

Summary Statement on CDR Sample for Mechanical Engineer

Summary Statement of Professional Engineer CDR		
Competency Element	Summary of application of the element	Paragraph number
PE1 KNOWLEDGE AND SKILL BASE		
PE1.1 Comprehensive, theory-based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline.	I contemplated the desired knowledge of physical and natural sciences and have implied it to the best of my abilities. I used all possible sources to do research for increasing Gas Turbine Efficiency.	CE 1.1, CE 1.2, CE 1.3 CE 2.2, CE 2.3, CE 2.5 CE 3.2, CE 3.3, CE 3.5
PE1.2 Conceptual understanding of the mathematics, numerical analysis, statistics and computer and information sciences which underpin the engineering discipline.	Mathematics, numerical analysis, statistics and well-ordered use of computer and information sciences are chief prominence in engineering. I have pragmatic all these skills in the three projects sufficiently.	CE 1.1, CE 1.2, CE 1.3, CE 1.6 CE 2.1, CE 2.2, CE 2.3, CE 2.5 CE 3.2, CE 3.3, CE 3.5, CE 3.6
PE1.3 In-depth understanding of specialist bodies of knowledge within the engineering discipline.	From start to end and even after the employment of the projects, I was fascinated and established the knowledge I had united during my studies has been effectively applied. I proposed that flow can be reduced to the stage 2 nozzle which implied executing a smaller Stg 13 extraction line orifice.	CE 1.1, CE 1.2, CE 1.3, CE 1.6 CE 2.1, CE 2.2, CE 2.3, CE 2.5 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 mentioned in three episodes were realized after inclusive study and scrutiny. I asked technician to hook up ADRE so that I can capture steady state & shutdown data to perform baseline assessment.	CE 1.2, CE 1.3, CE 1.6, CE 1.7 CE 2.1, CE 2.2, CE 2.3, CE 2.5 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 exhaustive research and information.	CE 1.2, CE 1.3, CE 1.6 CE 2.1, CE 2.2, CE 2.3, CE 2.5 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.	Displayed prevalent considerate of the projects and took the principal role, keeping in view all the associated disciplines. I anticipated that the first critical phase was to make design calculation & simulate different scenarios of turbine modes to observe the effect of IGV angle change on machine.	CE 1.2, CE 1.3, CE 1.4, CE 1.6 CE 2.1, CE 2.2, CE 2.3, CE 2.5 CE 3.2, CE 3.3, CE 3.5, CE 3.6
PE2 ENGINEERING APPLICATION ABILITY		

PE2.1 Application of established engineering methods to complex engineering problem solving.	In these projects, I applied well-known engineering approaches to resolve problems. I used carbon nanotubes to subside water presence as a by-product in methanol production via CO ₂ hydrogenation process..	CE 1.8, CE 1.9 CE 2.10 CE 3.8, CE 3.9
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.	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

<p>PE3.5 Orderly management of self and professional conduct.</p>	<p>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.</p>	<p>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</p>
<p>PE3.6 Effective team membership and team leadership.</p>	<p>The projects I did were done professionally. I left no stone unturned in solving all the issues accordingly in concern with the team mates.</p>	<p>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</p>