**Module code**: SP-4290

**Module Title**: Physics Project

**Degree/Diploma**: Bachelor of Science (Applied Physics)

**Type of Module**: Major Core

**Module Contents**
- A project will be taken under the supervision of a member of staff.
- The project will normally be investigative and/or exploratory.
- The project will involve the application of the concepts of physics.
- The student is expected to develop existing skills and acquire new ones in a range of areas including laboratory skills, especially of physical measurements, good time management skills, good data gathering methods and data analysis and interpretation skills.
- The student is also expected to develop good scientific reporting skills.

**Aims**
This module aims to introduce students to the methodology of conducting scientific research.

**Learning Outcomes**
*On successful completion of this module, a student will be expected to be able to:*

**Lower order**: 10%
- understand the application of physics concepts in different contexts
- know and understand ways of solving problems through execution of practical investigations and other methods of performing scientific research

**Middle order**: 10%
- research, retrieve and combine data from different information sources
- conduct and report on the testing of hypotheses and evaluate data and assumptions
- apply appropriate scientific and mathematical principles in analysing physical problems
- collect, record and analyse data using suitable techniques
- process data and assess their reliability to determine the significance of results
- relate results to relevant theories in physics

**Higher order**: 80%
- critically evaluate data by considering methodology and accuracy during collection, recording and analysis of data
- critically make judgements to identify a range of solutions to a problem
- solve problems using theoretical, practical and/or computational methods
- follow proper procedures and protocols when conducting practical work
- communicate effectively in written, oral and graphical forms
- identify individual goals and work independently
- adopt good time management skills
- work cooperatively in a team
- participate actively in group discussions and problem solving sessions

**Assessment**

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<th>Assessment</th>
<th>Formative assessment</th>
<th>Summative assessment</th>
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<tbody>
<tr>
<td></td>
<td>Meetings, discussions and submission of preliminary reports</td>
<td>Examination: 0%</td>
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<td>Coursework: 100%</td>
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<td>- 2 project reports - Assessed by supervisor(s) and internal examiner (60%)</td>
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<td>- Student’s effort and initiative - Assessed by supervisor(s) (25%)</td>
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<td>- 1 oral presentation - Assessed by academic staff (15%)</td>
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