

Department of Natural and Applied Sciences (DoNAS)

launches dual degree programme in

DATA SCIENCE

from the forthcoming academic session, starting August 2023

The four-year undergraduate programme and five-year postgraduate programme have been designed in accordance with the National Education Policy (NEP) 2020 and the recent guidelines issued by the University Grants Commission with in-built options of Multiple Entry and Multiple Exit mapped with employability opportunities.

**Four-year undergraduate programme: B.Sc. (Hons.)/B.Sc.
(Hons. with Research)**

**Five-year postgraduate programme (dual degree): B.Sc.
(Hons.)/B.Sc. (Hons. with Research) and M.Sc**

Eligibility

Senior Secondary School Examination (12th Grade: 10+2) Certificate or equivalent in any discipline from a recognized Board of Education with at least 50% marks in aggregate. There is no upper age bar.

Admission criteria

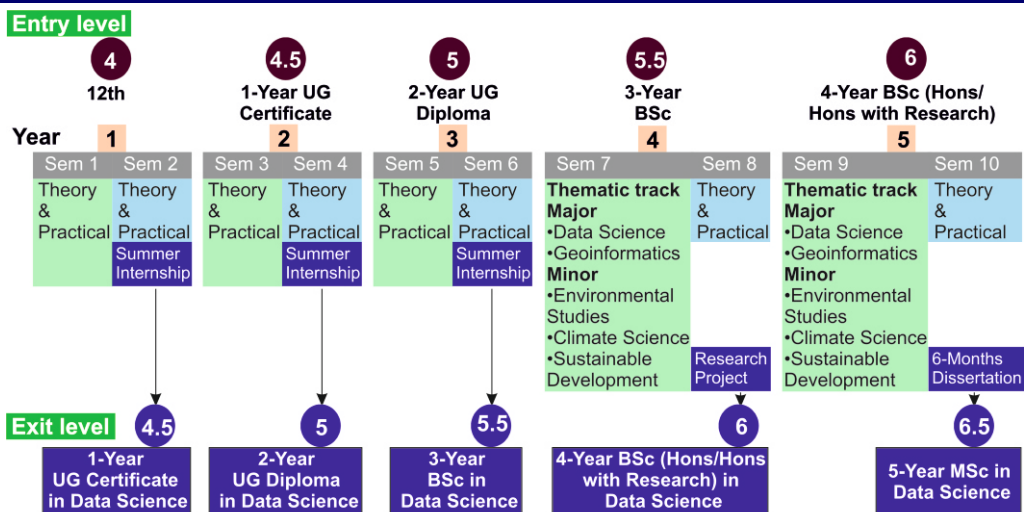
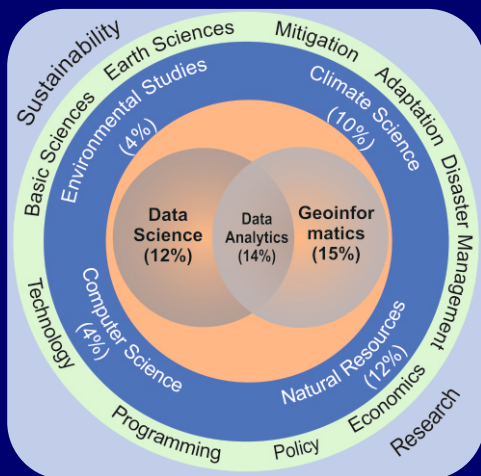
Admission shall be on the basis of merit of marks secured in 10+2 or equivalent examination in aggregate of best of three subjects and one language. For any further query write to admissions@terisas.ac.in.

B.Sc. (Hons.)/B.Sc.(Hons. with Research) and M.Sc.

Data science is an interdisciplinary, rapidly emerging branch of learning that facilitates extracting information from large datasets using scientific methods that combine mathematics, statistics, computer science, machine learning, artificial intelligence, deep learning, and domain-specific knowledge.

The proposed interdisciplinary integrated programme in Data Science will provide formal training in various quantitative techniques, along with a unique blend of theory and practice interwoven in a qualitative matrix. The programme will facilitate a systematic amalgamation of widespread knowledge under a common platform.

The programme has been innovatively designed that will provide students to have in-depth study of interdisciplinary major in Data Science with an option to choose from interdisciplinary minors and skill-based courses relating to a chosen thematic area – environmental studies, climate science and geoinformatics.



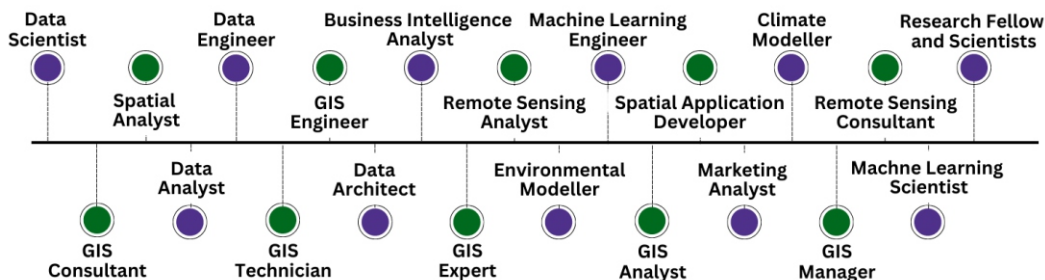
Programme Structure with Multiple Entry & Exit options

The unique features of the programme

- Designed using multi- and inter-disciplinary approaches, embedded with community engagement and service, skill & ability enhancement, and value-added courses with an intent to provide holistic education.
- Interlinks data science with domain knowledge – Environmental Studies, Climate Science, and Geoinformatics.
- Provides systematic amalgamation of widespread knowledge under a common platform.
- Extensive use of technology in teaching and learning that encompasses sciences, social sciences, arts, and humanities.
- Skill-based human resource development under various thematic areas.
- Mapped with the application of data science to achieve all the Sustainable Development Goals (SDGs) and National Missions.
- Enriched from modern science to basic understanding and ancient Indian traditional knowledge and practices.
- Enables lifelong learning through Multiple Entry and Multiple Exit (ME-ME) options leading to – One-year UG Certificate, Two-year UG Diploma, Three-year UG Degree, Four-year UG Degree (Honours), Four-year UG Degree (Honours with Research) and Five-year PG Degree.

Career opportunities

The programme facilitates a wide spectrum of career opportunities leading to career paths based on students' interests.



About TERI School of Advanced Studies (TERI SAS)

Academic programmes at the TERI SAS are focused around the challenges of providing the advanced studies for a rising global population with a limited and degraded natural resource base. In moving towards sustainability, the implicit understanding is that there is no panacea or straight road, with recognized and established methodologies, tools or specializations leading to such development. The solutions therefore do not lie in a specific subject discipline, but must be appropriate and relevant to the context or the practical problem being addressed. Developing such an understanding among its students is best achieved through exposure to a variety of subjects, tools, and methodologies offered in interdisciplinary mode. This has been the guiding philosophy behind the programmes offered by the TERI SAS and is practised by building a theoretical understanding in courses covering a variety of traditional disciplines, such as ecology, natural and social sciences, governance, policy, law, and engineering.

Over a period of two years, students converge upon a few areas of focus based upon their interest, having been exposed to a new way of thinking that looks at problems not from the lens of a subject specialist, but from the perspective of one who recognizes the complex linkages between man and his environment.

Apart from doctoral research, the TERI SAS offers MSc degree programmes in Environmental Studies and Resource Management, Economics, Geoinformatics, Climate Science and Policy, Water Science and Governance and Biotechnology; MBA programme in Sustainability Management; and MTech programmes in Renewable Energy Engineering and Management, Water Resources Engineering and Management and Urban Development Management; and LL.M. programmes in Environment & Natural Resources Law and in Infrastructure & Business Law.

The University offers two MA programmes, one in Public Policy and Sustainable Development, and the other in Sustainable Development Practice. The TERI SAS is one of a select group of 22 institutions chosen worldwide by the MacArthur Foundation, USA, to run the Sustainable Development Practice programme.

The TERI SAS offers four-year undergraduate degree programmes (FYUP) and five-year integrated postgraduate degree programmes (FYIPP). The University has launched FYUP in Data Science, Environmental Studies, Economics and Business Administration along with FYIPP in Data Science and Environmental Studies from academic session 2023. All the programmes have been designed in accordance with the National Education Policy (NEP) 2020 and the recent guidelines issued by the University Grants Commission with in-built choices of multiple entry and multiple exit options mapped with employability opportunities.

The University uses modern pedagogical tools, richly supplemented by field visits, live industry projects, and hands-on applications. It provides the very best in equipment and instruments, which includes state-of-the-art computer facilities, well-equipped laboratories, video-conferencing facilities, and access to South Asia's most comprehensive library on energy and environment.

TERI SAS has established excellent partnerships and collaborative arrangements with a number of institutions overseas, including Yale University, USA; The Freie University of Germany; Utrecht University, The Netherlands; North Carolina State University, USA; and University of Technology, Australia.



For further information, please contact TERI
School of Advanced Studies, 10 Institutional
Area Vasant Kunj, New Delhi - 110 070, India



+91 11 71800222



registrar@terisas.ac.in



www.terisas.ac.in



/terischool



@terischool



/company/terischool



/TERISchoolofAdvancedStudies