

POSTGRADUATE INSTITUTE OF SCIENCE (PGIS)

University of Peradeniya





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 Peradeniva and from other local and foreign universities and
- 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 Peradeniva.
- 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.

Postgraduate Diploma (1 year) [SLQF Level 8]

The postgraduate Diploma programme in Science Education is of 12 months duration and consists of only taught courses.

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, acceptable to the PGIS. Those who are awaiting results of their final degree examinations may also apply.

MASTERS DEGREE PROGRAMMES SCHEDULED TO **COMMENCE IN FEBRUARY/MARCH 2022:**

The deadline for the receipt of applications for Masters programmes in Industrial Mathematics and Physics of Materials is 20th December 2021. The deadline for all the other Masters programmes listed below is 31st December 2021. 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 (1st installment at the registration, 2nd installment after 4 months from the date of registration and 3rd installment after 8 months from the date of registration).

Masters Degree in Analytical Chemistry [SLQF Level 9/10]

This Masters programme is designed to train analytical chemists who could contribute in many diverse areas such as food and beverage industry, pharmaceutical industry, healthcare, environmental control, agriculture, etc. covering quality control, research and development work and manufacturing processes in industry, university and other research laboratories. (Programme Fee - Rs. 225,000/- for 1-year category; Rs. 225,000/- + 125,000/- for 2-year category).

Masters Degree in Applied Epidemiology [SLQF Level 9/10]

This Masters programme provides advanced knowledge of epidemiological concepts with training in essential methodological skills required to conduct epidemiological studies; apply epidemiological principles for surveillance and control of diseases within animal and human populations. This program is especially designed for medical, dental, veterinary and science graduates. (Programme Fee - Rs. 150,000/- for 1-year category; Rs. 150,000/- + 80,000/- for 2-year category).

Masters Degree in Applied Statistics [SLQF Level 9/10]

This programme provides an adequate coverage of basic statistical theory, applications in design of experiments and surveys, data analysis and methods of presentation and interpretation of results. At the completion of the programme, the candidate will be able to fit in as an applied statistician in a research institute, planning institute or other state or private sector institute. (Programme Fee - Rs. 200,000/- for 1year category; Rs. 200,000/- + 60,000/- for 2-year category).

Masters Degree in Biodiversity, Ecotourism and Environment Management [SLQF Level 9/10]

This programme deals with biodiversity and other natural resources, cultural heritage, local produce and traditional professions of Sri Lanka that interest an ecotourist. It would also show the importance of environment conservation and management in protecting biodiversity, natural resources and cultural heritage, which would in turn greatly benefit the ecotourism industry. (Programme Fee - Rs. 150,000/- for 1year category; Rs. 150,000/- + 100,000/- for 2-year category).

Masters Degree in Computer Science [SLQF Level 9/10]

This Masters programme provides computer science/non-computer science graduates an advanced knowledge and training in information technology. At the completion of the programme, the candidate is qualified to seek a career in any computerized enterprise or a research or educational institute or to pursue higher studies. (Programme Fee - Rs. 300,000/- for 1-year category; Rs. 300,000/- + 100,000/- for 2-year category).

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 Environmental Science [SLQF Level 9/10]

This Masters programme encompasses environmental aspects of all areas of science. It covers advanced training in air pollution, water pollution, environmental impact assessment, cleaner production, waste management, etc. It is intended for those aspiring to become environmental scientists and managers, and also for those who need to improve their skills and knowledge. (Programme Fee - Rs. 150,000/- for 1-year category; Rs. 150,000/- + 100,000/- for 2-year category).

Masters Degree in Gemmology and Industrial Minerals [SLQF Level 9/10]

This Masters programme trains professionals in the exploitation and processing of precious materials and industrial minerals in Sri Lanka through selection, design, recognition, technical analysis and acquisition. The programme provides an advanced knowledge in the natural processes pertaining to the formation of gems or minerals /precious stones/semiprecious stones and quantification of mineral resources. (Programme Fee -Rs. 150,000/- for 1-year category; Rs. 150,000/- + 50,000/- for 2-year category).

Masters Degree in Industrial Chemistry [SLQF Level 9/10]

This Masters programme provides an adequate coverage of important aspects of chemical industry including chemistry, basic concepts of chemical engineering, chemical technology and industrial economics. The necessary practical training will be provided in areas relevant to chemical industry. (Programme Fee - Rs. 150,000/- for 1-year category; Rs. 150,000/- + 75,000/- for 2-year category).

Masters Degree in Industrial Mathematics [SLQF Level 9/10]

(Scheduled to commence in January 2022)

This Masters programme deals with developing mathematical models, finding solutions and interpreting the results of problems that come up in industry. The programme in designed to provide graduates with an adequate knowledge in mathematics, statistics, operations research and scientific computing and to provide opportunities for research in applications of mathematics to existing problems in industry. (Programme Fee -Rs. 150,000/- for 1-year category; Rs. 150,000/- + 50,000/- for 2-year category).

Masters Degree in Nanoscience and Nanotechnology [SLQF Level 9/10]

Nanoscience and Nanotechnology are fast growing areas of science and technology which span the entire spectrum of science and technology including next generation electronics, engineering materials, advanced materials and coatings, devices, computers, medicine, textiles, sports equipment, polymers, biology, agriculture, etc. The study programme will prepare the student to take the challenge of meeting not only national needs in diverse areas of nanoscience and nanotechnology but also to continue toward advanced studies anywhere in the world. (Programme Fee - Rs. 200,000/- for 1-year category; Rs. 200,000/- + 150,000/- for 2-year category).

Masters Degree in Pharmaceutical Botany [SLQF Level 9/10]

Masters programme in Pharmaceutical Botany will provide effective knowledge on plant species with pharmaceutical importance and their usage, and train students towards development of new commercial pharmaceutical products through innovative research and to disseminate recent advancements in Pharmaceutical industry with hands on experience. (Programme Fee - Rs. 200,000/- for 1-year category; Rs. 200,000/- + 150,000/- for 2-year category).

Masters Degree in Physics of Materials [SLQF Level 9/10]

(Scheduled to commence in January 2022)

A sound knowledge in Science and Technology of materials is necessary for the efficient use of materials in industry. The broad aim of this M.Sc. programme is to provide a basic knowledge in Physics of Materials with emphasis on technologically important materials and newly emerging area of nanomaterials and nanotechnology. This programme will train graduates required for various industries and also to improve the knowledge and skills of personnel already employed in the industrial sector. (Programme Fee - Rs. 225,000/for 1-year category; Rs. 225,000/- + 75,000/- for 2-year category).

Masters Degree in Science Education [SLQF Level 9/10]

The programme is designed especially for science teachers and educationists and for those who could contribute to the development of science education in Sri Lanka. The programme consists of a professional general component of Science Education, and a special component from one of the four subject areas: Biology Education, Chemistry Education, Mathematics Education and Physics Education. In addition, practicals, a research project and a seminar in the special component are also included in the programme. State-of-the-art activity-based and interactive methods of teaching forms a significant part of training. Classes are conducted throughout the week. (Programme Fee - Rs. 100,000/- for 1-year category; Rs. 100,000/- + 80,000/- for 2-year category).

Postgraduate Diploma in Science Education [SLQF Level 8]

This postgraduate Diploma programme in Science Education is designed especially for science graduates who are planning to become teachers and for science teachers who are already employed. Postgraduate diploma programme is of 12 months duration and consists of taught courses (Programme Fee - Rs. 70,000/-).

NOTE: The gazette notification No. 2255/14 published on 24th November 2021 is an amendment to the Teacher Services Constitution (1885/38 of 23rd October 2014) to recognize PG Diploma in Science Education in promotions.

APPLICATION PROCEDURE:

Application forms and course contents of the programme/s can be downloaded from the website: 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://ipg.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) or PGIS Office (Tel.: 081 2385660/7).

> Prof. H M T G A Pitawala Director, PGIS 5th December 2021