

New Curriculum A.A.S. in Chemical Engineering with course descriptions of some of the courses that have been modified or added

Year One, Fall Semester

ENG 110	Freshman Composition	3
CHEM 120	General Chemistry I	4
MTH 121	College Algebra	4
ENGR103	Introduction to Engineering	3
CHEME119	Safety, Health & Environmental I	4

An overview of safety, health, and environmental issues in the performance of all job tasks associated with the process industries. This course covers recognition, control, and regulation of safety hazards in the workplace. Topics include record keeping, training, facilities, personal protection equipment, fire protection and governmental regulations.

CHEME 115	Introduction to Process Technology	3
Provides an overview of process-based manufacturing industries with a focus on process technology operations using a systems perspective. Includes concepts of safety, process instruments, environmental standards, and continuous process improvement. Prerequisite: None		

Total **21**

Year One Spring Semester

CHEME 117	Process Technology I-Equipment	4
Introduces students to the purpose, components, and the process technician's role for operating and troubleshooting the equipment used within the process industry.		

CMP 101	Introduction to Computers	3
NAV 225	Dine Philosophy of Education	3

Total **10**

Year Two Fall Semester

CHEME 202	Industrial Chemistry with lab	4
COM 130	Public Speaking	3
CHEME 222	Fundamentals of Chemical Engineering	4

CHEME 218	Process Technology II-System	4
The course is related to the studies of the interrelation of various process systems to process equipment. Examines how to arrange process equipment into basic systems; describes the purpose and function of specific process systems; explains how factors affecting process systems are controlled under normal conditions; introduces the concept of system and plant economics. Prerequisite: CHEME117.		

Total **15**

Year Two Spring Semester

CHEME 231	Process Technology III-Operations	4
This course covers process technology today, process hazards, permit systems, quality and economics. In addition, plant science physics and chemistry are discussed in relationship to process technology and training. Also covered are; Process Technician's role and maintenance duties, bulk chemical handling and storage, process unit shutdown, turnarounds and process unit startup. Prerequisite: CHEME 218.		

CHEME 224	Quality Control in chemical engineering	4
CHEME 223	Petroleum Refinery Engg. & Petrochemicals	4
CHEME 230	Practicum in Industry	4
Total		16
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Total Credits Required		62