

HYDROLOGY AND WATER RESOURCES

One of the unique features of the Hydrology and Water Resources Program at Tarleton State University is that each student is required to complete an internship before graduation (see HYDR 440-Internship in the course offerings section of this catalog). The manner in which this requirement is met is for the student to work from 9 to 13 weeks (generally 40 hours a week) for a company or agency that has some expertise in hydrology. Often this leads to full-time employment at the end of the internship. The student is expected to have received a grade of C or higher in all required courses (specifically, HYDR, BIOL, GEOL, CHEM, MATH, and PHYS courses) that have been completed at the point of the proposed internship enrollment. Departmental faculty will assist students in finding an appropriate internship sponsor. Enrollment in HYDR 440 requires advisor and department head approval.

THE BACHELOR OF SCIENCE DEGREE IN HYDROLOGY

	Semester Hours
<u>University Core Curriculum</u>	47
See pp. 47-48 for additional information about the Tarleton State University core curriculum requirements. See p. 372 for HYDR course descriptions.	

Courses Required for BS in Hydrology

HYDR 110, 211, 300, 310, 320, 410, 420, 430, 440, 450	34
PHYS 122, ¹ 242, CHEM 201 ² , GEOL 105	16
MATH 209, 300, 333	11
C S 344	3
Advised elective ³	3

¹ This course satisfies a core curriculum requirement.

² Prerequisite CHEM 105 and 108 are taken to meet Core requirements for Laboratory Science.

³ Chemistry track students may take BIOL 120 as the advised elective.

Courses required for Support Areas

For Classical	
BIOL 120, 121, 312, 441	16
ENGL 309	3
For Agriculture	
A EN 318, AGRN 301, 420	10
R&RM 301, 320, AGRN 105, 427; or ECO 201, 202, A EC 301, 425	12
For Biology	
BIOL 120, 121, 312, 441	16
2 electives from BIOL 340, 401, 442, CHEM 202	6-8
For Chemistry	
BIOL 121, 441, CHEM 202, 323	16
2 electives from CHEM 324, 427 or 428, 307 or 408	7-8
For Engineering	
MATH 306	3
ENGR 111, 112, 221, 222, 223, 486 and ENPH 225	22
For Geosciences	
GEOL 106, 203, 310, 313, 314, 412	21
For Computer Science	
MATH 306, 360, 420	9
C S 110, 115, 241, 361, 401	15

A student who wishes to be eligible to take the Engineering Fundamentals Examination as a graduate of an engineering-related science program should take the following courses:

ENGR 221	Principles of Engineering I	ENGR 303	Engineering Economy
ENGR 222	Principles of Engineering II	ENPH 225	Electrical Circuit Theory
ENGR 223	Principles of Engineering III	ENPH 248	Introduction to Digital
MATH 306	Differential Equations		Systems Design

A typical curriculum incorporating these courses may be obtained from the Division of Hydrology and Water Resources/Engineering. Completing these courses allows the student to minor in engineering.