



University of Kelaniya  
Faculty of Science



## Research Studentships

### AHEAD Development Oriented Research Projects (DOR Projects)

Applications are invited for Studentships to carry out research projects leading to MPhil/PhD Degrees on the following research areas which will be commenced in June 2019:

**1. Optimal village planning and management (MPhil in Statistics)**

*Minimum qualification:* BSc (Special/Honours) Degree in Statistics (GPA  $\geq$  3.00) or BSc (General) Degree with Statistics as a subject with a 1<sup>st</sup> Class or 2<sup>nd</sup> Class (Upper Division) from a recognized university.

**2. Electrification towards net zero energy buildings (MPhil in Applied Sciences)**

*Minimum qualification:* BSc (Special/Honours) Degree in Physics/Electronics (GPA  $\geq$  3.00) or BSc (General) Degree with 1<sup>st</sup> class/ 2<sup>nd</sup> Upper in Physics or Electronics from a recognized university. A candidate with good software skills and good electronic hardware background is preferred.

**3. Characterization and phytochemical evaluation of selected underutilized fruit plants for quality improvement (M Phil in Botany)**

*Minimum qualification:* BSc (Special/Honours) Degree in Botany or Molecular Biology and Plant Biotechnology with 1<sup>st</sup> Class or 2<sup>nd</sup> Class (Upper Division) Honours from a recognized university.

**4. Effects of selected plant extracts and ant species in plant disease management (MPhil in Biological Science)**

*Minimum qualifications:* BSc (Special/Honours) Degree in Zoology or Botany, with Second Class Honours and Zoology and Botany course units should have been followed in Level 1 and Level 2.

**5. Blockchain based model of a smart food supply chain system for the organic food industry in Sri Lanka (MPhil in Management and Information Technology)**

*Minimum qualification:* Honours/Special Degree with a strong background in computing, operations and supply chain management and mathematics. Experience in agricultural food supply chain operations would be an added advantage.

**6. Mathematical modelling of natural disasters for risk management and delineation of vulnerable zones (PhD in Mathematics)**

*Minimum qualification:* BSc (Special/Honours) Degree in Mathematics with at least Second Class (Upper Division) from a recognized university.

**7. Investigation of removal and degradation of indoor air pollutants by selected locally grown ornamental plants and plant associated microflora (MPhil in Environmental Biotechnology)**

*Minimum qualification:* B.Sc. Special degree in Chemistry with Microbiology as a subject or B.Sc. Special degree in Microbiology or B.Sc. General Degree with a First Class (Honours) with Chemistry and Microbiology as subjects.

**8. Eco-friendly methods for conversion of mixed plastic waste into liquid fuel (MPhil in plastic waste management)**

*Minimum qualification:* 4 year B.Sc. in Chemical and Process Engineering and GPA  $\geq$  3.00. A candidate who has followed Polymer Science / Petroleum Chemistry/ Petroleum Technology with research experience is preferred.

**9. Managing non communicable diseases by intervention through life style changes and nutraceutical supplements (MPhil in Chemistry)**

*Minimum qualification:* BSc (Special/Honours) in Food chemistry/Chemistry/ Biochemistry/Botany/Microbiology or any other related discipline preferably with a GPA of 3 or above.

**Monthly Stipend:** LKR. 45,000 to LKR 55,000 depending on applicant's qualifications.

- For graduates with a BSc (Special/Honours) Degree having a 1<sup>st</sup> Class or 2<sup>nd</sup> Class (Upper Division) – up to LKR 55,000 per month.
- For graduates with a BSc (Special/Honours) Degree having a 2<sup>nd</sup> Class (Lower Division) – LKR 50,000 per month.
- For graduates with a BSc (General) Degree with a 1<sup>st</sup> Class or a 2<sup>nd</sup> Class (Upper Division) -LKR 45,000 per month.

**Notes:**

- Selected candidates will be required to sign a bond agreement with the university.
- The candidates who are currently employed at a university, state/private sector department/institute, should submit his/her application through the respective head of university/department/institute.

Please send a self-prepared application indicating the interested research topic along with a CV to the address mentioned below on or before 24<sup>th</sup> of May 2019. Also please e-mail a softcopy of the application to: [rscfs@kln.ac.lk](mailto:rscfs@kln.ac.lk)

**Coordinator/ AHEAD-DOR**  
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