

2. 1.1.3 Average percentage of courses having focus on employability/entrepreneurship/skill development during the last five years (10) **58 %**

2014-15

Name of the Course	Course Code	Name of the Programme	Activities with direct bearing on Employability/ Entrepreneurship/ Skill development	Year of introduction
Chemical Engineering Thermodynamics-I	CH2301	BTech	Application of concepts of thermodynamics in real life situations and process application	2013-14
Chemical Engineering Calculation	CH2302	BTech	understanding of process calculation of industry	2013-14
Fluid Mechanics	CH2303	BTech	understanding of dynamics of fluid in industrial application	2013-14
Fluid Mechanics Lab	CH2307	BTech	understanding of dynamics of fluid in industrial application	2013-14
Mechanical Operation	CH2401	BTech	Learn about the handling of solids in industry	2013-14
Process Instrumentation	CH2402	BTech	Understand the measuring techniques required in chemical industries	2013-14
Inorganic Chemical Technology	CH2403	BTech	Students learn about recent developments and current trends in process industries.	2013-14
Mechanical Operation Lab	CH2406	BTech	Learn about the handling of solids in industry	2013-14

Heat Transfer	CH3501	BTech	Heat transfer basics and application like Heat exchanger	2009-10
Mass Transfer-I	CH3502	BTech	mass transfer operations like distillation, diffusion etc.	2009-10
Heat Transfer Lab	CH3506	BTech	Determination of thermal conductivity, heat transfer co-efficient, emissivity etc.	2009-10
Process Equipment Design-I	CH3503	BTech	Mechanical Aspects of various vessels	2009-10
Mass Transfer-I Lab	CH3507	BTech	mass transfer operations like distillation, diffusion etc.	2009-10
Chemical Reaction Engineering	CH3604	BTech	understand the reaction kinetics and different type of reactors	2009-10
Chemical Reaction Engineering Lab	CH3608	BTech	understand the reaction kinetics and different type of reactors	2009-10
Mass Transfer-II	CH3601	BTech	mass transfer operations like distillation, diffusion etc.	2009-10
Process Dynamics and Control	CH3603	BTech	learn about the controlling paramers in industries	2009-10
Process Equipment Design-II	CH3602	BTech	study the desing aspects of heat transfer equipments	2009-10
Fuel Combustion Energy	CH4702	BTech	Energy efficiency and conservation learning	2009-10

Technology				
Minor Project	CH4708	BTech	involved in the research related to new innovations	2009-10
Industrial Training Viva Cum Seminar	CH4709	BTech	learn the working culture of industry	2009-10
Process Equipment Design-III	CH4703	BTech	study the desing aspects of mass transfer equipments	2009-10
Project Engineering, Economics and Management	CH4701	BTech	understand the economics of the process industries	2009-10
Petroleum Refinery Engineering	CH4705	BTech	Learn about the refinery industry	2009-10
Environmental Pollution control Engineering	CH4803	BTech	Learn about the air, water and noise pollution and remedies	2009-10
Major Project	CH4807	BTech	involved in the research related to new innovations	2009-10
Petrochemical Technology	CH4804	BTech	study the manufacturing of petroleum products	2009-10
Optimization Techniques in	CH4802	BTech	optimization of paramers involved in chemical process	2009-10

Chemical Engineering				
<p>Documents:</p> <ul style="list-style-type: none"> • Programme/ Curriculum/ Syllabus of the courses • Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses. • MoU's with relevant organizations for these courses, if any. • Institutional data in prescribed format. 				

2.	1.1.3 Average percentage of courses having focus on employability/entrepreneurship/skill development during the last five years (10)				58%
2015-16	Name of the Course	Course Code	Name of the Programme	Activities with direct bearing on Employability/ Entrepreneurship/ Skill development	Year of introduction
	Chemical Engineering Thermodynamics-I	CH2301	BTech	Application of concepts of thermodynamics in real life situations and process application	2013-14
	Chemical Engineering Calculation	CH2302	BTech	understanding of process calculation of industry	2013-14

Fluid Mechanics	CH2303	BTech	understanding of dynamics of fluid in industrial application	2013-14
Fluid Mechanics Lab	CH2307	BTech	understanding of dynamics of fluid in industrial application	2013-14
Mechanical Operation	CH2401	BTech	Learn about the handling of solids in industry	2013-14
Process Instrumentation	CH2402	BTech	Understand the measuring techniques required in chemical industries	2013-14
Inorganic Chemical Technology	CH2403	BTech	Students learn about recent developments and current trends in process industries.	2013-14
Mechanical Operation Lab	CH2406	BTech	Learn about the handling of solids in industry	2013-14
Heat Transfer	CH3501	BTech	Heat transfer basics and application like Heat exchanger	2013-14
Mass Transfer-I	CH3502	BTech	mass transfer operations like distillation, diffusion etc.	2013-14
Heat Transfer Lab	CH3506	BTech	Determination of thermal conductivity, heat transfer co-efficient, emissivity etc.	2013-14
Process Equipment Design-I	CH3602	BTech	Mechanical Aspects of various vessels, mass transfer process equipment design	2013-14
Mass Transfer-I Lab	CH3507	BTech	mass transfer operations like distillation, diffusion etc.	2013-14

Chemical Reaction Engineering-I	CH3504	BTech	understand the reaction kinetics and different type of reactors	2013-14
Chemical Reaction Engineering Lab	CH3608	BTech	understand the reaction kinetics and different type of reactors	2013-14
Mass Transfer-II	CH3601	BTech	mass transfer operations like distillation, diffusion etc.	2013-14
Process Dynamics and Control	CH3503	BTech	learn about the controlling paramers in industries	2013-14
Organic Chemical Technology	CH3505	BTech	Students learn about recent developments and current trends in process industries.	2013-14
Fuel Combustion Energy Technology	CH4702	BTech	Energy efficiency and conservation learning	2009-10
Minor Project	CH4708	BTech	involved in the research related to new innovations	2009-10
Industrial Training Viva Cum Seminar	CH4709	BTech	learn the working culture of industry	2009-10
Process Equipment Design-III	CH4703	BTech	study the desing aspects of mass transfer equipments	2009-10
Project Engineering, Economics and Management	CH4701	BTech	understand the economics of the process industries	2009-10

Petroleum Refinery Engineering	CH4705	BTech	Learn about the refinery industry	2009-10
Environmental Pollution control Engineering	CH4803	BTech	Learn about the air, water and noise pollution and remedies	2009-10
Major Project	CH4807	BTech	involved in the research related to new innovations	2009-10
Petrochemical Technology	CH4804	BTech	study the manufacturing of petroleum products	2009-10
Optimization Techniques in Chemical Engineering	CH4802	BTech	optimization of parameters involved in chemical process	2009-10

Documents:

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2.	1.1.3 Average percentage of courses having focus on employability/entrepreneurship/skill development during the last five years (10) 61%				
2016-17	Name of the Course	Course Code	Name of the Programme	Activities with direct bearing on Employability/ Entrepreneurship/ Skill development	Year of introduction
	Chemical Engineering Thermodynamics-I	CH3TES06	BTech	Application of concepts of thermodynamics in real life situations and process application	2016-17
	Fluid Mechanics	CH3TES05	BTech	understanding of dynamics of fluid in industrial application	2016-17
	Fluid Mechanics Lab	CH3PES05	BTech	understanding of dynamics of fluid in industrial application	2016-17
	Chemical Engineering Calculation	CH3TPC02	BTech	understanding of process calculation of industry	2016-17
	Numerical Analysis and Computer Application	CH4TBS06	BTech	Employing numerical techniques to model and simulate to chemical engineering phenomena.	2016-17
	Numerical Analysis and Computer Application Lab	CH4PBS03	BTech	Employing numerical techniques to model and simulate to chemical engineering phenomena.	2016-17

Inorganic Chemical Technology	CH4TPC03	BTech	Students learn about recent developments and current trends in process industries.	2016-17
Mechanical Operation	CH4TPC04	BTech	Learn about the handling of solids in industry	2016-17
Mechanical Operation Lab	CH4PPC02	BTech	Learn about the handling of solids in industry	2016-17
Process Instrumentation	CH4TPC05	BTech	Understand the measuring techniques required in chemical industries	2016-17
Chemical Engineering Thermodynamics-II	CH4TPC02	BTech	Application of concepts of thermodynamics in real life situations and process application	2016-17
Heat Transfer	CH3501	BTech	Heat transfer basics and application like Heat exchanger	2013-14
Mass Transfer-I	CH3502	BTech	mass transfer operations like distillation, diffusion etc.	2013-14
Heat Transfer Lab	CH3506	BTech	Determination of thermal conductivity, heat transfer co-efficient, emissivity etc.	2013-14
Process Equipment Design-I	CH3602	BTech	Mechanical Aspects of various vessels, heat transfer process equipment design	2013-14
Mass Transfer-I Lab	CH3507	BTech	mass transfer operations like distillation, diffusion etc.	2013-14

Chemical Reaction Engineering-I	CH3504	BTech	understand the reaction kinetics and different type of reactors	2013-14
Chemical Reaction Engineering Lab	CH3608	BTech	understand the reaction kinetics and different type of reactors	2013-14
Mass Transfer-II	CH3601	BTech	mass transfer operations like distillation, diffusion etc.	2013-14
Fuel Combustion Energy Technology	CH3603	BTech	Energy efficiency and conservation learning	2013-14
Process Dynamics and Control	CH3503	BTech	learn about the controlling paramers in industries	2013-14
Organic Chemical Technology	CH3505	BTech	Students learn about recent developments and current trends in process industries.	2013-14
Computer added design and Simulation	CH4709	BTech	Study the mathematical modeling andsimulation through software	2013-14
Minor Project	CH4709	BTech	involved in the research related to new innovations	2013-14
Vocational Training Viva Cum Seminar	CH4708	BTech	learn the working culture of industry	2013-14
Process Equipment Design-II	CH4702	BTech	study the desing aspects of mass transfer equipments	2013-14

Project Engineering, Economics and Management	CH4701	BTech	understand the economics of the process industries	2013-14
Petroleum Refinery Engineering	CH4705	BTech	Learn about the refinery industry	2013-14
Environmental Pollution control Engineering	CH4803	BTech	Learn about the air, water and noise pollution and remedies	2013-14
Major Project	CH4807	BTech	involved in the research related to new innovations	2013-14
Petrochemical Engineering	CH4804	BTech	study the manufacturing of petroleum products	2013-14
Optimization Techniques in Chemical Engineering	CH4802	BTech	optimization of parameters involved in chemical process	2013-14
Advanced Heat Transfer	CHPG1101	M.Tech	learn about heat transfer analogy and heat transfer modes in chemical engineering processes	2013-14
Chemical Reactor Design	CHPG1102	M.Tech	understand the industrial reactor used in chemical process	2013-14
Fluidization Engineering	CHPG1103	M.Tech	floating and separation techniques of particles used in process industries	2013-14

Membrane separation processes	CHPG1105	M.Tech	study the separation based on membrane	2013-14
Chemical Engineering Computational Lab	CHPG1106	M.Tech	learn the variuos chemical engineering methods that used in process industries	2013-14
Advanced Fluid Mechanics	CHPG1201	M.Tech	understanding of dynamics of fluid in industrial application	2013-14
Advanced Mass Transfer	CHPG1202	M.Tech	mass transfer operations like distillation, diffusion etc.	2013-14
Industrial pollution control Technologies	CHPG1203	M.Tech	Ccontrolling techniques of various pollution invovled in industries	2013-14
Design and Development of Catalyst	CHPG1204	M.Tech	understand the design of various catalyst used in industries by different methods like solgel, precipitations etc.	2013-14
Advanced Waste Water Treatment Technology	CHPG1105	M.Tech	Study the advanced water treatment methods and their application in process industries	2013-14
Steady state process simulation	CHPG1205	M.Tech	Study the mathematical modeling andsimulation through software	2013-14
Project	CHPG1206	M.Tech	involved in the research related to new innovations	2013-14

Seminar	CHPG1207	M.Tech	learn to present the reasearch based paper in conference. Seminar etc.	2013-14
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2.	1.1.3 Average percentage of courses having focus on employability/entrepreneurship/skill development during the last five years (10)				57%
2017-18	Name of the Course	Course Code	Name of the Programme	Activities with direct bearing on Employability/ Entrepreneurship/ Skill development	Year of introduction
	Chemical Engineering	CH3TES06	BTech	Application of concepts of thermodynamics in real life situations and process application	2016-17

Thermodynamics-I				
Fluid Mechanics	CH3TES05	BTech	understanding of dynamics of fluid in industrial application	2016-17
Fluid Mechanics Lab	CH3PES05	BTech	understanding of dynamics of fluid in industrial application	2016-17
Chemical Engineering Calculation	CH3TPC02	BTech	understanding of process calculation of industry	2016-17
Numerical Analysis and Computer Application	CH4TBS06	BTech	Employing numerical techniques to model and simulate to chemical engineering phenomena.	2016-17
Numerical Analysis and Computer Application Lab	CH4PBS03	BTech	Employing numerical techniques to model and simulate to chemical engineering phenomena.	2016-17
Inorganic Chemical Technology	CH4TPC03	BTech	Students learn about recent developments and current trends in process industries.	2016-17
Mechanical Operation	CH4TPC04	BTech	Learn about the handling of solids in industry	2016-17
Mechanical Operation Lab	CH4PPC02	BTech	Learn about the handling of solids in industry	2016-17
Process Instrumentation	CH4TPC05	BTech	Understand the measuring techniques required in chemical industries	2016-17

Chemical Engineering Thermodynamics-II	CH4TPC02	BTech	Application of concepts of thermodynamics in real life situations and process application	2016-17
Heat Transfer	CH5TPC06	BTech	Heat transfer basics and application like Heat exchanger	2017-18
Mass Transfer-I	CH5TPC07	BTech	mass transfer operations like distillation, diffusion etc.	2017-18
Heat Transfer Lab	CH5PPC03	BTech	Determination of thermal conductivity, heat transfer co-efficient, emissivity etc.	2017-18
Process Equipment Design-I	CH6TPE21	BTech	Mechanical Aspects of various vessels	2017-18
Mass Transfer-I Lab	CH5PPC04	BTech	mass transfer operations like distillation, diffusion etc.	2017-18
Chemical Reaction Engineering-I	CH5TPC08	BTech	understand the reaction kinetics and different type of reactors	2017-18
Chemical Reaction Engineering Lab	CH5PPC05	BTech	understand the reaction kinetics and different type of reactors	2017-18
Mass Transfer-II	CH6TPC09	BTech	mass transfer operations like distillation, diffusion etc.	2017-18
Fuel Combustion Energy Technology	CH6TPE31	BTech	Energy efficiency and conservation learning	2017-18
Process Dynamics	CH6TPC10	BTech	learn about the controlling paramers in industries	2017-18

and Control				
Organic Chemical Technology	CH6TPC11	BTech	Students learn about recent developments and current trends in process industries.	2017-18
Fertilizer Technology	CH6TPE22	BTech	learn about the fertilizers and uses	2017-18
Environmental Engineering	CH6TPE32	BTech	Learn about the air, water and noise pollution and remedies	2017-18
Fluidization Engineering	CH5TOE11	BTech	floating and separation techniques of particles used in process industries	2017-18
Computer added design and Simulation	CH4709	BTech	Study the mathematical modeling and simulation through software	2013-14
Minor Project	CH4709	BTech	involved in the research related to new innovations	2013-14
Vocational Training Viva Cum Seminar	CH4708	BTech	learn the working culture of industry	2013-14
Process Equipment Design-II	CH4702	BTech	study the design aspects of mass transfer equipments	2013-14
Project Engineering, Economics and	CH4701	BTech	understand the economics of the process industries	2013-14

Management				
Petroleum Refinery Engineering	CH4705	BTech	Learn about the refinery industry	2013-14
Environmental Pollution control Engineering	CH4803	BTech	Learn about the air, water and noise pollution and remedies	2013-14
Major Project	CH4807	BTech	involved in the research related to new innovations	2013-14
Petrochemical Engineering	CH4804	BTech	study the manufacturing of petroleum products	2013-14
Optimization Techniques in Chemical Engineering	CH4802	BTech	optimization of paramers involved in chemical process	2013-14
Aadvanced Heat Transfer	CHPG1101	M.Tech	learn about	2013-14
Chemical Reactor Design	CHPG1102	M.Tech	understand the industrial reactor used in chemical process	2013-14
Fluidization Engineering	CHPG1103	M.Tech	floating and separation techniques of particles used in process industries	2013-14
Membrane separation	CHPG1105	M.Tech	study the separation based on membrane	2013-14

processes				
Chemical Engineering Computational Lab	CHPG1106	M.Tech	learn the variuos chemical engineering methods that used in process industries	2013-14
Advanced Fluid Mechanics	CHPG1201	M.Tech	understanding of dynamics of fluid in industrial application	2013-14
Advanced Mass Transfer	CHPG1202	M.Tech	mass transfer operations like distillation, diffusion etc.	2013-14
Industrial pollution control Technologies	CHPG1203	M.Tech	Ccontrolling techniques of various pollution invovled in industries	2013-14
Design and Development of Catalyst	CHPG1204	M.Tech	understand the design of various catalyst used in industries by different methods like solgel, precipitations etc.	2013-14
Advanced Waste Water Treatment Technology	CHPG1105	M.Tech	Study the advanced water treatment methods and their application in process industries	2013-14
Steady state process simulation	CHPG1205	M.Tech	Study the mathematical modeling andsimulation through software	2013-14
Project	CHPG1206	M.Tech	involved in the research related to new innovations	2013-14
Seminar	CHPG1207	M.Tech	learn to present the reasearch based paper in conference. Seminar etc.	2013-14

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	Chemical Engineering Thermodynamics-I	CH3TES06	BTech	Application of concepts of thermodynamics in real life situations and process application	2016-17
	Fluid Mechanics	CH3TES05	BTech	understanding of dynamics of fluid in industrial application	2016-17

Fluid Mechanics Lab	CH3PES05	BTech	understanding of dynamics of fluid in industrial application	2016-17
Chemical Engineering Calculation	CH3TPC02	BTech	understanding of process calculation of industry	2016-17
Numerical Analysis and Computer Application	CH4TBS06	BTech	Employing numerical techniques to model and simulate to chemical engineering phenomena.	2016-17
Numerical Analysis and Computer Application Lab	CH4PBS03	BTech	Employing numerical techniques to model and simulate to chemical engineering phenomena.	2016-17
Inorganic Chemical Technology	CH4TPC03	BTech	Students learn about recent developments and current trends in process industries.	2016-17
Mechanical Operation	CH4TPC04	BTech	Learn about the handling of solids in industry	2016-17
Mechanical Operation Lab	CH4PPC02	BTech	Learn about the handling of solids in industry	2016-17
Process Instrumentation	CH4TPC05	BTech	Understand the measuring techniques required in chemical industries	2016-17
Chemical Engineering Thermodynamics-	CH4TPC02	BTech	Application of concepts of thermodynamics in real life situations and process application	2016-17

II				
Heat Transfer	CH5TPC06	BTech	Heat transfer basics and application like Heat exchanger	2017-18
Mass Transfer-I	CH5TPC07	BTech	mass transfer operations like distillation, diffusion etc.	2017-18
Heat Transfer Lab	CH5PPC03	BTech	Determination of thermal conductivity, heat transfer co-efficient, emissivity etc.	2017-18
Process Equipment Design-I	CH6TPE21	BTech	Mechanical Aspects of various vessels	2017-18
Mass Transfer-I Lab	CH5PPC04	BTech	mass transfer operations like distillation, diffusion etc.	2017-18
Chemical Reaction Engineering-I	CH5TPC08	BTech	understand the reaction kinetics and different type of reactors	2017-18
Chemical Reaction Engineering Lab	CH5PPC05	BTech	understand the reaction kinetics and different type of reactors	2017-18
Mass Transfer-II	CH6TPC09	BTech	mass transfer operations like distillation, diffusion etc.	2017-18
Fuel Combustion Energy Technology	CH6TPE31	BTech	Energy efficiency and conservation learning	2017-18
Process Dynamics and Control	CH6TPC10	BTech	learn about the controlling paramers in industries	2017-18
Organic Chemical	CH6TPC11	BTech	Students learn about recent developments and current trends in process	2017-18

Technology			industries.	
Fertilizer Technology	CH6TPE22	BTech	learn about the fertilizers and uses	2017-18
Environmental Engineering	CH6TPE32	BTech	Learn about the air, water and noise pollution and remedies	2017-18
Fluidization Engineering	CH5TOE11	BTech	floating and separation techniques of particles used in process industries	2017-18
Minor Project	CH7PPC08	BTech	involved in the research related to new innovations	2018-19
Vocational Training Viva Cum Seminar	CH7PPC09	BTech	learn the working culture of industry	2018-19
Process Equipment Design-II	CH7TPC13	BTech	study the desing aspects of mass transfer equipments	2018-19
Project Engineering, Economics and Management	CH8TPC17	BTech	understand the economics of the process industries	2018-19
Petroleum Refinery Engineering	CH7TPE41	BTech	Learn about the refinery industry	2018-19
Project	CH8PPC10	BTech	involved in the research related to new innovations	2018-19

Petrochemical Technology	CH8TPE51	BTech	study the manufacturing of petroleum products	2018-19
Optimization Techniques	CH8TOE41	BTech	optimization of paramers involved in chemical process	2018-19
New Separation Processes	CH7TPC15	BTech	learn about the new processes of separations	2018-19
Membrane separations processes	CH8TPE53	BTech	learn about the new processes of separations	2018-19
Water Conservation and Management	CH7TOE32	BTech	understand the water utilization and conservation techniques	2018-19
Process Modeling and Simulation	CH8TOE42	BTech	Study the mathematical modeling andsimulation through software	2018-19
Aadvanced Heat Transfer	CHPG1101	M.Tech	learn about	2013-14
Chemical Reactor Design	CHPG1102	M.Tech	understand the industrial reactor used in chemical process	2013-14
Fluidization Engineering	CHPG1103	M.Tech	floating and separation techniques of particles used in process industries	2013-14
Membrane separation	CHPG1105	M.Tech	study the separation based on membrane	2013-14

processes				
Chemical Engineering Computational Lab	CHPG1106	M.Tech	learn the variuos chemical engineering methods that used in process industries	2013-14
Advanced Fluid Mechanics	CHPG1201	M.Tech	understanding of dynamics of fluid in industrial application	2013-14
Advanced Mass Transfer	CHPG1202	M.Tech	mass transfer operations like distillation, diffusion etc.	2013-14
Industrial pollution control Technologies	CHPG1203	M.Tech	Ccontrolling techniques of various pollution invovled in industries	2013-14
Design and Devlopment of Catalyst	CHPG1204	M.Tech	understand the design of various catalyst used in industries by different methods like solgel, precipitations etc.	2013-14
Project	CHPG1206	M.Tech	involved in the research related to new innovations	2013-14
Advanced Waste Water Treatment Technology	CHPG1105	M.Tech	Study the advanced water treatment methods and their application in process industries	2013-14
Steady state process simulation	CHPG1205	M.Tech	Study the mathematical modeling andsimulation through software	2013-14
Seminar	CHPG1207	M.Tech	learn to present the reasearch based paper in conference. Seminar etc.	2013-14

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