

B.8. Program Criteria

In this section we review the fashion in which the Chemical Engineering specific program criteria are provided for in the curriculum.

B.8.1. Program Criteria

The following program criteria applies to the chemical engineering program:

The program must demonstrate that graduates have: thorough grounding in chemistry and a working knowledge of advanced chemistry such as organic, inorganic, physical, analytical, materials chemistry, or biochemistry, selected as appropriate to the goals of the program; and working knowledge, including safety and environmental aspects, of material and energy balances applied to chemical processes; thermodynamics of physical and chemical equilibria; heat, mass, and momentum transfer; chemical reaction engineering; continuous and stage-wise separation operations; process dynamics and control; process design; and appropriate modern experimental and computing techniques.

Table 8-1 demonstrates the fashion in which courses in the program satisfy this requirement.

Table 8-1 Program Criteria for Programs Named Chemical Engineering

Additional Criteria for Programs Named Chemical Engineering	Courses in Regular Program Used to Satisfy Chemical Engineering Program Criteria
The program must demonstrate that graduates have...	
thorough grounding in chemistry, ...	CHEM 1110, CHEM 1120
working knowledge of advanced chemistry, ...	CHEM 2070/1, CHEM 2080, CHEM 6070/1
material and energy balances, ...	CHEN 2100/1
thermodynamics of physical and chemical equilibria, ...	ENGR 2010, CHEN 3370
heat, mass, and momentum transfer, ...	CHEN 2610, CHEN 3620
chemical reaction engineering, ...	CHEN 3700
continuous and stage-wise separation operations, ...	CHEN 3660
process dynamics and control, ...	CHEN 4160, CHEN 6170
process design, ...	CHEN 4450, CHEN 6460, CHEN 6470
safety and environmental aspects, ...	CHEN 6651, CHEN 6470, CHEN 3820, CHEN 4860, CHEN 6650
modern experimental techniques, ...	CHEN 3820, CHEN 4860
modern computing techniques.	COMP 1200, CHEN 2101, CHEN 3650, CHEN 6170, CHEN 6460