Summary Sta Competency Element	Summary of application of the element	Paragraph number
PE1 KNOWLEDGE AND SKILL B	BASE	
		CE 1.2, CE 1.3, CE 1.5
PE1.1 Comprehensive, theory-based understanding of the underpinning	I pondered the needed knowledge of physical and	CE 2.2, CE 2.3, CE 2.4, CE 2.6
natural and physical sciences and the engineering fundamentals applicable	natural sciences and have used it to the best of my	CE 3.2, CE 3.3, CE 3.5
to the engineering discipline.	competences. I did both online & offline Research on Methanol production via hydrogenation	
		CE 1.2, CE 1.3, CE 1.6
PE1.2 Conceptual understanding of the mathematics, numerical analysis.	Mathematics, numerical analysis, statistics and	CE 2.2, CE 2.3, CE 2.4, CE 2.6
statistics and computer and information sciences which underpin the engineering discipline.	regimented use of computer and information sciences are main emphasis of engineering discipline; I have applied all these skills in the three projects adequately.	CE 3.2, CE 3.3, CE 3.5
		CE 1.2, CE 1.3, CE 1.6, CE 1.6, CE 1.7
PE1.3 In-depth understanding of specialist bodies of knowledge within the engineering discipline.	From start to end and even after the implementation of the projects, I was enthralled and demonstrated the knowledge I had integrated during my studies has been applied. I prepared methanol synthesis catalyst using impregnation method.	CE 2.2, CE 2.3, CE 2.4, CE 2.6, CE 2.9
		CE 3.2, CE 3.3, CE 3.5, CE 3.6

PE1.4 Discernment of knowledge development and research directions within the engineering discipline.	The projects quoted in three episodes were implemented after comprehensive study and analysis. I used Auto CAD software for designing the PFD.	CE 1.2, CE 1.3, CE 1.7 CE 2.2, CE 2.3, CE 2.6, 2.11 CE 3.2, CE 3.3, CE 3.5, CE 3.6
PE1.5 Knowledge of contextual factors impacting the engineering discipline.	All the projects were based on thorough research and knowledge. I went through all the latest developments in gas chromatography to analyze the withdrawn gases from the reactor.	CE 1.3, CE 1.7, CE 1.8 CE 2.8, CE 2.9 CE 3.2, CE 3.3, CE 3.5, CE 3.6
PE1.6 Understanding of the scope, principles, norms, accountabilities and bounds of contemporary engineering practice in the specific discipline.	Showed widespread understanding of the projects and took the lead role, keeping in view all the allied disciplines. I developed process flow diagram for the system of the topside.	CE 1.3, CE 1.7, CE 1.8, CE 1.9 CE 2.2, CE 2.3, CE 2.6, CE 2.9 CE 3.2, CE 3.3, CE 3.5, CE 3.6, CE 3.7

PE2 ENGINEERING APPLICATION ABILITY

		CE 1.8, CE 1.9
PE2.1 Application of established engineering methods to complex engineering problem solving.	In these projects, I applied well-known engineering approaches to resolve	CE 2.10
	problems. I used carbon	CE 3.8, CE 3.9
	nanotubes to subside water	
	presence as a by-product in	
	methanol production via CO2	
	hydrogenation process	

PE2.2 Fluent application of engineering techniques, tools and resources.	The practices that I used were credible, while assuring cautious use of available resources. I did calculations to prepare CNT supported Cu/ZnO based catalyst.	CE 1.7, CE 1.8, CE 1.9, CE 1.10, CE 1.11 CE 2.9, CE 2.11, CE 2.12, CE 2.13 CE 3.7, CE 3.8, CE 3.9, CE 3.10, CE 3.11		
PE2.3 Application of systematic engineering synthesis and design processes.	I followed a methodical slant to make designs outstanding and substantial. I designed a suitable reactor for the reaction of CO ₂ hydrogenation.	CE 1.7, CE 1.8, CE 1.9, CE 1.10, CE 1.11 CE 2.9, CE 2.10, CE 2.11 CE 3.8, CE 3.9, CE 3.10, CE 3.11, CE 3.12		
PE2.4 Application of systematic approaches to the conduct and management of engineering projects.	Since instigation to achievement, I confirmed application of methodical approaches. I did modulation of projects into definite number of stages & created a classification of activities to be achieved.	CE 1.6, CE 1.12 CE 2.6, CE 2.7, CE 2.14, CE 2.15 CE 3.3, CE 3.13		
PE3 PROFESSIONAL AND PERSONAL ATTRIBUTES				
PE3.1 Ethical conduct and professional accountability.	As a team member, I kept my attitude highly professional, driven my team members and ensured they were equally valued for their assistances. I went through all the latest developments in Crude Separation & drafted the requirement for the project accordingly.	CE 1.5, CE 1.6 CE 2.3, CE 2.4, CE 2.7, CE 2.14, CE 2.15 CE 3.3, CE 3.5		

PE3.2 Effective oral and written communication in professional and lay domains.	The projects were all self – explanatory and there was no indecisiveness in communication at any level.	CE 1.5, CE 1.6, CE 2.2, CE 2.7, CE 2.13 CE 3.3, CE 3.6, CE 3.12
PE3.3 Creative innovative and proactive demeanor.	Being an ardent person, in each project I remained inventive and most visional among my group. I used my knowledge & performed ASPEN HYSYS simulation in order to test the proposed PFD design.	CE 1.10, CE 1.11 CE 2.11, CE 2.12, CE 2.13 CE 3.10, CE 3.11
PE3.4 Professional use and management of information.	I assured acceptable and professional use of information in view of allocated projects.	CE 1.5, CE 1.6, CE 1.12 CE 2.7, CE 2.8, CE 2.14, CE 2.15 CE 3.2, CE 3.3, CE 3.6
PE3.5 Orderly management of self and professional conduct.	My professional conduct throughout the projects was up to the standard and highly valued. I developed project management skill after the project completion. This helped me in making firm decision during project execution.	CE 1.5, CE 1.6, CE 1.12 CE 2.7, CE 2.14, CE 2.15 CE 3.3, CE 3.5, CE 3.6
PE3.6 Effective team membership and team leadership.	The projects I did were done professionally. I left no stone unturned in solving all the issues accordingly in concern with the team mates.	CE 1.2, CE 1.5, CE 1.6, CE 1.12 CE 2.7, CE 14, CE 2.15 CE 3.2, CE 3.4, CE 3.5, CE 3.6