

Cleveland State University

Bachelor of Chemical Engineering
I.D. No. _____

Name _____

Curriculum Sheet (Effective Fall 2025)

First Year							
Fall Semester	Credits	Grade	Core	Spring Semester	Credits	Grade	Core
INQ 170 Engineering Launch	3		IL	ESC 102 Technical Writing & Prof. Comm.	3		RPW
ENG 101 Writing I	3		FYV	MTH 182 Calculus II	4		QFR
MTH 181 Calculus I	4		QFR	PHY 241 University Physics I	5		SI
CHM 261 General Chemistry I	3		SI	CHM 262 General Chemistry I	3		SI
CHM 266 General Chemistry Lab I	1		SI	CHM 267 General Chemistry Lab I	1		SI
Semester Total	14			Semester Total	16		

Second Year							
Fall Semester	Credits	Grade	Core	Spring Semester	Credits	Grade	Core
PHY 242 University Physics II	5		SI	CHE 300 Chemical Engineering Principles	4		
ESC 152 Programming with MATLAB	3			ESC 301 Fluid Mechanics	3		
ESC 250 Differential Equations	3			ESC 350 Linear Algebra	3		
ESC 321 Engineering Thermodynamics	3			MTH 283 Multivariable Calculus for Engrs	2		
Society & Human Behavior Elective	3		SHB	CHM 331 Organic Chemistry I	3		
ESC 130 Engr/Comp Sci Career Preparation	1			CHM 336 Organic Chemistry Lab I	1		
Semester Total	18			Semester Total	16		

Third Year							
Fall Semester	Credits	Grade	Core	Spring Semester	Credits	Grade	Core
CHE 302 Chem. Engr. Thermodynamics	4			CHE 404 Chemical Reactor Design	4		WAC
CHE 306 Transport Phenomena	4			CHE 408 Separation Processes	4		
CHE 307 Chemical Engineering Methods	3		WAC	ESC 310 Engineering Statistics	3		
ESC 270 Materials Science	3			ESC 282 Engineering Economy	3		
PHL 215 Engineering Ethics	3		HCC	Global Human Perspectives Elective	3		GHP
	17				17		

Fourth Year							
Fall Semester	Credits	Grade	Core	Spring Semester	Credits	Grade	Core
CHE 430 Process Control	4			CHE 420 Senior Chemical Engineering Lab	4		
CHE 440 Process Design I	3		WAC	CHE 441 Process Design II	3		
CHE 448 Chemical Process Safety	3			Technical Elective	3		
Technical Elective	3			Technical Elective	2		
African-American History & Culture Elective	3		AAHC	Diversity in Society Elective	3		DIS
Semester Total	16			Semester Total	15		

Degree Total hours: 129

Core Curriculum Key:

GHP = Global Human Perspectives (one course)	QFR = Quantitative & Formal Reasoning (one course)
IL = Inquiry Launch (one course)*	RPW = Research & Professional Writing (one course, C or better required)
FYV = Finding Your Voice (one course, C or better required)	HCC = Human Culture & Creativity (one course)
SHB = Society & Human Behavior (one course)	WAC/SPAC = Writing/Speaking Across the Curriculum Req (2 courses, one in the major)
SI = Scientific Inquiry (two courses, one lab credit)	AAHC = African-American History & Culture (one course)
GHP = Global Human Perspectives (one course)	DiS = Diversity in Society (one course)
DDL = Data & Digital Literacy (one course, can be satisfied by a second FQR course)	

**Students transferring in >xx ch, or who have already completed an Inquiry Launch course at CSU, will instead take ESC 120 (2 credits) Intro. To Engr Design.

This information is provided solely for the convenience of the reader, and the University expressly disclaims any liability which may otherwise be incurred. This publication is neither a contract nor an offer to make a contract. While every effort has been made to ensure the accuracy of the information, the University reserves the right to make changes at any time with respect to course offerings, degree requirements, services provided, or any other subject addressed herein.
