



The Association of Professional
Engineers and Geoscientists of Alberta

**CHEMICAL ENGINEERING
COURSE EQUIVALENTS
2016 EDITION**

<i>University of Alberta</i>		<i>University of Calgary</i>	
16-CHEM-A1	Process Balances and Chemical Thermodynamics		
CME 265	Process Analysis	ENCH 315	Chemical Engineering Process Calculation
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CHE 343	Chemical Engineering Thermodynamics	ENCH 427	Chemical Engineering Thermodynamics
16-CHEM-A2	Unit Operations and Separation Processes		
CHE 312	Fluid Mechanics	ENCH 331	Process Fluid Dynamics
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CHE 412	Introduction to Fluid-Particle Systems	ENCH 403	Heat Transfer
16-CHEM-A3	Heat and Mass Transfer		
CHE 314	Heat Transfer	ENCH 405	Mass Transfer & Separation Processes
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CHE 318	Mass Transfer	ENCH 505	Design of Separation Processes
16-CHEM-A4	Chemical Reactor Engineering		
CHE 345	Chemical Reactor Analysis I	ENCH 421	Chemical Reaction Engineering
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CHE 445	Chemical Reactor Analysis II		
16-CHEM-A5	Chemical Plant Design and Economics		
CHE 464	Chemical Engineering Design I	ENCH 423	Chemical Engineering Process Development
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CHE 465	Chemical Engineering Design II		
16-CHEM-A6	Process Dynamics and Control		
CHE 446	Process Dynamics and Control	ENCH 429	Process Dynamics and Control
16-CHEM-B1	Transport Phenomena		
	<i>No equivalent course offered</i>	ENCH 501	Transport Phenomena
16-CHEM-B2	Environmental Engineering		
	Environmental Engineering Fundamentals		Effluent Treatment Processes for Energy Industry
CIVE 221		ENEE 505	
16-CHEM-B3	Simulation, Modelling, and Optimization		
CHE 472	Modelling Process Dynamics	ENCH 627	Chemical Process Simulation
16-CHEM-B4	Biochemical Engineering		
	Introduction to Biochemical Engineering		Principles of Biochemical Engineering
CHE 484		ENCH 535	
16-CHEM-B5	Pulp and Paper Technology		
	<i>No equivalent course offered</i>		<i>No equivalent course offered</i>

University of Alberta		University of Calgary	
16-CHEM-B6	Petroleum Refining and Petrochemicals		
CHE 522	Fundamentals of Oilsands Upgrading	ENCH 503	Crude Oil Upgrading and Refining
16-CHEM-B7	Extractive Metallurgy		
CME 472	Extractive Metallurgy		<i>No equivalent course offered</i>
16-CHEM-B8	Polymer Engineering		
CME 482	Fundamentals of Polymers	ENCH 539	Polymer Engineering
16-CHEM-B9	Advanced Materials		
MATE 495	Nanomaterials and Biomedical Applications		<i>No equivalent course offered</i>
16-CHEM-B10	Life Cycle Assessment (LCA)		
	<i>No equivalent course offered</i>	ENEE 503	Life Cycle Assessment
16-CHEM-B11	Nuclear and Nuclear Chemical Processes		
	<i>No equivalent course offered</i>		<i>No equivalent course offered</i>
16-CHEM-B12	Petroleum Production Operations - (17-Pet-A5)		
CHE 534	Fundamentals of Oilsands Extraction	ENPE 533	Production Engineering
16-CHEM-B13	Fundamental Reservoir Engineering (17-Pet-A3)		
PET E 295	Fundamental Reservoir Engineering	ENPE 523	Introduction to Reservoir Engineering

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