

## Faculty of Engineering

### Program Learning Outcomes

#### Doctor of Philosophy (PhD) in Engineering

| Program Learning Outcomes (PLOs): "What a student is expected to know, understand, and/or be able to demonstrate after completing a process of learning" |                                                                                                                                                                                           | Characteristics                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| PLO1                                                                                                                                                     | Apply deep and comprehensive knowledge of engineering, science, and mathematics for solving various dimensions of problems in their relevant fields or professional areas.                | Knowledge                                                           |
| PLO2                                                                                                                                                     | Apply advanced research techniques to emerging development for solving problems by integrating disciplinary knowledge in innovative ways.                                                 | Skills                                                              |
| PLO3                                                                                                                                                     | Communicate the results of the original research significantly using a range of media, to the peers and community.                                                                        | Communication Skills<br>Information Communication Technology Skills |
| PLO4                                                                                                                                                     | Analyze complex problems using advanced numerical and computational techniques, leading to the generation of new knowledge and significant developments in their field of specialization. | Numeracy Skills                                                     |
| PLO5                                                                                                                                                     | Perform lifelong learning and personal development in shaping future directions within the related field.                                                                                 | Lifelong learning skills                                            |
| PLO6                                                                                                                                                     | Comply with ethics and professionalism, for research advancement in the field and their impact to society.                                                                                | Ethical Awareness                                                   |