NORTHERN ARIZONA UNIVERSITY

Accelerated Master of Science in Chemistry Department of Chemistry and Biochemistry

ACCELERATED PROGRAM: BS Chemistry – MS Chemistry (General Emphasis)

Overview

Note: This plan includes 12 units that are used to complete both the undergraduate and the graduate requirements: 0 at the undergraduate level and 12 at the graduate level. Students must receive a grade of "B" or higher in this coursework used towards both degrees.

Undergraduate requirements for students in the accelerated program

The following 39 units of core courses, maintaining a 3.0 GPA:

- CHM 151, CHM 151L, CHM 152, and CHM 152L
- CHM 235, CHM 235L, CHM 238, and CHM 238L
- CHM 341
- Select one from: CHM 300W, ENG 302W, or ENG 305W
- MAT 136 and MAT 137
- PHY 161 and PHY 262* (*Note: PHY 262L is not required.)

The following 29-32 units*, maintaining a 3.0 GPA in these courses:

- Select 8 additional CHM units from: <u>CHM 320</u>, <u>CHM 320L</u>, <u>CHM 338L</u>, <u>CHM 350</u>, or (CHM 360 or CHM 461) in consultation with
 research advisor and thesis committee to determine best coursework pathways (NOTE: CHM 360 and CHM 461 are duplicative.
 CHM 462C must be taken with CHM 461, and can be used towards the capstone or elective credits.)
- Select two of these capstone options (8-10 units):
 - CHM 425C and CHM 425LC (5 units)
 - CHM 442C and CHM 442LC (5 units)
 - CHM 450C and CHM 450LC (4 units)
 - CHM 462C and CHM 460LC (4 units)
- CHM 485 (1-2 units)
- Select two CHM graduate-level courses (500- or 600-level) chosen with your advisor's and committee's approval (6 units)
- CHM 685 (6 units)

Students in the accelerated program are also required to:

- Select a research advisor and thesis committee upon acceptance to the program
- Maintain satisfactory progress (as determined by the research advisor and thesis committee) on a research project commencing with Year 3

Graduate requirements for students in the accelerated program

Coursework: The following courses while remaining in good academic standing:

General Emphasis (32-35 units)

Formal coursework (a minimum of 18 units):

• <u>CHM 698</u> (4 units)

^{*}Note that some courses have prerequisites that are not otherwise required for the major.

 Graduate level courses (500- or 600-level) chosen with your advisor's and committee's approval, consisting of at least 9 units in CHM; <u>CHM 595</u> does not count towards the 9 units with a CHM prefix, but may count towards the 14 unit minimum with advisor and committee approval (14-15 units)

Research units (a minimum of 14 units):

- CHM 685 for the research of an approved thesis (8-11 units)
- <u>CHM 699</u> for the writing and oral defense of an approved thesis* (4-6 units)
 - * NOTES: Once you begin taking CHM 699, you must continue to enroll each semester in at least 1 unit of CHM 699 until you graduate.
- CHM 697 (1 unit)

Additional requirements:

- Passing proficiency exams in three of the five subdisciplines of chemistry (see the Program Rules and Guidelines)
- Successful completion of a research thesis.

Suggested Progression Plan

- ^ Denotes undergraduate course applied towards the undergraduate degree
- % Denotes a course that applies towards both degrees
- * Denotes graduate course applied towards the graduate degree

Fall Year 1 (Term 1: 16 units)	Spring Year 1 (Term 2: 17 units)
^ CHM 151 (4)	^ CHM 152 (3)
^ CHM 151L (1)	^ CHM 152L (1)
^ MAT 136 (4)	^ MAT 137 (4)
^ ENG 105 (4)	^ Liberal Studies/Diversity (3)
^ Liberal Studies/Diversity (3)	^ Liberal Studies/Diversity (3)
	^ undergraduate elective (3)

Fall Year 2 (Term 3: 18 units)	Spring Year 2 (Term 4: 16 units)
^ CHM 235 (4)	^ CHM 238 (3)
^ CHM 235L (1)	^ CHM 238L (1)
^ PHY 161 (4)	^ PHY 262 (3)
^ Liberal Studies/Diversity (3)	^ Liberal Studies/Diversity (3)
^ Liberal Studies/Diversity (3)	^ Liberal Studies (3)
^ undergraduate elective (3)	^ undergraduate elective (3)

Fall Year 3 (Term 5: 14-16 units)	Spring Year 3 (Term 6: 13-15 units)		
^ CHM 341 (3)	^ undergraduate elective (3)		
^ additional units of CHM (3-4)	^ additional units of CHM (3-4)		
^ additional units of CHM or undergraduate elective (2-3)	^ CHM 300W, ENG 302W, or ENG 305W (3)		
^ Liberal Studies/Diversity (3)	^ CHM 485 (1-2)		
^ undergraduate elective (3)	^ undergraduate elective (3)		

Fall Year 4 (Term 7: 16-18 units)	Spring Year 4 (Term 8: 14-15 units; graduate with BS)
^ CHM 350 (3)	^ undergraduate elective (3)
^ first capstone option (4-5)	^ second capstone option (4-5)
% CHM 5XX or CHM 6XX (3)	% CHM 5XX or CHM 6XX (3)
% CHM 685 (3)	% CHM 685 (3)
* CHM 595 (2) or CHM 5XX or CHM 6XX (3)	* CHM 698 (1)
* CHM 698 (1)	

Fall Year 5 (Term 9: 9 units)	Spring Year 5 (Term 10: 9 units; graduate with MS)
* CHM 5XX or CHM 6XX (3)	* CHM 5XX, CHM 6XX, or graduate-level course (3)
* CHM 685 (4)	* CHM 685 (3)
* CHM 698 (1)	* CHM 698 (1)
* CHM 697 (1)	* CHM 699 (2)