

2.	1.1.2 Programmes/ courses focused on employability/ entrepreneurship/ skill development during the Academic year 2019-20			
	Programme with Code	Date of Introduction	Course with Code	Outcome
	BTech 101	2013	Thermodynamics CH02TES03	Application of concepts of thermodynamics in real life situations and process application
	BTech 101	2018	Workshop and Manufacturing Practice CH02PES04	practical involved Welding, Carpentry, Fitting, Forging etc.
	BTech 101	2019	Fluid Mechanics CH03TPC02	understanding of dynamics of fluid in industrial application
	BTech 101	2019	Fluid Mechanics Lab CH03PPC02	understanding of dynamics of fluid in industrial application
	BTech 101	2019	Material and Energy Balance Calculations CH03TPC01	understanding of process calculation of industry
	BTech 101	2019	Numerical Methods in Chemical Engineering CH04TPC04	Employing numerical techniques to model and simulate to chemical engineering phenomena.
	BTech 101	2019	Numerical Methods in Chemical Engineering Lab CH4PPC03	Employing numerical techniques to model and simulate to chemical engineering phenomena.
	BTech 101	2019	Inorganic Chemical Technology CH4TPC05	Students learn about recent developments and current trends in process industries.
	BTech 101	2019	Particle and Fluid Particle –Processing CH04TPC06	Learn about the handling of solids in industry
	BTech 101	2019	Particle and Fluid Particle -Processing Lab CH4PPC04	Learn about the handling of solids in industry
	BTech 101	2019	Process Instrumentation CH4TPC07	Understand the measuring techniques required in chemical industries
	BTech 101	2019	Process Instrumentation Lab CH4PPC05	Understand the measuring techniques required in chemical industries
	BTech 101	2017	Heat Transfer CH5TPC06	Heat transfer basics and application like Heat exchanger

BTech 101	2017	Heat Transfer Lab CH5PPC03	Determination of thermal conductivity, heat transfer co-efficient, emissivity etc.	
BTech 101	2017	Mass Transfer-I CH5TPC07	mass transfer operations like distillation, diffusion etc.	
BTech 101	2017	Mass Transfer-I Lab CH5PPC04	mass transfer operations like distillation, diffusion etc.	
BTech 101	2017	Chemical Reaction Engineering-I CH5TPC08	understand the reaction kinetics and different type of reactors	
BTech 101	2017	Chemical Reaction Engineering Lab CH5PPC05	understand the reaction kinetics and different type of reactors	
BTech 101	2017	Mass Transfer-II CH6TPC09	mass transfer operations like distillation, diffusion etc.	
BTech 101	2017	Process Dynamics and Control CH6TPC10	learn about the controlling parameters in industries	
BTech 101	2017	Organic Chemical Technology CH6TPC11	Students learn about recent developments and current trends in process industries.	
BTech 101	2017	Process Equipment Design-I CH6TPE21	Mechanical Aspects of various vessels	
BTech 101	2017	Fertilizer Technology CH6TPE22	learn about the fertilizers and uses	
BTech 101	2017	Fuel Combustion Energy Technology CH6TPE31	Energy efficiency and conservation learning	
BTech 101	2017	Environmental Engineering CH6TPE32	Learn about the air, water and noise pollution and remedies	
BTech 101	2018	Process Equipment Design-II CH7TPC13	study the design aspects of heat transfer equipment's	
BTech 101	2018	Chemical Reaction Engineering-II CH7TPC14	understand about the catalytic reactions, mixing of fluids	
BTech 101	2018	New Separation Processes CH7TPC15	learn about the new processes of separations	
BTech 101	2018	Minor Project CH7PPC08	involved in the research related to new innovations	

BTech 101	2018	Vocational Training Viva Cum Seminar CH7PPC09	learn the working culture of industry	
BTech 101	2018	Process Equipment Design-II CH8TPC16	study the design aspects of mass transfer equipment's	
BTech 101	2018	Project Engineering, Economics and Management CH8TPC17	understand the economics of the process industries	
BTech 101	2018	Project CH8PPC10	involved in the research related to new innovations	
BTech 101	2018	Petroleum Refinery Engineering CH7TPE41	Learn about the refinery industry	
BTech 101	2018	Petrochemical Technology CH8TPE51	study the manufacturing of petroleum products	
BTech 101	2018	Membranes separations processes CH8TPE53	learn about the new processes of separations	
BTech 101	2018	Water Conservation and Management CH7TOE32	understand the water utilization and conservation techniques	
BTech 101	2018	Optimization Techniques CH8TOE41	optimization of parameters involved in chemical process	
BTech 101	2018	Process Modeling and Simulation CH8TOE42	Study the mathematical modeling and simulation through software	
MTech	2013	Advanced Heat Transfer CHPG1101	learn about	
MTech	2013	Chemical Reactor Design CHPG1102	understand the industrial reactor used in chemical process	
MTech	2013	Fluidization Engineering CHPG1103	floating and separation techniques of particles used in process industries	
MTech	2013	Membrane separation processes CHPG1105	study the separation based on membrane	
MTech	2013	Chemical Engineering Computational Lab CHPG1106	learn the various chemical engineering methods that used in process industries	
MTech	2013	Advanced Fluid Mechanics CHPG1201	understanding of dynamics of fluid in industrial application	

MTech	2013	Advanced Mass Transfer CHPG1202	mass transfer operations like distillation, diffusion etc.
MTech	2013	Industrial pollution control Technologies CHPG1203	Controlling techniques of various pollution involved in industries
MTech	2013	Design and Development of Catalyst CHPG1204	understand the design of various catalyst used in industries by different methods like solgel, precipitations etc.
MTech	2013	Project CHPG1206	involved in the research related to new innovations
MTech	2013	Seminar CHPG1207	learn to present the research based paper in conference. Seminar etc.

1.1.3 Total number of courses having focus on employability/ entrepreneurship/ skill development offered by the University during the year <b>2020-21</b>				
1.2.1 Number of new courses introduced of the total number of courses across all programs offered during the year				
Name of the Course	Course Code	Year of introduction	Activities/Content with direct bearing on Employability/ Entrepreneurship/ Skill development	Link to the relevant document
Computer programming	CS201TES02	2020	UNDERSTAND THE COMPUTER PROGRAMMING	
Computer programming Lab	CS201PES02	2020	COMPUTER TRAINING ON PROGRAMMING	
Workshop Technology and Manufacturing Practices	ME202PES04	2020	practical involved Welding, Carpentry, Fitting, Forging etc.	
Thermodynamics	CH03TPC03	2019	Application of concepts of thermodynamics in real life situations and process application	
Fluid Mechanics	CH03TPC02	2019	understanding of dynamics of fluid in industrial application	
Fluid Mechanics Lab	CH03PPC02	2019	understanding of dynamics of fluid in industrial application	
MATERIAL AND ENERGY BALANCE CALCULATIONS	CH03TPC01	2019	understanding of process calculation of industry	

NUMERICAL METHODS IN CHEMICAL ENGINEERING	CH04TPC04	2019	Employing numerical techniques to model and simulate to chemical engineering phenomena.	
NUMERICAL METHODS IN CHEMICAL ENGINEERING LAB	CH04PPC03	2019	Employing numerical techniques to model and simulate to chemical engineering phenomena.	
Inorganic Chemical Technology	CH04TPC05	2019	Students learn about recent developments and current trends in process industries.	
PARTICLE AND FLUID PARTICLE PROCESSING	CH04TPC06	2019	Learn about the handling of solids in industry	
PARTICLE AND FLUID PARTICLE PROCESSING	CH04PPC04	2019	Learn about the handling of solids in industry	
Process Instrumentation	CH04TPC07	2019	Understand the measuring techniques required in chemical industries	
Process Instrumentation Lab	CH04PPC05	2019	Understand the measuring techniques required in chemical industries	
BUSINESS COMMUNICATION AND PRESENTATION SKILL	CH04THS02	2019	DEVELOP THE COMMUNICATION AND PRESENTATION SKILL	
Heat Transfer	CH05TPC08	2020	Heat transfer basics and application like Heat exchanger	
Heat Transfer Lab	CH05PPC06	2020	Determination of thermal conductivity, heat transfer co-efficient, emissivity etc.	
Mass Transfer-I	CH05TPC09	2020	mass transfer operations like distillation, diffusion etc.	
Mass Transfer-I Lab	CH05PPC07	2020	mass transfer operations like distillation, diffusion etc.	
Chemical Reaction Engineering-I	CH05TPC10	2020	understand the reaction kinetics and different type of reactors	
Chemical Reaction Engineering Lab	CH05PPC08	2020	understand the reaction kinetics and different type of reactors	
Mass Transfer-II	CH06TPC11	2020	mass transfer operations like distillation, diffusion etc.	
Process Dynamics and Control	CH06TPC12	2020	learn about the controlling parameters in industries	
Process Equipment Design-I	CH06TPC13	2020	Mechanical Aspects of various vessels	
Fertilizer Technology	CH06TPE31	2020	learn about the fertilizers and uses	

Fuel Combustion Energy Technology	CH06TPE32	2020	Energy efficiency and conservation learning	
Environmental Engineering	CH06TPE21	2020	Learn about the air, water and noise pollution and remedies	
Process Equipment Design-II	CH7TPC13	2018	study the design aspects of heat transfer equipment's	
Chemical Reaction Engineering-II	CH7TPC14	2018	understand about the catalytic reactions, mixing of fluids	
New Separation Processes	CH7TPC15	2018	learn about the new processes of separations	
Minor Project	CH7PPC08	2018	involved in the research related to new innovations	
Vocational Training Viva Cum Seminar	CH7PPC09	2018	learn the working culture of industry	
Process Equipment Design-II	CH8TPC16	2018	study the design aspects of mass transfer equipment's	
Project Engineering, Economics and Management	CH8TPC17	2018	understand the economics of the process industries	
Project	CH8PPC10	2018	involved in the research related to new innovations	
Petroleum Refinery Engineering	CH7TPE41	2018	Learn about the refinery industry	
Petrochemical Technology	CH8TPE51	2018	study the manufacturing of petroleum products	
Membrane separations processes	CH8TPE53	2018	learn about the new processes of separations	
Water Conservation and Management	CH7TOE32	2018	understand the water utilization and conservation techniques	
Optimization Techniques	CH8TOE41	2018	optimization of parameters involved in chemical process	
Process Modeling and Simulation	CH8TOE42	2018	Study the mathematical modeling and simulation through software	
Advanced Heat Transfer	CHPG1101	2013	learn about	
Chemical Reactor Design	CHPG1102	2013	understand the industrial reactor used in chemical process	
Fluidization Engineering	CHPG1103	2013	floating and separation techniques of particles used in process industries	
Membrane separation processes	CHPG1105	2013	study the separation based on membrane	
Chemical Engineering Computational Lab	CHPG1106	2013	learn the various chemical engineering methods that used in process industries	

Advanced Fluid Mechanics	CHPG1201	2013	understanding of dynamics of fluid in industrial application	
Advanced Mass Transfer	CHPG1202	2013	mass transfer operations like distillation, diffusion etc.	
Industrial pollution control Technologies	CHPG1203	2013	Controlling techniques of various pollution involved in industries	
Design and Development of Catalyst	CHPG1204	2013	understand the design of various catalyst used in industries by different methods like solgel, precipitations etc.	
Project	CHPG1206	2013	involved in the research related to new innovations	
Seminar	CHPG1207	2013	Learn to present the research based paper in conference. Seminar etc.	