

Chemical Engineering — ABM

Accelerated Bachelor's/Master's Curriculum for Chemical Engineering

The Chemical Engineering Accelerated Bachelor's/Master's Program (ABM) provides an opportunity for highly motivated undergraduate students to gain a depth of understanding and experience of chemical engineering beyond that of typical bachelor's level graduates. The ABM program allows these exceptional students to count up to 9 hours toward both the bachelor's and master's degrees.

The Bachelor of Chemical Engineering undergraduate major can lead to a Master of Science in Chemical Engineering (thesis or non-thesis) in the ABM track. Please see the Department of Chemical Engineering website for additional information.

Senior Year for Students in ABM Program - Chemical Engineering

CHEN 6xxx/7xxx elective courses are approved courses that can be taken in the ABM program that replace CHEN electives at the undergraduate level.

Courses marked with an asterisk are those used by students enrolled in the ABM program to meet nine undergraduate hours during their senior year and nine graduate hours to be used toward their graduate degree.

Senior

Fall	Hours	Spring	Hours
CHEN 4170 Digital Process Control		3 CHEN 4470 Process Design Practice	3
CHEN 4450 Process Economics and Safety		3 *CHEN 6xxx/7xxx Elective	3
CHEN 4460 Process Simulation Synthesis and Optimization		2 *CHEN 6xxx/7xxx Elective	3
CHEN 4860 Chemical Engineering Laboratory II		2 Core Fine Arts	3
*CHEN 6xxx/7xxx Elective		3 Core Social Science	3
Core Literature		3 UNIV 4AA0 Achieve the Creed	0

Accelerated Master of Science in Chemical Engineering (non-thesis)

Fifth Year

Fall	Hours	Spring	Hours
CHEN 7100 Transport Phenomena		3 CHEN 7250 Chemical Reaction Engineering	3
CHEN 7200 Chemical Engineering Thermodynamics		3 CHEN/Other 6xxx/7xxx Elective	3
CHEN 6xxx/7xxx Elective		3 CHEN/Other 6xxx/7xxx Elective	3
CHEN/Other 6xxx/7xxx Elective		3	
		12	9

Total Hours: 21

Accelerated Master of Science in Chemical Engineering (thesis)

Fifth Year

Summer	Hours	Fall	Hours	Spring	Hours
CHEN 7990 Research and Thesis	1	CHEN 7100 Transport Phenomena	3	CHEN 7250 Chemical Reaction Engineering	3

	CHEN 7200 Chemical Engineering Thermodynamics	3	CHEN/Other 6xxx/7xxx Elective ¹	3
	CHEN 7950 Graduate Seminar	1	CHEN 7950 Graduate Seminar	1
	CHEN 7990 Research and Thesis	1	CHEN 7990 Research and Thesis	1
		1		8
Sixth Year				
Summer	Hours	Fall		Hours
CHEN 7990 Research and Thesis	1	CHEN 7950 Graduate Seminar		1
		CHEN 7990 Research and Thesis		2
		1		3
Total Hours: 21				

¹ See advisor for approved course listing.