineering Thermodynamics	CH262	DC	3	1	0	11
4	Mass & Energy Balances	CH171	DC	2	1	0	8
5	Fluid Flow and Mechanical Operations	CH224	DC	3	1	2	13
							56

Semester 4 (Second Year: Even Sem)							
Sl.	Course_Title	Course_Code	Course Category	L	T	P	Credit
1	Materials Science and Strength of Materials	CH212	DC	3	1	0	11
2	Mass Transfer Operations-1	CH274	DC	3	1	0	11
3	Heat Transfer Operations	CH231	DC	3	1	2	13
4	Chemical Reaction Engineering-1	CH251	DC	2	1	2	10
5	Petroleum Refining Engineering	CH281	DE 1	3	0	0	9
6	Professional Communication	PC101	LM	2	1	0	8
							62

Summer Term 2 nd Year (After 4 th Sem)							
Sl.	Course_Title	Course_Code	Course Category	L	T	P	Credit
1	Summer Internship (Four Weeks)	CH317	DP	0	0	11	3

Semester 5 (Third Year: Odd Sem)							
Sl.	Course_Title	Course_Code	Course Category	L	T	P	Credit
1	Mass Transfer Operations-2	CH375	DC	3	1	2	13
2	Chemical Reaction Engineering-2	CH352	DC	2	1	0	8
3	Chemical Process Technology	CH392	DC	3	0	0	9
4	Process Equipment Design	CH414	DC	2	0	2	8
5	Process Dynamics and Control	CH342	DC	3	1	0	11
6	Refinery Process Design	CH382	DE 2	3	0	0	9
							58

Semester 6 (Third Year: Even Sem)							
Sl.	Course_Title	Course_Code	Course Category	L	T	P	Credit
1	Process Instrumentation	CH301	DC	2	0	0	6
2	Plant Design and Economics	CH413	DC	3	0	2	11
3	Corrosion Engineering / Lube Base Oil & Wax Processing	CH202 / CH381	DE 3	3	0	0	9
4	Natural Gas Processing / Fluidization Engineering / Electrochemical Processes and Energy Systems	CH481 / CH543 / CH451	DE 4	3	0	0	9
5	Process Dynamics and Control Lab	CH342L	DC	0	0	2	2
6	Health, Safety and Pollution Control	CH407	DC	3	0	0	9
							46

Summer Term 3 rd Year (After 6 th Sem)							
Sl.	Course_Title	Course_Code	Course Category	L	T	P	Credit
1	Summer Internship (Six weeks)	CH417	DP	0	0	12	5

Semester 7 (Fourth Year: Odd Sem)[illegible]**Semester 8 (Fourth Year: Even Sem)**

Sl.	Course_Title	Course_Code	Course Category	L	T	P	Credits
1	B.Tech. Project	CH421	DP	0	0	40	40
2	OE 2		OE 2	3	0	0	9
3	Foundations of Management	MT5405	LM	2	0	0	6
							55