

Table E.3b: Course to PO Matrix – for new curriculum structure (starting session 2018-2019)

Code	Course	Core/ Elective	Programme Outcomes												
			1	2	3	4	5	6	7	8	9	10	11	12	
EKC107	Organic Chemistry	Core	✓	✓								✓	✓		
EKC113	Physical Chemistry	Core	✓	✓											✓
EKC114	Analytical Chemistry	Core	✓	✓											
EKC122	Mass and Energy Balance	Core	✓	✓	✓			✓				✓	✓		
EKC124	Material Science for Chemical Engineering	Core	✓	✓											
EKC157	Chemical Engineering Drawing	Core	✓	✓				✓				✓	✓		
EKC216	Process Heat Transfer	Core	✓	✓	✓							✓	✓		
EKC217	Mass Transfer	Core	✓	✓	✓							✓	✓		
EKC218	Fluid Flow in Chemical Engineering	Core	✓	✓	✓							✓	✓		
EKC222	Chemical Engineering Thermodynamics	Core	✓	✓								✓	✓		
EKC245	Mathematical Methods for Chemical Engineering	Core	✓	✓											
EKC246	Computer Programming and Applications	Core	✓	✓	✓			✓							
EKC271	Biotechnology for Engineers	Core	✓	✓								✓	✓		
EKC278	Environmental Engineering and Management	Core	✓	✓	✓				✓	✓	✓			✓	
EKC291	Chemical Engineering Laboratory I	Core	✓	✓					✓			✓	✓		✓
EUP222	Engineers in Society	Core							✓		✓			✓	
EKC309	Project Management	Core			✓			✓			✓	✓	✓	✓	✓
EKC314	Transport Phenomena	Core	✓	✓				✓				✓	✓		✓
EKC316	Separation Processes	Core	✓	✓	✓							✓	✓		

Code	Course	Core/ Elective	Programme Outcomes											
			1	2	3	4	5	6	7	8	9	10	11	12
EKC336	Chemical Reaction Engineering	Core	✓	✓	✓		✓				✓	✓		
EKC338	Reactor Design and Analysis	Core	✓	✓	✓		✓				✓	✓		✓
EKC361	Process Dynamics and Control	Core	✓	✓	✓		✓				✓	✓		
EKC367	Plant Safety	Core			✓	✓	✓	✓	✓	✓	✓	✓		✓
EKC394	Chemical Engineering Laboratory II	Core	✓	✓		✓	✓				✓	✓	✓	✓
EKC395	Industrial Training	Core					✓				✓	✓		✓
EKC396	Chemical Engineering Laboratory III	Core	✓	✓		✓	✓				✓	✓	✓	✓
EKC451	Process Design and Analysis	Core			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EKC455	Plant Design and Operation	Core			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EKC457	Engineering Economics	Core	✓	✓	✓		✓	✓	✓			✓		✓
EKC499	Final Year Project	Core	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
EKC351	Biochemical Engineering	Elective	✓	✓		✓						✓		✓
EKC352	Process Intensification in Chemical Processes	Elective	✓	✓		✓						✓		✓
EKC354	Nanomaterials in Chemical Engineering	Elective	✓	✓		✓						✓		✓
EKC358	Oleochemical Processing	Elective	✓	✓		✓						✓		✓
EKC377	Renewable and Alternative Energy	Elective	✓	✓		✓		✓	✓		✓			✓
EKC379	Downstream Processing for Bioproducts	Elective	✓	✓		✓						✓		✓
EKC461	Membrane Science and Technology	Elective	✓	✓		✓						✓		✓
EKC462	Advanced Control Systems for Industrial Processes	Elective	✓	✓		✓						✓		✓
EKC463	Advanced Process Safety Engineering	Elective	✓	✓		✓		✓	✓		✓	✓		✓

Code	Course	Core/ Elective	Programme Outcomes											
			1	2	3	4	5	6	7	8	9	10	11	12
EKC464	Biorefinery Engineering	Elective	✓	✓		✓						✓		✓
EKC475	Wastewater Treatment Engineering	Elective	✓	✓	✓			✓	✓			✓		✓
EKC483	Petroleum and Gas Processing Engineering	Elective	✓	✓		✓						✓		✓