

**Seismic Migration** (3 credit hours): This course will provide an in-depth training on seismic migration, which is the leading method of seismic imaging. The emphasis is placed on the principles and practicality of most frequently used seismic migration methods, such as Kirchhoff, f-k, and reverse-time migrations. Prestack depth migration and related issues will also be discussed.

#### **Course Outline**

1. Introduction to Migration
2. Common Tangent Method
3. Kirchhoff Migration
4. Time vs. Depth, and Poststack vs. Prestack Migrations
5. Migration Velocity Analysis
6. Frequency Domain Migration
7. Finite Difference Migration
8. Prestack Depth Migration
9. Common Problems with Depth Imaging