



Department of Chemical Engineering B.Tech Curriculum (2020 Onwards)

Course No	SEM-1	Credits	Type
EP1108	Modern Physics	2	BS
CY1010/ CY1018	Environmental Chemistry	2	BS
MA1110	Calculus-I	1	BS
MA1220	Calculus-II	1	BS
ID1063	Introduction to programming	3	BE
CH1110	Introduction to Chemical Engineering	2	DC
CH1120	Applied Chemistry	2	BS
LAxxxx	English Communication	2	SS
BT1010/ BO1010	Introduction to Life Sciences	1	BS
	Total	16	

Course No.	SEM-II	Credits	Type
CYxxxx	Chemistry Lab	2	BS
MA1140	Elementary Linear Algebra	1	BS
MA1150	Differential Equations	1	BS
CH1131	Applied Chemistry Lab	1	BS
ID1054	Digital Fabrication	2	BE
CH1130	Chemical Process Calculations	2	DC
CH1140	Thermodynamic Laws & Phase Transitions	3	BE
EM3020	Introduction to Entrepreneurship	1	SS
LAxxxx	LA/CA	2	LA/CA
	Total	15	

Course No	SEM-III	Credits	Type
CH2110	Biological Engineering	3	DC
CH2120	Numerical Methods	3	DC
CH2130	Transport Phenomena	3	DC
CH2140	Chemical Engineering Thermodynamics	3	DC
CH2150	Applied Mathematics in Chemical Engineering	3	DC
LAxxxx	LA/CA	3	LA/CA
	Total	18	

Course No	SEM-IV	Credits	Type
EP1031	Physics Lab	2	BS
ID1050	Intro to AI	1	BE
EE1102	Basic Electrical Engineering	3	BE
CH2160	Materials Science for Chemical Engineers	2	BE
CH2170	Chemical Reaction Engineering-I	3	DC
CH2180	Heat transfer	3	DC
CH2190	Fluid Mechanics	3	DC
LAxxxx	LA/CA	2	LA/CA
	Total	19	

Course No	SEM-V	Credits	Type
CH3110	Mass Transfer – I	3	DC
CH3120	Mechanical Operations	3	DC
CH3130	Chemical Technology	2	DC
CH3140	Chemical Reaction Engineering-II	3	DC
CH3121	HT & FM Lab	2	DL
CHxxxx	Dept Electives-I*	6	DE
	Total	19	

Course No	SEM-VI	Credits	Type
CH3150	Mass Transfer – II	2	DC
CH3160	Process Control	3	DC
CH3131	MUO and CRE Lab	2	DL
CHxxxx	Dept Electives-II*/Internship	6	DE
	Free Electives-I#	4	FE
	Total	17	

Course No	SEM-VII	Credits	Type
CH4112	Process Design and Economics	3	DC
CH4111	Process Simulation Lab	2	DL
CH4121	MT and Control Lab	2	DL
CHxxxx	Dept Electives-III*	2	DE
	Free Elective-II#	3	FE
	LA/CA	1	LA/CA
	Total	13	

Course No.	SEM-VIII	Credits	Type
CH4140	Process Intensification	1	DC
LAxxxx	LA/CA	1	LA/CA
CHxxxx	Dept Electives-IV*	4	DE
	Free Electives-III#	5	FE
	Total	11	

LA courses must be taken during the assigned semesters and not carried over

*#All free elective and department elective must be completed in the assigned semester and not carried over

*Out of 18 credits of department electives, a minimum of 12 credits have to be mandatorily done via courses

*Out of 18 credits of department electives, a maximum of 6 credits can be earned by doing mini project instead (optional and only for those who are not undergoing internship)