

**Geophysical Data Processing** (3 credit hours): This course is designed to provide basic background and training for the processing of digital seismic data, particularly that used by the petroleum industry. The emphasis is placed on the principles and practicality of the major processing methods, including sampling, filtering, deconvolution, seismic modeling and migration imaging.

#### **Course Outline**

1. Geophysical Data
2. Discrete Fourier Analysis
3. Statistical Analysis of Geophysical Data
4. Digital Filters
5. Deconvolution
6. Seismic Modeling and Inversion
7. Principles of Migration
8. Special Topics