## **About the Programme**



The Coca-Cola Department of Regional Water Studies set up in 2014 with the support of The Coca-Cola Foundation is engaged in capacity building to deal with a multitude of issues in water and related sectors. The M.Tech (Water Resources Engineering and Management) and M.Sc (Water Science and Governance) programs of the department have been designed

with an approach to look at waterrelated issues in a comprehensive and holistic manner transcending technical. social, economic, political and legal, perspectives. The unique blend of coursework, trips and internships equips the students with the practical know-how to deal successfully with work-related challenges.

#### **About TERI School of Advanced Studies**

Academic programmes at the TERI SAS are focused around the challenges of providing the advanced studies 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 speci 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 M.Sc. degree programmes in Environmental Studies and Resource Management, Environmental and Resource Economics, Geoinformatics. Water Science and Governance, Climate Science and Policy, and Biotechnology; MBA in Sustainability Management: and M.Tech, programmes in Renewable Energy Engineering and Management, Water Resources Engineering and Management and Urban Development

The institute offers two M.A. programmes, one in Public Policy and Sustainable Development, and the other in Sustainable Development Practice. 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 institute uses modern pedagogical tools, richly supplemented by 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

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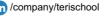


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Feb 2023 (50)

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Deemed to be University Under Section 3 of the UGC Act Accredited with 'A' grade by NAAC

## A NEW ERA OF **CAREER OPPORTUNITIES**



M.Tech in Water Resources Engineering & Management M.Sc in Water Science and Governance

# Career opportunities In Water Sector

The United Nations World Water Development Report, estimates that over one billion jobs - representing more than 40% of the world's total active workforce - are heavily water-dependent. Such jobs are found in agriculture, forestry, inland sheries, mining and resource extraction, power generation, water supply, sanitation, manufacturing, and construction and transportation industries. The water management linked skills in India have traditionally been taught in institutions offering Civil Engineering and allied post-graduate programs where students are trained to view water predominantly from a technical lens. However, in the present scenario when water issues are multi-dimensional, employers need water professionals that have collective skill sets- technical, institutional, economic and social, to tackle the challenges in a holistic manner.

The Department of Regional Water Studies at TERI SAS offers a multi-track program on Water Science and Governance which has a sound blend of theory and practical sessions. The format of the entire program is flexible and caters to fresh graduates as well as working professionals who desire to upgrade their skills/qualifications. The taught courses focus on cross cutting issues of water resources and encompass science, engineering, legal, socio-economic and institutional dimensions. The programme Career opportunities is aimed for students from India and SAARC nations and Africa.



## **Placements**

The water market is on the brink of change. and the push for greater water security and sustainability has increased over the past decade. Emerging markets are investing heavily in water sector and companies are realizing that sustainable water use is not only good for the environment it's also good for their activities. The students of this programme are moulded and equipped to take up jobs in corporate houses, water industry, government departments, donor agencies, NGOs and research institutions, or join the band of entrepreneurs passionately working for the cause of water availability, affordability and accessibility. Thus, a student undergoing these programmes is sure to have a rst mover advantage just as people who opted for learning computers in the early 90s had.

#### **Programme Outline**

## **M.Tech** (Water Resources Engineering and Management)

The M. Tech program integrates engineering and technological principles with socio-economic perspectives. Interdisciplinary in its scope and objectives, the program aims to train young graduates and professionals into water leaders who can provide with multi-faceted perspectives on water related issues rather than just technical ones, thereby contributing to development of both technical insights and policy prescriptions along with effective implementation. The major focus topics covered in this program include:

- Design of Water Supply and Sanitation Systems,
- Industrial Pollution Control
- · Optimization Techniques for Water Management,
- · Advanced Hydraulics,
- · Advanced Geoinformatics for Water Resources,
- · Applied Hydrology and Meteorology,
- Water Quality Monitoring Methods, Analysis and Applications

#### apart from key management aspects like

- Water Planning and Management
- · Water Security and Con
- Gender, Rights and Equity Perspective for Sustainable Water Management,
- Irrigation Water and Drainage Management

#### **M.Sc.** (Water Science and Governance)

The M.Sc. program is an interdisciplinary program with special emphasis on development of social, economic, institutional and governance perspectives. The objective of the programme is to create water professionals equipped to examine water issues in a trans-boundary and cross-cultural framework transcending environmental, social, economic and legal discourses. The major focus topics covered in this program include:

- · Aquatic Eco-System Management,
- · Water Audit and Demand Management
- Industrial Pollution Control
- Integrated Watershed and River Basin Management apart from key socio-economic and governance aspects like
- · Water Resource Economics
- Water Supply and Sanitation
- Water Law
- Integrated Impact Assessment
- Water Resources Institutions and Governance
- Gender, Rights and Equity Perspective for Sustainable Water Management

## **Eligibility Criteria**

Our Programmes encourage fresh graduates as well as working professionals from diverse background. Depending upon the eligibility of a candidate and his/her interest, a student can choose a two year M.Tech/M.Sc. degree or can exit after the frst semester with a PG certificate or can exit after one year with a PG Diploma.

### M.Tech in Water Resources Engineering & Management

M.Tech (Water Resources Engineering and Management) Graduate or equivalent from any branch of Engineering or Postgraduate or equivalent in Environmental Science, Physics, Mathematics, Statistics, Chemistry, Geology, Atmospheric Science, Economics, Geography, Agricultural Science with mathematics at 10+2 level.

Candidates with valid GATE score are exempted from TERI SAS common entrance test.

#### M.Sc Water Science and Governance

M.Sc. (Water Science and Governance)
Graduate (B.Sc/B.A) or equivalent from any branch
of Engineering, Environmental Science, Physics,
Mathematics, Statistics, Chemistry, Geology,
Atmospheric Science, Economics, Geography,
Zoology, Botany, Anthropology, Agricultural Science
or 3-years B.Voc in Industrial Waste Management,
Soil and Water Conservation, Industrial Chemistry,
Industrial Waste Treatment Technology, Sustainable
Agriculture.







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