



### MASTERS DEGREE PROGRAMMES 2022/2023

#### Call for Applications

#### MASTERS STUDENTS AT THE PGIS .....

- Learn from a distinguished panel of teachers and scientists drawn from all Faculties of the University of Peradeniya and from other local and foreign Universities and Institutes.
- Get hands-on experience in practical/laboratory training required for industrially oriented jobs, research and development, teaching and higher research degrees locally and internationally.
- Improve career prospects by obtaining a postgraduate degree from the University of Peradeniya.
- Conduct a research project and obtain experience in applying scientific method to solve problems in local/global context (*applicable to students following 'Master of Science (M.Sc.) degree programme with course work and a research component'*).
- Gain an opportunity to register/upgrade to M.Phil./Ph.D. research degree programme at the PGIS or join a prestigious foreign university for a Ph.D. programme.

Masters degree programmes are offered at the PGIS under following categories:

#### Masters by course work (1 year) [Sri Lanka Qualification Framework (SLQF) Level 9]

The 'Masters Degree by course work' can be obtained by completing course work only.

#### Master of Science (2 years) [SLQF Level 10]

In addition to the requirements for the 'Masters Degree by course work', the 'Master of Science Degree' requires a research project of one year duration. The minimum duration of the entire programme shall be 24 months.

Most programmes are conducted generally during **week-ends**.

#### ADMISSION REQUIREMENTS:

A Bachelor's Degree in Science, Engineering, Agriculture, Medicine, Surveying or any other equivalent qualification from a recognized university is acceptable to the PGIS. Those who are awaiting the results of their final degree examinations may also apply.

#### MASTERS DEGREE PROGRAMMES SCHEDULED TO COMMENCE IN SEPTEMBER/OCTOBER 2022:

The **deadline** for the receipt of applications for Masters programmes in Disaster Management and Masters programmes in Engineering Geology and Hydrogeology is **15<sup>th</sup> August 2022**. The **deadline** for all other Masters programmes listed below is **31<sup>st</sup> August 2022**. The **programme fee** can be paid in **full** or in **two installments** (50% at the registration and 50% at the beginning of the second semester) or in **three installments** (1<sup>st</sup> installment at the registration, 2<sup>nd</sup> installment after 4 months from the date of registration and 3<sup>rd</sup> installment after 8 months from the date of registration).

#### Masters Degree in Disaster Management [SLQF Level 9/10]

*Conducted jointly with the Faculty of Engineering, University of Peradeniya*

This Programme gives an opportunity for graduates with different backgrounds to gain a focused understanding of disaster management and mitigation. The programme has, as its long-term objective, the sustainable training of well accomplished professionals who would be available to carry out activities related to hazard, vulnerability, risk analysis and mitigation. Their skills achieved in participatory risk assessment techniques, forecasting methods, environmental management and GIS applications should indeed satisfy the aspirations of Sri Lanka's Disaster Management efforts. Visiting experts from foreign countries also conduct several course modules and laboratory sessions. (Programme Fee - Rs. 200,000/- for 1-year category; Rs. 200,000/- + 70,000/- for 2-year category).

#### Masters Degree in Engineering Geology and Hydrogeology [SLQF Level 9/10]

The programme is designed to provide the geologists, engineers and other scientists a sound theoretical and practical knowledge of engineering, geological and hydrogeological principles. In Sri Lanka, at present, there is a growing need to improve infrastructure facilities with particular reference to construction of buildings, roads, railways, bridges, sub-way tunnels, overpasses, etc., and to develop energy and water resources to meet the requirements of an increasing population. It is important to emphasize that these goals could be achieved only by those having a sound knowledge of geological principles and their applications to civil engineering practices. This programme will be conducted jointly with the Department of Geology and the Department of Civil Engineering. (Programme Fee - Rs. 150,000/- for 1-year category; Rs. 150,000/- + 30,000/- for 2-year category).

#### Molecular Biology and Biotechnology [SLQF Level 9/10]

Molecular Biology and Biotechnology are innovative sciences which overlap with Biology, Chemistry, Genetics and Biochemistry, and play imperative roles in many fields including Medicine, Agriculture, Environmental Management, and various other value-driven industries. This Masters programme focuses on developing molecular biologists and biotechnologists with evaluative, innovative, and creative capabilities. After successful completion of this programme, the students should be able to demonstrate a good working knowledge in molecular biology and biotechnology; show the highest level of competency in analytical techniques, methodology, upkeep, and use of instruments, understand the biological systems and their interactions with the environment at molecular level, function in an administrative, supervisory and advisory capacity and work as team members with personnel in other related fields. Classes are conducted during weekends. (Programme Fee - Rs. 400,000/- for 1-year category; Rs. 400,000/- + 300,000/- for 2-year category).

#### Science Education (ICT, SLQF 10 only)

The programme leading to the Master of Science (M.Sc.) in Science Education in Information and Communication Technology (ICT) Education is designed especially for the teachers, educators, and for those who could contribute to the development of Science Education in Sri Lanka. The programme consists of two semesters of coursework, which include the professional general component of Science Education, and a special component in ICT Education, followed by a 30 credit (1-year) research component. In addition to activity-based and interactive methods of teaching that form a significant part of the training, the programme also involves practicals, a research project and a seminar. Classes are conducted throughout the week. Programme Fee - Rs. 100,000/- (first year) + 80,000/- (second year). Please note that there is no exit point after 1 year of course work.

#### Masters Degree in Clinical Biochemistry [SLQF Level 9/10]

This Masters programme focuses on developing clinical biochemists with evaluative, innovative and creative capabilities. After successful completion of this programme, the students should be able to demonstrate a good working knowledge in Clinical Biochemistry, show the highest level of competency in analytical techniques, methodology, upkeep and use of instruments, update clinical laboratory technology, function in an administrative, supervisory and advisory capacity and work as team members with medical and paramedical personnel to deliver better healthcare. Classes are conducted during weekends and on either Mondays or Fridays (Programme Fee - Rs. 225,000/- for 1-year category; Rs. 225,000/- + 100,000/- for 2-year category).

Medical Microbiology

#### Masters Degree in Medical Physics [SLQF Level 9/10]

Medical Physics is a branch of physics applied to medicine and biology, covering a wide range of applications such as the use of radioisotopes in cancer treatment, imaging of organs using X-rays, gamma cameras, CT scanners, magnetic resonance scanners, ultrasonic scanners, thermographic scanners, etc. This M.Sc. programme, conducted in collaboration with experts from the Faculty of Medicine, University of Peradeniya, the General Hospital, Kandy and Atomic Energy Authority, Colombo aims to train personnel in Radiotherapy and Radiation Protection to carry out the duties of a Medical Physicist in a Hospital. Trained Medical Physicists are in great demand in hospitals in Sri Lanka and abroad. (Programme Fee - Rs. 170,000/- for 1-year category; Rs. 170,000/- + 80,000/- for 2-year category).

#### Masters Degree in Medical Microbiology [SLQF Level 9/10]

Effective control of infective diseases requires a multi-pronged approach, central to which is the availability of a network of efficient and reliable microbiology diagnostic and reference laboratories, which requires persons trained in laboratory methodology, including molecular techniques which are being increasingly used for diagnostic and epidemiological purposes. The Masters programme aims to produce scientists ready to apply modern methods of diagnosis of infective diseases caused by viruses, bacteria, fungi and other parasites and these scientists will be able to pursue a career in research or in diagnostic microbiology. (Programme Fee - Rs. 225,000/- for 1-year category; Rs. 225,000/- + 100,000/- for 2-year category).

#### Masters Degree Programme in Postharvest Technology of Fruits and Vegetables [SLQF Level 9/10]

Masters programme in Postharvest Technology of Fruits and Vegetables will provide knowledge on pre- and postharvest physiology and biochemistry of fresh produce, postharvest losses due to diseases and disorders and supply chain and logistics management. Further it gives hands on experience and disseminates innovative recent advancements on postharvest techniques. This programme is intended for those seek employment in the field of postharvest of fresh produce and also for those who need to improve their skills and knowledge in the related field.

(Programme Fee - Rs. 200,000/- for 1-year category; Rs. 200,000/- + 150,000/- for 2-year category).

#### APPLICATION PROCEDURE:

Application forms and course contents of the programme/s can be downloaded from the website: [www.pgis.lk](http://www.pgis.lk). The completed-application forms should be submitted/posted with a processing fee of Rs. 2000/- to the Assistant Registrar, Postgraduate Institute of Science, University of Peradeniya, Peradeniya. Please write 'Masters Degree Application' on the top left-hand corner of the envelope.

Mode of Payment of Processing Fee (Rs. 2000/-):

- Through Online Payment Gateway: Follow the link <https://jpp.pgis.lk> (Please write the 'Order ID' displayed on the Payment Receipt Page upon successful payment).
- By cash: Accepted only at the shroff counter of the PGIS.

For details please contact the Assistant Registrar (Tel.: 081 2394793, e-mail: [ar@pgis.lk](mailto:ar@pgis.lk)) or PGIS Office (Tel.: 081 2385660/7).

Prof. H M T G A Pitawala  
Director, PGIS  
31<sup>st</sup> July 2022