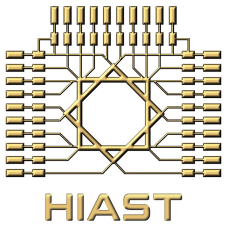
Syrian Arab Republic

Higher Institute for Applied Sciences and Technology



Course Specification Document

Title	Experimental Physics 2

Credits	1.5 ECTS

Aims	This course aims to complement the student's knowledge and skills in dealing with some laboratory equipment. It also aims to deepen some of the physical concepts related to the subject of experiments, which contributes to his study of specialized engineering courses and later to his work practice.

Intended learning outcomes

On successful completion of this course, the student will be able to:

- Know and effectively utilize measurement tools and equipment.
- Study the theoretical basis of different physical phenomena and how to achieve them experimentally with analysis of the results of the experiment.
- Utilize laboratory equipment effectively.
- Develop the measurement skills required in the engineering field.

Syllabus

- Cathode ray oscilloscopes 2.
- Multi-meters and vibration meters.
- Amplifiers.
- Black body radiation (the tungsten wire of a light bulb).
- Cyclonic currents.
- Physical light: diffraction and interference.
- Impedance measurement bridges.
- Magnetic field – Ampere's law.