

## CERTIFICATE PROGRAMS AVAILABLE

Students must complete each course in a certificate program with a grade of “C” or better. The courses cannot be taken pass/fail.

### GEOTECHNOLOGY SYSTEMS (GTS)

The Geotechnology Systems Certificate (GTS) will provide students and industry personnel with the necessary theoretical knowledge and technical skills needed to apply geologic computer software and cartography to support geologists in their decision-making processes. Further, this certificate is designed for industry personnel who work with the management and exploitation of natural resources, such as petroleum and water resources, as well as for degree-seeking students interested in environmental science, geology, land use planning, and related fields.

Increasing operating costs and decreasing budgets for hiring professional geologists, geophysicists, and petroleum engineers has produced a demand for mid-level persons trained in petroleum technology. Using the latest computer methods, these geotechnicians or “geotechs” typically perform data searches, generate maps and cross sections, gather and organize well data, and perform numerous other tasks in support of exploration and development efforts. By some estimates, the combination of a geologist with a geotechnician will result in a synergy that produces more than twice the output of either working alone. The result is a significant increase in productivity.

#### Admissions Requirements:

1. There are no special admission requirements for students seeking GTS certification.
2. All students must take the prerequisite courses or provide evidence to the instructor that they have equivalent training before they can enroll in certificate courses. Some courses in the certificate are prerequisites to other courses in the certificate. Prerequisite courses that are not listed as courses required for the certificate are: GEL 1010-4, *General Geology*; CMS/CSS 1010-3, *Introduction to Computers*; GEG 1220-2, *Map Use*; and GIS 2250-3, *Introduction to Geographic Information Systems*.

#### Completion Requirements:

All students seeking GTS certification must maintain a 3.0 or above in the certificate program. Geotechnology and its applications require a high degree of discipline and commitment. The courses required for the certificate are very challenging with regard to the theoretical and practical subjects. They require a significant amount of time devoted to hands-on and laboratory exercises. Students successfully completing this certificate can take pride in their accomplishment.

#### Required Courses

#### Semester Hours

___	GEL	1030	Historical Geology .....	4
___	GEL	2700	Introduction to Petroleum Technology .....	3
___	GEL	2710	Computer Applications in Earth Sciences .....	3
___	GEL	3060	Stratigraphy and Structure .....	4
___	GEL	3700	Integrated Geotechnology .....	3
___	GEL	3710	Earth Sciences Data Management .....	3
___	GEL	4700	Subsurface Geology .....	3
___	GIS	3250	Computer Cartography .....	3
<i>Total credits for Certificate.....</i>				<i>26</i>