



## College Graduate Specifications and Learning Outcomes

### ❖ College Graduate Specifications:

Upon successfully completing their studies at the college, the graduate will be able to:

1. Explain concepts related to their specialization that help them acquire more professional and scientific knowledge and skills.
2. Collect, analyze, and interpret data related to petroleum engineering, geology, and environmental science.
3. Survey and create descriptive maps of the type of rocks, structures, and environments.
4. Propose solutions to problems encountered in fields related to their specialization.
5. Work within a team, communicate effectively, and prepare reports.
6. Seek knowledge and engage in self-directed learning.

### ❖ Learning Outcomes:

#### 1. Knowledge and Understanding:

- Understand basic scientific concepts and mathematics related to petroleum engineering, earth sciences, and environmental studies.
- Explain fundamental concepts of petroleum, geology and environmental sciences, including demonstrating the impact of safety and environmental concerns on both global and local levels.
- Show cognitive understanding of the basic principles of general culture, Islamic values, and national values.

#### 2. Intellectual Skills:

- Design an engineering project related to geology, the environment, or petroleum sciences.
- Practice critical thinking and creative problem-solving skills during fieldwork or in laboratories and find solutions to emerging issues.
- Efficiently evaluate available data within their specialization and correlate it within a temporal and spatial framework.

#### 3. Professional and Practical Skills:

- Study samples, data, and microscopic slides both in the field and in laboratories.
- Analyze and interpret data, maps, and records according to their area of specialization.
- Use modern technologies and software relevant to their field.
- Design and conduct geological, exploratory, mineralogical, and environmental experiments.

#### 4. General Skills:

- Collaborate effectively within multidisciplinary teams under stressful circumstances and constraints.
- Communicate effectively using modern technology and practice negotiation and problem-solving skills.
- Prepare technical reports within their field of specialization.