Course Code: PH4418
Course Title: Physics in the Industry
Pre-requisites: PH3101 - Quantum Mechanics II
PH3102 – Condensed Matter Physics I
No of AUs: 4
Contact Hours: 52 hours

Course Aims
This course aims to introduce you to a broad range of physics-related industries. On completion of the course, you will appreciate how physics is being applied to a wide range of industries and can make a more informed decision on the industries that better suit your career interests.

Intended Learning Outcomes (ILO)
By the end of this course, you (as a student) would be able to:
1. Describe key physics principles used in specific industries.
2. Conduct an investigation into how physics is applied to a chosen industry.
3. Present the findings from the investigation in the form of a report and a presentation.

Examples of industries include the Electronics industry, the Optics industry, the Food, Pharmaceutical & Oil industry, the Biomedical industry and the Financial industry. These are subjected to changes.

Course Content
Topics include
- Industry 1: Physics in the Electronics Industry
- Industry 2: Physics in the Optics Industry
- Industry 3: Soft Condensed Matter Physics in the Industry
- Industry 4: Physics in the Biomedical Industry
- Industry 5: Physics Modelling in the Financial Industry

Reading and References