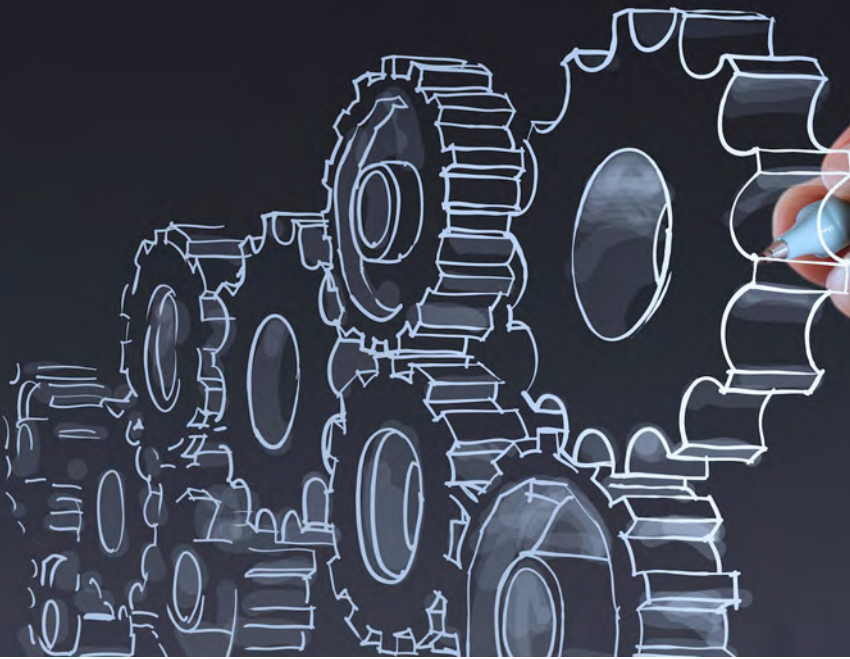




▶ PROGRAMME DESCRIPTION

The Doctor of Philosophy (PhD) in Engineering programme has been designed to provide students with in-depth knowledge in various fields of specialization to enable them to formulate questions and plan and carry out research in their respective subject areas. The candidates would be able to conduct a high-level research and address complex technical questions and challenge the established knowledge and practices on the respective subjects. The PhD candidates would be capable enough to evaluate the work of others as well, at the same level. The candidates will also evaluate the application of different techniques in the subject areas and shall contribute to the development of new theories, new knowledge and new methods in the respective subject area.



▶ PROGRAMME AIM

The Ph.D. in Engineering programme in Lincoln University College is to prepare a selected number of qualified students for careers in university-level teaching and research and for responsible positions in Government and Private Engineering industries. The primary aims of the programme are:

- ▶ To provide students with advanced knowledge in the theory and practice of areas of engineering studies with the concept of research work.
- ▶ To prepare the learners for critical problem solving, decision making on various situations and responsibilities in the course of their research work
- ▶ To create qualified managerial level Engineering professionals to provide support towards Engineering work in their specialty subjects
- ▶ To develop and prepare professionals with Research knowledge and aptitude that is useful for industrial need and in the professional engineering specialty area.
- ▶ To train student about the significance of skills and knowledge in specialties under Civil Engineering, Environmental Engineering and Management, Geotechnical Engineering, Architectural Engineering, Chemical Engineering, Petroleum Engineering, Mechanical Engineering, Computer Engineering, Metallurgical Engineering, Electrical and Electronic Engineering, Bioengineering, Biochemical Engineering, Engineering Management, Production and Industrial Engineering



▶ **PROGRAMME DURATION** Minimum Duration: 36 Months. | Maximum Duration: 120 Months

▶ **INTAKE** 1. January. 2. May. 3. September.

▶ **ENTRY REQUIREMENTS**

- ▶ Recognized Master's degree (Malaysian Qualifications Framework, MQF Level 7) in Engineering or its equivalent; or
- ▶ Other qualifications equivalent to a Master's degree (MQF Level 7) that are accepted by the Senate
- ▶ English language requirements for international students;
 - ▶ A minimum score in the Test of English as a Foreign Language (TOEFL)
 - i) 550 in the TOEFL Paper Based Test; OR
 - ii) 80 in the TOEFL Internet Based Test; OR
 - ▶ A minimum score of 6.0 in the International English Language Testing System (IELTS).

▶ **LIST OF COURSE/MODULE OFFERED IN THE PROGRAMME**

Year 1	CODE	COURSE NAME
	PEN 101	Research Methodology
	PDP 102	Computer Applications

Elective Broad Subject Area—Student have to choose Any one Area		
Year 1, 2	PDP 101	Civil Engineering
	PDP 102	Mechanical Engineering
	PDP 103	Electrical Engineering
	PDP 104	Chemical Engineering

CIVIL ENGINEERING -PHDE 101

Research work on any one of the following topics

1. Structural Engineering
2. Off-Shore Structural Engineering
3. Highway & Transportation Design Engineering
4. Environmental Engineering And Management
5. Geotechnical Engineering
6. Water Resources Engineering
7. Urban Planning Engineering
8. Town & Country Planning Engineering
9. Hydraulic Engineering
10. Geotechnical Engineering
11. Architectural Engineering
12. Waste Water Engineering
13. Sustainable Engineering
14. Advanced Seismic Technology Engineering
15. Non-Seismic Methods Engineering
16. Advanced Engine Development Engineering
17. Construction And Project Management Engineering
18. Manufacturing System Optimization Engineering
19. System Level Integration Engineering
20. Infrastructure Systems Engineering
21. Construction Engineering Management
22. Rock Physics Engineering

MECHANICAL ENGINEERING -PHDE 102

Research work on any one of the following topics

1. Deep Reservoir (High Pressure High Temperature) Engineering
2. Cementing Technology Engineering
3. Flow Assurance Engineering
4. Drilling Optimization Engineering
5. Drilling Fluid And Completion Engineering
6. Mechanical Systems Design Engineering
7. Vehicle Design Engineering
8. Friction Stir Welding Engineering
9. Metallurgical Engineering
10. Instrumentation Engineering And Control
11. Printing Engineering
12. Modeling, Simulation, And Visualization Engineering
13. Integrated Basin Analysis Engineering
14. Reservoir Characterization, Modeling & Simulation Engineering
15. Carbonate Reservoir Characterization Engineering
16. Carbonate Sedimentology, Diagenesis And Sequence Stratigraphy Engineering
17. Energy Systems Engineering
18. Production & Industrial Engineering
19. Energy And Sustainability Engineering
20. Engineering Management



ELECTRICAL ENGINEERING -PHDE 103

Research work on any one of the following topics

1. Geographical Information System (GIS) Engineering
2. Communications Engineering
3. Sensor Technology Engineering
4. Energy Utilisation & Power System Engineering
5. Electronic System Design Engineering
6. Power Electronics Engineering
7. Power Systems Engineering
8. Microelectronics Engineering
9. Computer Engineering
10. Computer Architecture Engineering
Intelligent Imaging Engineering

CHEMICAL ENGINEERING -PHDE 104

Research work on any one of the following topics

1. Ionic Liquid Engineering
2. Bio-Fuel Engineering
3. Material Development Engineering
4. Advanced Process Control Engineering
5. Process System Engineering
6. Process Safety Engineering
7. Oil Field Chemical Engineering
8. Petroleum Engineering
9. Catalysis Engineering
10. Reactor Technology Engineering
11. Unconventional Hydrocarbon Engineering
12. Petrochemical Engineering
13. Petroleum Geosciences Engineering
14. Separation Engineering
15. Advanced Materials And Processing Engineering
16. Biochemical Engineering
17. Bioengineering
18. Enhanced Oil Recovery Engineering
19. Corrosion and Reliability Engineering

