

ASSOCIATE IN SCIENCE
Pre-Major: CHEMISTRY AND CHEMISTRY EDUCATION

Revised Spring Semester 2009

*This template has been developed by university and community college faculty and made specific for Durham Tech students. It is to be used as a blueprint for guiding students interested in majoring in Chemistry or Chemistry Education in their course selections. Students who successfully complete this course of study and who meet the requirements for admission to the university may be eligible to apply for admission to the major with junior standing. **This agreement is meant as a guide and the student should not assume that it addresses unique requirements set by his or her university of choice. It is the student's responsibility to become aware of individual requirements of the senior institution and to make course substitutions as warranted, within the requirements of the AS Plan-of-Study.***

General Education Core (44 SHC): 44 semester hours of credit (SHC) in general education core courses are required as outlined by the North Carolina Community College Curriculum Standards for Associate in Science degree programs. Students who complete the General Education Core exclusively at public colleges and universities in North Carolina or at private colleges that have signed on to the Comprehensive Articulation Agreement will be able to transfer the core as a package. The General Education core includes study in the areas of English composition, humanities and fine arts, social and behavioral sciences, natural sciences and mathematics.

English Composition (6 SHC):

- ENG 111 (3 SHC)—Expository Writing
- ENG 113 (3 SHC)—Literature-Based Research

Humanities and Fine Arts (9 SHC):

- One English literature course (3 SHC) selected from—ENG 231, 232, 233, 241, 242, 243, 251, 252, 261, 262
- *FL 112 (3 SHC)—Elementary Foreign Language II (*Must be taken with the accompanying lab—see Other Required Hours below*)
- One course (3 SHC) selected from—ART 111, 114, 115, 117; DRA 111; HUM 110, 121, 150, 160; MUS 110, 113; PHI 215, 240; REL 110, 211

**Foreign languages offered at Durham Tech include Arabic, French, German, Italian, Portuguese, and Spanish. Students graduating from UNC-CH are required to complete Intermediate Foreign Language I. Students must demonstrate competency in or complete the prerequisite for Elementary Foreign Language II.*

Social and Behavioral Sciences (9 SHC):

- One history course (3 SHC) selected from—HIS 111, 112, 121, 122, 131, 132
- Two courses (6 SHC) selected from the following list from two separate disciplines—ANT 210, 220; ECO 251, 252; GEO 111, 112; POL 120, 220; PSY 150*, 241, 281; SOC 210, 213, 220, 225

**PSY 150 is strongly recommended as one of these two courses.*

Natural Sciences and Mathematics (20 SHC)

Natural Science (12 SHC):

- CHM 151 (4 SHC)—General Chemistry I
- CHM 152 (4 SHC)—General Chemistry II
- PHY 251 (4 SHC)—General Physics I (*Offered spring only*)

Mathematics (8 SHC):

- MAT 271* (4 SHC)—Calculus I (*Offered fall and spring only*)
- MAT 272 (4 SHC)—Calculus II (*Offered spring and summer only*)

**Students must demonstrate competency in or complete the prerequisite for MAT 271.*

CHEMISTRY AND CHEMISTRY EDUCATION, continued

ELECTIVES: To complete this Associate in Science a student must complete a total of 64-67 credit hours. Sixty-four credit hours are guaranteed to transfer. The transfer of credit hours beyond the 64th is not guaranteed. Electives transfer as a package if the student completes the AS degree. If the degree is not completed then elective courses transfer on a course-by-course basis and it is the student's responsibility to address individual requirements at the university. We recommend that the additional 20-23 credit hours be distributed as follows:

Natural Science/Mathematics Electives (14 SHC)—An additional 14 semester hours of mathematics and science, selected from the following list of courses:

- CHM 251 (4 SHC)—Organic Chemistry I (*Offered fall only*)
 - CHM 252 (4 SHC)—Organic Chemistry II (*Offered spring only*)
 - CSC 134 (3 SHC)—C++ Programming (*Offered fall only*) or CSC 151 (3 SHC)—Java Programming (*Offered fall only*) (*Note: these courses transfer to UNC-CH only if you complete the AS degree.*)
 - PHY 252 (4 SHC)—General Physics II (*Offered fall only*)
- For students who did not place into Calculus I (4-8 SHC):**
- MAT 171/171 A (4 SHC)—Pre-calculus Algebra and accompanying Lab
 - MAT 172/172A (4 SHC)—Pre-calculus Trigonometry and accompanying Lab

Other Elective Hours Required for Graduation * (6-9 SHC):

- CAPSTONE COURSE (This course may be used to satisfy hours in the Natural Science/Mathematics Electives): BIO 140 (3 SHC)—Environmental Biology
- ACA 122 (1 SHC)—College Transfer Success
- Demonstration of computer competency by completion of CIS 110 (3 SHC)—Introduction to Computers or CIS 115 (3 SHC)—Introduction to Programming and Logic or satisfactory score on computer competency test
- FL 182 (1 SHC)—Lab for Foreign Language II
- One physical education course (1 SHC) selected from—PED 111, 113, 120, 121, 128, 130, 139, 142, 143, 145, 148, 149, 162, 183, 186

**Students must demonstrate competency in or complete the prerequisites required for FL 112.*

Other Hours Recommended for the Major:

- COM 231 (3 SHC)—Public Speaking (*Required for Education Majors*)
- MAT 273 (4 SHC)—Calculus III (*Offered fall only*)

The colleges and universities that offer this major:

To identify the public universities offering this major, go to the web site

<http://ias.ga.unc.edu/%7Epassess/acrobat/apibyprog.pdf> or
www.northcarolina.edu/content.php/aa/planning/traditional.htm .

To identify the private colleges and universities offering this major, go to the web site

<http://www.northcarolina.edu/content.php/assessment/reports/publications/api.htm> .

Admission to teacher licensure programs requires satisfactory scores on PRAXIS I and II.

Universities allow, at most, 64 hours of credit to transfer. However, there are situations where more than 64 hours can be completed at the community college. Please consult with an advisor to find out what those situations are.

Durham Technical Community College awards the Transfer Core Diploma. The Transfer Core Diploma confirms that students have completed all their General Education Core requirements under an A.A. or A.S. degree program. Core completion certifies that a student has met all the lower-division General Education Requirements of the receiving senior institution and has met the Minimum Course Requirements (MCRs) for admission to the University of North Carolina System. Students need to apply for the Diploma once they have completed the Core of their respective Plan of Study. Forms are available in Admissions in the Wynn Center.