4.2 Program learning objectives and outcomes

4.2.1 Graduate Attributes

1. Advanced education and lifelong learning through subject area expertise, research and analysis skills, and cross-disciplinary awareness.
2. Active participation in the economy through professional knowledge and skills, advance-level employability skills, and entrepreneurial skills

4.2.2 Objectives related to learning outcomes

1. Excellence in teaching physics and its applications.
2. Contribution in distinguished research in physics.
3. Continuous development of human resources.
4. Ongoing development of recent technology in the field of physics.
5. Enhancing community engagement that leads to mutual enrichment.

a. Knowledge and Understanding

Upon completing this program, the graduate will be able to:

1. Describe fundamental concepts, principles, theories and laws relevant to the physics course subjects.
2. Recall experimental techniques tools and basic concepts for physics laboratory.

b. Skills

Upon completing this program, the graduate will be able to:

1. Interpret physics concepts and principles and apply them to analyse a given situation/phenomenon.
2. Demonstrate skills in problem solving and critical thinking.
3. Demonstrate the ability of using software packages to analyse physics-relevant theoretical and experimental problems.
4. Employ different information resources to perform an independent study of a topic or a subject.
5. Communicate comprehensively in writing and orally using proper scientific language.

c. Values

Upon completing this program, the graduate will be able to:

1. Implement ethical standards of practice as the basis of all interactions with organizations, communities and individuals
2. Demonstrate self-dependence, responsibility, active and effective contribution within work groups, and the tendency to responsible and effective leadership.