

Performance Indicators for the Programme Outcomes

No.	Programme Outcomes (PO)	Performance Indicator (PI)	
		Performance Criteria (PC)	Performance Target (PT)
1.	Engineering Knowledge - Apply knowledge of mathematics, natural science, engineering fundamentals and an engineering specialization to the solution of complex chemical engineering problems.	Percentage of Students above 40% Cumulative Average PO1 Attainment Marks from Courses that Contributed to PO1 as in OBE Database System	100 % at an average marks higher than 50%
		Test Marks for EKC451 EKC453	60 %
		Graduates Response on PO1 Attainment in Exit Survey	3.50 Score
2.	Problem Analysis - Identify, formulate, research literature and analyses complex chemical engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.	Percentage of Students above 40% Cumulative Average PO2 Attainment Marks from Courses that Contributed to PO2 as in OBE Database System	100 % at an average marks higher than 50%
		Literature Review and Problem Statement from EKC499 and Design Problem from EKC451 and EKC453	60 %
		Graduates Response on PO2 Attainment in Exit Survey	3.50 Score
3.	Design/Development of Solutions - Design solutions for complex chemical engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.	Percentage of Students above 40% Cumulative Average PO3 Attainment Marks from Courses that Contributed to PO3 as in OBE Database System	100 % at an average marks higher than 50%
		Average PO3 Attainment Marks from EKC 451 Process Design & Analysis and EKC 453 Plant Design & Economics	60 %
		Graduates Response on PO3 Attainment in Exit Survey	3.50 Score
4.	Investigation - Conduct investigations of complex problems using research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis	Percentage of Students above 40% Cumulative Average PO4 Attainment Marks from Courses that Contributed to PO4 as in OBE Database System	100 % at an average marks higher than 50%
		Average PO7 Attainment Marks from Key Exiting Year Courses (EKC499)	60 %

	of information to provide valid conclusions.	Graduates Response on PO4 Attainment in Exit Survey	3.50 Score
5.	Modern Tool Usage - Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex chemical engineering problems, with an understanding of the limitations.	Percentage of Students above 40% Cumulative Average PO5 Attainment Marks from Courses that Contributed to PO5 as in OBE Database System	100 % at an average marks higher than 50%
		Aspen Plus and Breeze Simulation from Design Courses	60 %
		Graduates Response on PO5 Attainment in Exit Survey	3.50 Score
6.	The Engineer and Society - Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solutions to complex chemical engineering problems.	Percentage of Students above 40% Cumulative Average PO6 Attainment Marks from Courses that Contributed to PO6 as in OBE Database System	100 % at an average marks higher than 50%
		QRA section from Design	60 %
		Graduates Response on PO6 Attainment in Exit Survey	3.50 Score
7.	Environment and Sustainability - Understand and evaluate the sustainability and impact of professional engineering work in the solution of complex chemical engineering problems in societal and environmental contexts.	Percentage of Students above 40% Cumulative Average PO7 Attainment Marks from Courses that Contributed to PO7 as in OBE Database System	100 % at an average marks higher than 50%
		EIA section from Design	60 %
		Graduates Response on PO7 Attainment in Exit Survey	3.50 Score
8.	Ethics - Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.	Percentage of Students above 40% Cumulative Average PO8 Attainment Marks from Courses that Contributed to PO8 as in OBE Database System	100 % at an average marks higher than 50%
		Code of ethics from Design	60 %
		Graduates Response on PO8 Attainment in Exit Survey	3.50 Score
9.	Individual and Team Work - Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.	Percentage of Students above 40% Cumulative Average PO9 Attainment Marks from Courses that Contributed to PO9 as in OBE Database System	100 % at an average marks higher than 50%

		Teamwork section from Design courses	60 %
		Graduates Response on PO9 Attainment in Exit Survey	3.50 Score
10.	Communication - Communicate effectively on complex chemical engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.	Percentage of Students above 40% Cumulative Average PO10 Attainment Marks from Courses that Contributed to PO10 as in OBE Database System	100 % at an average marks higher than 50%
		Viva from EKC499	60 %
		Graduates Response on PO10 Attainment in Exit Survey	3.50 Score
11.	Project Management and Finance - Demonstrate knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.	Percentage of Students above 40% Cumulative Average PO11 Attainment Marks from Courses that Contributed to PO11 as in OBE Database System	100 % at an average marks higher than 50%
		PM & Finance from Design courses	60 %
		Graduates Response on PO11 Attainment in Exit Survey	3.50 Score
12.	Life Long Learning - Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.	Percentage of Students above 40% Cumulative Average PO12 Attainment Marks from Courses that Contributed to PO11 as in OBE Database System	100 % at an average marks higher than 50%
		Supervisor Evaluation from EKC499	60 %
		Graduates Response on PO12 Attainment in Exit Survey	3.50 Score