

B Tech Chemical Science and Technology Course structure (July 2018 onwards)

Course No	Semester-I	L	T	P	C	Course No	Semester-II	L	T	P	C
	Course Name						Course Name				
CH101	Chemistry	3	1	0	8	BT101	Introductory Biology	3	0	0	6
CH110	Chemistry Laboratory	0	0	3	3	CS101	Introduction to Computing	3	0	0	6
EE101	Basic Electronics	3	1	0	8	CS110	Computing Laboratory	0	0	3	3
MA101	Mathematics - I	3	1	0	8	EE102	Basic Electronics Laboratory	0	0	3	3
CE101	Engineering Drawing	2	0	3	7	MA102	Mathematics - II	3	1	0	8
PH101	Physics - I	2	1	0	6	ME101	Engineering Mechanics	3	1	0	8
PH110/ME110	Physics Laboratory/Workshop	0	0	3	3	PH102	Physics - II	2	1	0	6
						ME110/PH110	Workshop /Physics Laboratory	0	0	3	3
		13	4	9	43			14	3	9	43
HS101	English Communication*	2	0	2	0	SA1xx	Students Activity Course-I	0	0	2	0
Course No	Semester-III	L	T	P	C	Course No	Semester-IV	L	T	P	C
	Course Name						Course Name				
MA201	Mathematics-III	3	1	0	8	CH222	Applied Organic Chemistry	3	0	0	6
CH212	Inorganic Chemistry	3	0	0	6	CH2xx	Group Theory	3	0	0	6
CH221	Organic Chemistry	3	1	0	8	CH211	Industrial Chemistry	3	0	0	6
CH231	Introduction to Quantum Chemistry	3	0	0	6	CH233	Spectroscopic Techniques in Chemistry	3	0	0	6
CL201	Chemical Process Calculations	2	1	0	6	CH223	Chemical Technology Laboratory I	0	0	6	6
CL202	Fluid Mechanics	2	1	0	6	HS1xx	HSS Elective-I Level-I	3	0	0	6
		17	3	0	40			15	0	6	36
SA2xx	Students Activity Course-II	0	0	2	0	SA3xx	Students Activity Course-III	0	0	2	0
	Minor Course-I	3	0	0	6		Minor Course-II	3	0	0	6
						HS200	Sustainable Development Goals ***	2	0	0	0
Course No	Semester-V	L	T	P	C	Course No	Semester-VI	L	T	P	C
	Course Name						Course Name				
OE3xx	Open Elective	3	0	0	6	CH332	Computational Chemistry	3	0	0	6

CH302	Technical report presentation	0	0	3	3	CH335	Application of Nanomaterials	3	0	0	6
CH301	Environmental Chemistry	3	0	0	6	CH323	Polymer Chemistry	3	0	0	6
CH316	Frontiers of Coordination Chemistry	3	0	0	6	CH334	Chemical Technology Laboratory III	0	0	6	6
CH331	Chemical Kinetics and Electrochemistry	3	0	0	6	OE3xx	Open Elective	3	0	0	6
CH314	Chemical Technology Laboratory II	0	0	6	6						
HS1xx	HSS Elective-II Level-I	3	0	0	6		Open Elective/ Department Elective				
		15	0	9	39			12	0	6	30
SA4xx	Students Activity Course-IV	0	0	2	0		Minor Course-IV	3	0	0	6
	Minor Course-III	3	0	0	6						
Course No	Semester-VII	L	T	P	C	Course No	Semester-VIII	L	T	P	C
	Course Name						Course Name				
CH401	Modern Chemical Technology	3	0	0	6	CH4xx	Departmental Elective-III	3	0	0	6
CH498	BTech Project-I	0	0	12	12	CH499	BTech Project-II	0	0	12	12
CH4xx	Departmental Elective-I	3	0	0	6	CH4xx	Departmental Elective-IV	3	0	0	6
OExxx	Open Elective	3	0	0	6	CH4xxx	Departmental Elective-V	3	0	0	6
						OExxx	Open Elective	3	0	0	6
HS2xx	HSS Elective-I Level-II	3	0	0	6	HS2xx	HSS Elective-II Level-II	3	0	0	6
		12	0	12	36	HS2xx	Level-2 HSS Elective-II	15	0	12	42
	Minor Course-V	3	0	0	6						
CH4xx	General Course-I/Technical Skill Developing**	2	0	0	4	CH4xx	General Course-I/Technical Skill Developing**	2	0	0	4

* Only for students lagging language proficiency, to be graded as PP or NP.

** Additional learning: Credits will not be included in SPI/CPI calculation, nor towards the total number of mandatory credits required to complete the degree programme.

*** Type of Letter Grading: PP/NP and Compulsory course for all B.Tech 3rd Semester Students

Total Mandatory Credits: 309

