

TERI SCHOOL OF ADVANCED STUDIES

PLACEMENT BROCHURE

2023

M.Sc. Environmental Studies and Resource Management

M.Sc. Climate Science and Policy



Chancellor's Message

Established as an institution of higher learning, TERI School of Advanced Studies aims at creating knowledge and human capacity that enables transition towards a more sustainable world.

The foundation of the institute was laid by the Energy and Resources Institute a not-for-profit, independent research organization globally known for its contribution to scientific and policy research in the realm of energy, environment and sustainable development.

As a leader in sustainability education in India and abroad, TERI School of Advanced Studies (TERI SAS) has been transforming students into sustainability professionals who bring sustainable solutions to the problems that hinder growth in rapidly developing countries like ours. With the help of an interdisciplinary curriculum taught by a multi-disciplinary faculty, the institute imparts world-class education in domains such as climate change, energy, environment, urban

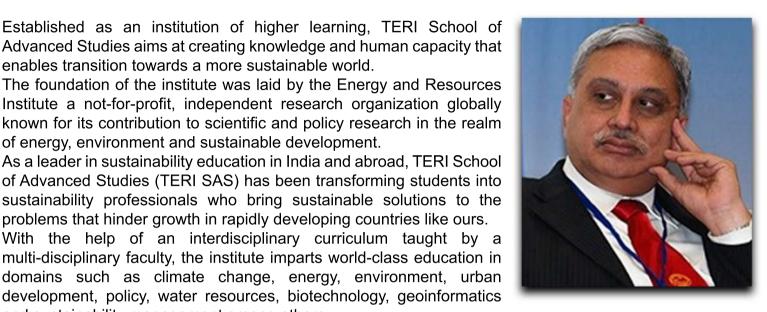
and sustainability management among others. A series of niche programmes offered by the institute that cater to the demands of the industry and are subjected to constant amendments

which enable our students to face and resolve issues with ease.

The feedback from the academic peers, employers and other stakeholders always motivate us to work towards improving our teaching methodology and curriculum.

Whether it's the organizations of global relevance such as the United Nations or the organizations that work to bring change at the grass-root level, our alumni are contributing in every aspect of life across continents to make earth more sustainable for future generations.

Therefore, I welcome you all to hire our students who are competent leaders and will be great assets to organisations.



Dr Shailesh Nayak, Chancellor, TERI SAS

Vice-Chancellor's Message

Dear Development and Industry Partners,

With an aim to create empowered professionals and thought leaders that better aligns the sustainability considerations in pursuit of economic growth and human welfare, TERI School of Advanced Studies (TERI SAS) is a unique institution of higher learning and cutting edge research.

The academic programmes at the TERI SAS have been designed by keeping in mind the challenges of rising population, already depleting and over-exploited natural resources, and opportunities for sustainable development. Over the years, our alumni engaged in diverse domains of various national and international organizations have been the ambassadors of our vision of creating knowledge for sustainable development in both public and private sectors.

The state-of-the-art research by our faculty members helps us to keep our programme curriculum cutting edge, interdisciplinary and solution-oriented. TERI SAS has been a pioneer in sustainability education and it's the unique combination of our multidisciplinary faculty and interdisciplinary curriculum that separates us from the rest of the institutes.

The curriculum ensures that the students inculcate and imbibe the problem-solving attitude through regular engagement with research projects, industry exposure and field visits.

TERI SAS believes in continuously adapting to the change taking place around the world. The feedback from the academic peers at the domestic and international levels, from employers of our alumni and other stakeholders including our students help us to make key amendments in our curriculum and teaching pedagogy.

The multicultural setting comes naturally to TERI SAS as we have students from the diverse regions across India with international students who continuously exchange ideas and experiences, making the institute truly global.

We are certain that you will find our graduates to be competent leaders who adhere to constructive engagements with analytical skills, well versed with contemporary developments in their domains and have solution-oriented approaches. Our graduates will be assets to organizations acclaiming on sustainability.

I welcome you all for the campus recruitment.

Thanking you and best regards,



Prof. Prateek SharmaVice-Chancellor(Acting), TERI SAS

About TERI SAS

TERI SAS (earlier TERI University) was established to disseminate knowledge arising from research and development undertaken by The Energy and Resources Institute (TERI), a not-for-profit, independent research institute recognized globally for its contribution to scientific and policy research in the realms of energy, environment, and sustainable development.

In 1999, the University was granted the 'Deemed to be University' status by the University Grants Commission (UGC) and notified vide the Ministry of Human Resources Development, Department of Education, Government of India, notification no. F.9/19/95-U-3, dated October 5, 1999. TERI SAS is also accredited by National Assessment and Accreditation Council (NAAC) with grade "A".

TERI SAS academic programmes are envisioned to provide students with a holistic perspective of the subjects offered and encourage interdisciplinary learning. The University aspires to be an institution of advanced learning which meets the needs of a rapidly growing nation. The University uses modern pedagogical tools, richly supplemented by comprehensive field trips, live industry projects, and hands-on applications.

Administration

The University's Board of Management is responsible for its overall administration and control. All aspects of academic policy are under the purview of the Academic Council, chaired by the Vice Chancellor, which approves curricula, courses and examination results.

ACADEMICS

Since its inception, the wide array of academic programmes offered by TERI SAS have been related to sustainable development and structured around four thematic areas—biotechnology, regulatory and policy aspects, energy and environment, and natural resources.

The University is a first-of-its-kind university in India to dedicate itself to the study of environment, energy, law, water resources, business sustainability and natural sciences for sustainable development.

INFRASTRUCTURE

TERI SAS provides well-equipped laboratories, advanced computer hardware and software, video-conferencing facilities and access to South Asia's most comprehensive library on energy and environment.

Green Campus

Spread over two acres, TERI SAS Green campus comprises of an administrative block, an office block, a convergence and a hostel block. The green campus provides a setting that enhances learning while simultaneously showcasing the concept of modern green buildings including insulation of external walls, terrace insulation, Hunter Douglas louvers, solar water heating system, waste water recycling, rainwater harvesting, solar rooftop system, LED lights and a windmill.

The Academic Council

Chairperson

Prof. Prateek Sharma

Professor & Vice Chancellor (Acting), TERI SAS

Deans

Prof. Ramakrishnan Sitaraman

Professor & Dean(Academic)

Prof. Shaleen Singhal

Professor & Dean(Research & Partnerships)

Prof. Anandita Singh

Professor & Dean(Student's Welfare)

Heads of the Departments

Dr Sudipta Chatterjee

Prof. Vinay Shankar Prasad Sinha

Prof. Nagui Anwer

Dr Sukanya Das

Dr Chaithanya Madhurantakam

Professors

Prof. Arun Kansal

Two Associate Professors from Departments

Dr Chander Kumar Singh Dr Smriti Das

Two Assistant Professors from the department rotation of seniority

Dr. Shruti Sharma Rana Dr Anu Rani Sharma

by Nominee the Vice Chancellor

Prof. Shreekant Gupta

Professor, Delhi School of Economics, University of

Prof. P.S.N. Rao

Director, School of Planning and Architecture

Prof. Sagnik Dev

Institute Chair Professor, Centre for Atmospheric Sciences, Indian Institute of Technology Delhi

Prof. T C Kandpal

Professor, Centre for Energy Studies, Indian Institute of Technology Delhi

Dr. Vivek Suneja

Faculty of Management Studies, University of Delhi

Prof. Suresh Jain

Professor, IITD

Co-opted Members

Mr. Manoj Chugh

President - Group Public Affairs & Member of the Group Executive Board Mahindra & Mahindra Ltd

Mr. Rahul Mittal

Director, International Tractors Ltd.

Dr Sabhyata Bhatia

Staff Scientist VII, National Institute of Plant Genome Research, New Delhi

Mr. Shubhashis Dev

Director - Climate Policy Program, (Low Carbon Development, Air Quality & Climate Finance), Shakti Foundation

Mr. Niraj Sharma

Chief Scientist, TPE Division, CSIR-Central Road Research Institute

Dr Bidyut Kumar Bhadra

Dy. General Manager, Regional Remote Sensing Centre-North, National Remote Sensing Centre, Indian Space Research Organisation

Dr Madhusudan Sau

Executive Director, R&D Centre. Indian Oil Corporation Limited

Mr. Sudhir Vadehra

Ex-Advisor, Ministry of Power; and Executive Director, REC (Retd)

Controller of Exams

Prof. Shashi Bhushan Tripathi

Secretary

Mr. Kamal Sharma

Registrar (Officiating), TERI SAS

Board of Management

Chairman

Prof. Prateek Sharma Professor & Vice Chancellor (Acting). TERISAS

Deans

Prof. Ramakrishnan Sitaraman Professor & Dean (Academic), TERI SAS

Prof. Shaleen Singhal Professor & Dean(Research & Partnerships), TERI SAS

Three eminent Academicians nominated by Chancellor

Prof Basabi Bhaumik Former Professor, IIT Delhi

Dr Sachin Chaturvedi Director General, Research and Information System for Developing Countries (RIS)

Dr Swati Basu Former Director, National Centre for Medium Range Weather Forecasting and Former Scientific Secretary, PSA's Office. Government of India

Nominee of Sponsoring Society

Dr V.P. Singh Regional Rep for South Asia, **International Centre for Tropical A**ariculture

Prof. Nitya Nanda Director, Council for Social Development

Mr. O P Agarwal Former IAS and former CEO of WRI

Two teachers (from Prof. and Associate Prof)

Prof. Anandita Singh Professor, TERI SAS

Dr Sukanya Das Associate Professor, TERI SAS

Secretary

Mr. Kamal Sharma Registrar (Officiating), TERI SAS

ACADEMICS

Since its inception, the wide array of academic programmes offered by TERI SAS have been related to sustainable development and structured around four thematic areas—biotechnology, regulatory and policy aspects, energy and environment, and natural resources.

The University is a first-of-its-kind university in India to dedicate itself to the study of environment, energy, law, water resources, business sustainability and natural sciences for sustainable development.

Department of Natural and Applied Sciences

Quality of life depends on the quality and quantity of natural resources available for use in equitable ways. The world today faces an unprecedented challenge of sustainability. Finding a balance between meeting the needs of human population and maintaining integrity of nature around us is the foremost question of our times. It is imperative to understand how natural processes and systems work around us and how to best use them in pursuit of this balance. The Department of Natural and Applied Sciences (DNAS) at TERI SAS is established to impart training for engaging with the questions of natural resource management in a scientifically rigorous manner. It houses faculty members from a diverse academic disciplines with a focus on applied research for informed decision making.

DNAS offers four distinct interdisciplinary masters programs in Biotechnology, Climate Science and Policy, Environmental Science and Resource Management, and Geoinformatics; and two transdisciplinary Ph.D. Programs in Bioresources and Biotechnology, and Natural Resource Management.

Students pursuing their Master's / Doctoral programme at DNAS are exposed to an academically rigorous and interdisciplinary learning environment with a significant emphasis on laboratory work and engagement with contemporary debates, emphasizing exploration and creative thinking and application as essential ingredients of originality in research and learning.

Department of Policy and Management Studies

The primary challenge of the human being is to improve quality of life across generations, an objective now widely recognized as Sustainable Development. This challenge necessitates numerous interventions concerning each of its components: environmental, social and economic. These interventions range from eradication of hunger and poverty to reduction in inequality; from the provision of quality education, good health, decent work environment, water, sanitation, affordable and clean energy to fostering gender equality; from economic growth to effective institutions; from responsible consumption and production to taking urgent actions to combat climate change.

The Department of Policy and Management Studies (DoPMS) at TERI School of Advanced Studies (TERI SAS) aims to contribute to theoretical and empirical enquiry towards informed prescriptions, implementable policies, sustainable practices and management through research, teaching and training. The continued research in sustainability for the business is also one of the key concerns of the Department.

Faculty of the Department have disciplinary backgrounds in Anthropology, Economics, Population Studies, Sociology, Finance & Accounting, Corporate and Commercial Laws, Public Health, Strategy, Business Sustainability, Circular Economy Finance, Climate Finance, Development Studies and Public Policy. Such promotion of desciplinary enables the multi-disciplinary research and learning economy-society-ecology interface. The faculties are engaged in active research in their disciplines as well as within the broad theme of sustainable development. This is reflected in their publications, sponsored projects, consultancies and training programmes and supervised research. The faculty regularly engage with the scientific community through seminars and conferences, participate in different forums as experts or resource persons, and engage with the general public through their lectures, print and digital media.

Department of Sustainable Engineering

Over the past half century, the global community has been debating the mode of economic growth, amid challenges of environmental degradation, energy transition and climate change. India among the several emerging economies, though at crossroads, it has chosen a trajectory of sustainable development for ensuring inter-generational equity and inclusiveness in its growth journey. As India is growing economically amid an increased pace of urbanization, the burden on resource utilization and management has increased Substantially. Two prominent sectors such as energy and urban development facing challenges which are bound to increase due to climate change. Addressing these challenges will require trained professionals who can assess the problems, think critically by integrating multiple sectors and create evidence-based solutions. The focus of Department of Sustainable Engineering (DSE) at the TERI SAS is to develop a cadre of professionals having requisite knowledge and skillsets towards addressing the current and envisaged challenges faced by humanity by promoting scientific, technological and policy innovations for strengthening local, regional, and global development agendas.

DSE offers MTech and doctoral programmes in areas of Renewable Energy Engineering & Management (REEM), and Urban Development Management (UDM). The Department is cognizant of the complex environmental, socio-economic, and political challenges that require an integrative approach towards engineering and sustainability. The DSE encourages collaboration with relevant stakeholders including industry, government, academic & research institutions, and multi-lateral organizations to deliver practice-informed research and teaching.

The curriculum of programmes offered by DSE is an eclectic mix of foundational and advanced courses which promotes both critical and creative thinking. The students at DSE are drawn from diverse branches of engineering, science, architecture, and planning which cultivates robust peer learning. The faculty at the DSE has wide experience and expertise across multiple domains, touching upon the two main themes of the Department – renewable energy and urban development.

Coca-Cola Department of Regional Water Studies

The Coca Cola Department of Regional Studies was created in 2014 with a mission is to createing a cadre of water professional who can provide systematic solutions to enhance water security. The water science and governance programme aims to prepare regional water champions who can address water problems in a holistic manner that eccompasses both the science of water management and the governance and an enabling policy environment with a healthy blend of theory and practice. The teaching programme focuses on cross cutting issues of water resources through science, engineering, legal, socio-economic and institutional dimensions.

The Department offers two Master's level programmes and Ph.D. programme. The M.Sc. programme in Water Science and Governance is an interdisciplinary program with emphasis on development of social, economic, institutional and governance perspectives. The water professionals graduationg from TERI SAS are equipped to examine water issues in a trans-boundary and cross-cultural framework transcending environmental science, social, economic and legal discourses. The M. Tech programme in Water Resources Engineering and Management integrates engineering and technological theories with socio-economic principles. The courses address the technical, social, economic, legal and political dimensions of water. Interdisciplinary in its scope and objectives, the programme prepares students for a rewarding and challenging career in water resources management.



COLLABORATIONS

Stressing the importance of the international perspective in its programmes, TERI SAS has entered into Memorandums of Understanding (MoUs) with several international universities aimed at facilitating a mutually beneficial exchange of students, faculty, knowledge, resources, and ideas.

Organisation with which MoU is signed

Freie University, Berlin

The Heller School for Social Policy and Management, Brandeis University

Himalayan University Consortium Charter University of Iceland

Sambhram Institute of Technology, Bangalore & TERI, Bangalore

The University of the West Indies, Kingston, Jamaica

Environment Protection Training and Research Institute, Telangana, India

Karl-Franzens-University, Graz; Ca'Foscari University, Venice; Leipzig University, Germany; Utrecht University, Netherlands; Basel University, Switzerland; Hiroshima University, Japan; Stellenbosch University, South Africa

Gurugram Metropolitan Development Authority, Haryana

Institute for Future Cities, University of Strathclyde, Glasgow, United Kingdom

Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Future Himalaya Institute (FHI), Kathmandu, Nepal

Faculty of Graduate Studies, University of Sri Jayewardenapura, Sri Lanka

National Institute of Disaster Management (NIDM), India

Purbanchal University, Nepal

The University of Victoria, B.C., Canada Deakin University, Australia

SM Sehgal Foundation, Gurugram

CPWD, New Delhi

University of Science, Engineering and Technology, Gambia

Lomonosov Moscow State University

Linnaeus University, Sweden

Mahindra & Mahindra Ltd.

Humboldt University, Berlin

EKI-Energy Services Limited

Canvest Infracapital Inc., Canada

DHAN Academy, Tamil Nadu

Centre for Public Policy Research, Kerala

Emerson Electric Co (I) Pvt. Ltd, Pune, Maharashtra

National Bureau of Plant Genetic Resources

University of Rhode Island, USA



INFRASTRUCTURE

TERI SAS provides the best equipment and instruments, which includes a state of the art computer hardware and software, well-equipped laboratories, video-conferencing facilities and access to South Asia's most comprehensive library on energy and environment.

Green Campus

Spread over two acres, TERI SAS Green campus comprises of an administrative block, an academic block, a convergence and a hostel block. The green campus provides a landscape that enhances learning while simultaneously showcasing the concept of modern green buildings including insulation of external walls, terrace insulation, Hunter Douglas louvers, solar water heating system, waste water recycling, rainwater harvesting, solar rooftop system, LED lights and Wind turbines.

Laboratories

TERI SAS laboratories are equipped with advanced equipment and facilities to aid and stimulate research.

The different laboratories at TERI SAS are:

Environmental Monitoring Laboratory

The laboratory has been created with the objective of providing a facility with all the basic equipment required for the analysis of environmental samples (soil, waste, water, and air). It caters to the interdisciplinary application of research to all the master's students (science-based) of the Deemed university. This laboratory facility is common for M.Sc./M.Tech. (ESRM, CSP and WSG) programs

Combustion Lab

The combustion lab was established in 2009 with the initial funding received from DST project and MNRE projects. It is a small lab however equipped with instruments used for emission and thermal efficiency testing. Primarily, we conduct experiments based on internationally accepted protocols viz, water boiling test (WBT) and kitchen performance test (KPT) in the above-mentioned lab. The hood methodology is used to capture and quantify the various products of incomplete combustion.

Environment Lab

The laboratory supports master's level experiments pertinent to the laid curriculum. The lab is equipped with instruments required for environmental analysis (soil, water, and air). The laboratory is capable to perform analysis on drinking water, wastewater, surface and groundwater, soil, and sediments, including air quality monitoring, and basic microbial analysis. Laboratory also supports various training programs offered by the university in the associated fields. This laboratory facility is common for M.Sc. (ES, WSG, and CSP) programs.

Centre of Excellence in Thermal Energy Storage

The laboratory is equipped for research on new thermal storage system development for sub-ambient, low, and medium temperature applications and characterizing storage material properties for optimal system design.



Heat transfer laboratory

The laboratory provides hands-on training to students to understand various heat transfer modes, devices and to quantify their characteristics parameters or properties.



Power Systems laboratory

The lab provides fundamental experimental knowledge on different equipments used in electrical power system at various loading conditions and to measure their characteristics.

Hybrid Micro Grid (HMG) laboratory

The lab houses solar PV system, wind turbine, battery energy storage and connected together to develop a hybrid micro grid. The research facility is used for carrying out power flow experiments.

Energy Simulation Laboratory

The lab is equipped with the state of the art software used in Renewable Energy industry. The lab provides in-depth understanding on design, simulation, financial analysis and optimization of various renewable energy technologies for plant/system design and other applications.

Biofuel and Waste Utilization Laboratory

The lab is used to conduct research experiments on the combustion process, fuel properties, biomass conversion, and pyrolysis.

Solar Energy Laboratory

The lab is equipped with outdoor and indoor experimental facilities to conduct experiments on the characterization of solar photovoltaics modules, radiation measurement, and performance analysis of various solar thermal devices/systems.



Geoinformatics Laboratory

The TERI SAS geoinformatics laboratory is well equipped with state-of-the-art equipment such as state-of-the-art computers (workstations), a scanner, printer, plotter, navigation devices, infrared thermometers, etc. It has license for high -end commercial software's like ERDAS Imagine, LPS, ArcGIS, MIKE, GMS, and WEAP along with other advanced support system's mechanism. The laboratory is also equipped with web publishing tools like ArcGIS Advance and ArcIMS Servers. The laboratory is also fitted with various open-source geospatial softwares to expose our students to the powerful open-source environment.



The laboratory holds a good repository of geospatial information in both digital and hard formats. The Geoinformatics laboratory of the Department of Natural and Applied Sciences of TERI SAS has a solid network with several research establishments and Universities working in Geoinformatics and other associated fields both within and outside the country. We also support R&D activities of various centres of The Energy Resources Institute (TERI) branches located across the country.

Analytical and Geochemistry Laboratory



The analytical and geochemistry lab caters the needs for research in understanding the earth sciences problems and providing solutions to these problems. The researchers in the laboratory are currently engaged in understanding the natural occurrence of Arsenic, Fluoride and Uranium in groundwater. The lab also has developed prototype nano-materials to remove such geogenic contaminants from groundwater to provide safe drinking water. The lab has established linkages to Lamont Doherty Earth Observatory, Columbia University; Dept. of Engineering,

Massachusetts Institute of Technology, Standford University. The lab also has developed linkages with institutions in India such as IIT Kharagpur, IIT Guwahati, Jawaharlal Nehru University, SPCB Bihar, Drinking Water Supply and Sanitation, Punjab, Board of Research in Nuclear Sciences etc. The laboratory houses several water field testing kits, flame photometer, double beam spectrophotometer, LED-Fluorimeter, Radiation Survey Meter, Air-dry Oven, Sonicator, pH meter, Muffle furnace, Ion selective Electrodes, Conductivity meter etc.

M.Sc. Environmental Studies and Resource Management M.Sc. Climate Science and Policy

Programme Outline

TERI School of Advanced Studies (TERI SAS) commits itself to academic excellence by providing an environment that encourages both personal and intellectual growth through teaching, creating and sharing knowledge.

M.Sc. Environmental Studies and Resource Management

M.Sc. Environmental Studies and Resource Management (ESRM) is an interdisciplinary programme that provides a platform for students to develop specific skill sets and abilities for analyzing a variety of environmental issues in a holistic and sustainable manner. The M.Sc. (ESRM) programme tr a ins the students a s compet ent environmental researchers, project managers, and policy planners. The M.Sc. (ESRM) is an intensive four-semester programme which enables the students pursue scientific and policy research in the fouth semester of the programme.

The programme aims at providing the students with experience, makes them understand the problems on the ground, and then provide sustainable solutions. The programme curriculum presents opportunities to study the entire spectrum and facets of the environment, including Air, Water, Soil, Pollution, Waste Management, Biodiversity Conservation, Geoinformatics, Sustainability and Climate Change, and Resource Management while specializing in their specific areas of scientific interest. This imparts holistic learning and enables the students to specialize in their selected field of choice; be it research, resource management, policy planning, or environmental consultancy.

The Resource Management aspect of the course separates this programme from others, providing students with the opportunity to specialize in concepts such as life cycle analysis, environmental auditing, and impact assessment. This enables them not only to look into the finer details but also understand the larger picture - an ability that is extremely useful in today's world with threats of climate change and resource exhaustion.

M.Sc. Climate Science and Policy

TERI SAS is the first institute in India to offer a degree programme in Climate Science and Policy (CSP). M.Sc. Climate Science and Policy (CSP) is an interdisciplinary amalgamation of science and policy related to the sphere of climate change. The programme draws from a pool of resources at TERI working on climate change and the faculty at TERI SAS who are experienced and well-trained in the state-of-the-art tools and techniques ranging from Earth System Sciences to Mitigation, Vulnerability and Adaptation studies. The M.Sc. (CSP) is an intensive four-semester programme with the students in the fourth semester opting to go for further scientific research, policy research, or both.

The programme imbues present and future professionals in the arena with practical and theoretical knowledge in scientific and policy strategy, relevant to climate change. Moreover, it enhances the students' understanding of the national and international policies, laws, and regulations applicable to climate science and policy. The students of M.Sc. (CSP) get exposure to policy issues, in-person involvement with bureaucrats and negotiators as well as with research in economics of climate change and energy efficiency policy. The High-Performance Computing facility at TERI SAS equips the students with first-hand knowledge about climate modeling- trend and scenario projections- as well as dynamic integrated models for energy forecasting along with economic and policy analysis.

Course Details

M.Sc. Environmental Studies and Resource Management

Semester I	
Course Title	Туре
Ecology	Core
Environmental Chemistry and microbiology	Core
Applied mathematics	Bridge
Communication skills and technical writing	Core
Introduction to sustainable development	Core
Environmental monitoring laboratory	Core
Environmental geosciences	Core
Environmental law and policy	Core
Environmental statistics	Core
Semester II	
Course Title	Туре
Water quality management	Elective
Solid and hazardous waste management	Elective
Air quality management	Elective
Research methodology and thesis writing	Core
Biodiversity assessment and conservation	Elective
Hydrology	Elective
Principles of geoinformatics	Elective
Basic course in environmental and resource economics	Elective
Multivariate data analysis	Elective
Environment health and risk assessment	Elective
Advanced Geosciences	Elective
Semester III	
Course Title	Туре
Minor project	Core
Environmental management system	Elective
Geoinformatics for resource management	Elective
Environmental economics	Elective
Environmental modelling	Elective
Governance and management of natural resources	Elective
Independent study	Elective
Integrated impact assessment	Core
Climate change and disaster risk reduction	Elective
Seminar course in global change	Elective
Groundwater hydrology and management	Elective
Integrated watershed management	Elective
Wildlife conservation and management	Elective
Aerosol Science	Elective
Satellite meteorology	Elective
Semeste <mark>r I</mark> V	
Course Title	Туре
Major Project	Core

Course Details

M.Sc. Climate Science and Policy

Semester I Course Title	Туре
Environmental law and policy	Core
Applied mathematics	Bridge
Basics of climate science	Core
Basics of economics	Bridge
Basic computer programming	Bridge
Concepts and theories of development	Core
Climate Lab	Core
Energy; science, technology and policy	Core
Earth system sciences	Core
Communication skills and technical writing	Core
Environmental statistics	Core
ntroduction to sustainable development	Core
Semester II	
Course Title	Туре
mpacts of climate change	Core
Aitigation of climate change	Core
Climate change vulnerability and adaptation	Core
Principles of geoinformatics	Core
Research methodology and thesis writing	Core
Climate change and public health	Elective
Climate change and law	Elective
ntroduction to climate modelling	Elective
Climate change and water	Elective
nvironment health and risk assessment	Elective
łydrology	Elective
/lultivariate Data Analysis	Elective
Semester III	
Course Title	Туре
Spatio temporal data analysis	Elective
Seminar course in global change	Core
Climate change and disaster risk reduction	Elective
co-system and climate change	Elective
Renewable energy technologies	Elective
Advance climate modelling	Elective
Public health and development: Issues and methods	Elective
Accounting and finance for sustainability	Elective
ndustrial Ecology	Elective
ndependent study	Elective
conomics of climate change	Elective
Alinor project	Core
ntegrated impact assessment	Elective
Governance of climate change	Elective
Satellite meterology	Elective
Geoinformatics for resource management	Elective
verosol Science	Elective
ntegrated watershed management	Elective
Semeste <mark>r IV</mark>	
Course Title	Type Core

FACULTY PROFILE



DR. ANAND MADHUKAR

Dr. Anand Madhukar serves as Assistant Professor and Programme Coordinator for M.Sc. (Climate Science and Policy) at TERI SAS. His research investigates climate change impacts and provides strategies to address them. He received his Ph.D. in Climate Change Impact & Adaptation from IIT Delhi. His Ph.D. thesis was recommended for the "Distinction in Doctoral Research" award by the international reviewer.



DR. ANU RANI SHARMA

Assistant Professor Department of Natural and Applied Sciences Dr. Anu Rani Sharma obtained her PhD degree in the Environmental Sciences from Andhra University, Visakhapatnam and worked at NRSC-ISRO during her research tenure. Her research interests include Atmospheric Aerosols and Trace Gases, Ground Measurements, Solar Irradiance, Climate Change, Satellite Remote Sensing of Air Pollution and Radiative Forcing. Dr. Anu's research work so far resulted in significant international publications (more than 30 research papers and one book article) in peer reviewed journals, with some of them on top25 referred research papers in climate change science and earth system journals.



DR. ARUN KANSAL

Professor Coca-Cola Department of Regional Water Studies
Dr. Arun Kansal's areas of research include Water Resource
Management, Waste Management with a focus on Resource Recovery
and Recycling, Urban Environment, and Energy-Environment-Climate
Linkages. He is the recipient of Best Teacher Award from GGS
Indraprastha University, India; Best Research Paper Award from Indian
Water Works Association and has also received the Roll of Honor by
TERI. In his academic career, Prof. Kansal has been a visiting
Professor (as ICCR Chair Professor from Government of India) to Freie
University, Berlin, Germany during 2010-11, an Honorary Senior
Research Fellow at the University of Birmingham, UK (2011-14), and
visiting Professor at the University of Derby in Natural Sciences.

DR. CHANDER KUMAR SINGH

Associate Professor Department of Natural and Applied Sciences

From a geochemistry background Dr. Singh's interests have turned to interactions between environment and public health. In his research, he addresses critical issues and concerns of qualitative and quantitative assessment of groundwater in India. The ongoing theme of his work relates to spatial patterns of geogenic contaminants in India and South and South East Asia at large. He focuses on vulnerability of aquifers using deep drilling, carbon dating and more sophisticated techniques in Indus and Gangetic plains of India. He works with a large pool of earth, public health and social scientists across the world on the issues of groundwater contamination.



DR. CHANDRASHEKHAR AZAD

Dr. Chandrashekhar Azad Vishwakarma is the Program coordinator of MSc Environmental Science and Resource Management program. Dr. Vishwakarma obtained his Ph.D. degree in Environmental Sciences from Jawaharlal Nehru University, New Delhi. His doctoral work focused particularly in the field of Hydrology, Remote Sensing and GIS. He has worked on various difficult terrain throughout India like Eastern Himalaya, Western Himalaya, Western Ghats, Vindhyan region and South Andaman Island. Dr. Vishwakarma completed his master's degree in Environmental Science from Banaras Hindu University, Varanasi. His research work is recognized in significant national and international journals (more than 15 research publications). He has also reviewed various research papers in recognized journals. He welcomes and promotes a multidisciplinary approach of research in the field of Environmental Sciences and is keen to work for a better and sustainable future.



DR. DEEPTI JAIN

Assistant Professor Department of Sustainable Engineering

Dr. Jain has received her Ph.D. in preparing methodology for low carbon mobility planning in Indian cities from Civil Engineering Department, Indian Institute of Technology (IITD), Delhi. She holds M.Plan in Infrastructure planning from CEPT University, Ahmedabad and M.Sc. in Urban Development and Management from ITC, Netherlands.

During her masters she had received funding from Volvo Research and Education Foundation (VREF) from January 2008 to June 2009 and worked on modelling urban form of Ahmedabad city. She has more than nine years of research experience in the areas of transport planning and policies, urban development, socio-environmental impacts and modelling and simulating urban complexities.



DR. GOPAL SARANGI

Assistant Professor Department of Policy and Management Studies

Dr. Gopal K. Sarangi is an economist with more than fifteen years of research and consulting experience. His primary domain of research covers energy market and regulation, intersection of energy technologies, fuels and resources with public policies, social systems and processes, energy and climate nexus, governance and institutional analysis of energy transition. He has a PhD on 'Sustainability Assessment of India Electricity Sector', from TERI School of Advanced Studies, New Delhi. He has contributed as PI, Co-PI, and team member to several collaborative projects. To his credit, he has published several peer-reviewed research papers in the domain of his research and has been invited to deliver talks in several national and international forums. He teaches courses on development economics, managerial economics and environmental economics.



PROF. PRATEEK SHARMA

Vice Chancellor & Professor Department of Sustainable Engineering Department of Natural and Applied Sciences

Ph.D. degree in environmental engineering from Indian Institute of Technology, Delhi. His interest lies in Environmental Modelling, Statistical Applications in Environmental and Water Resources Engineering, and Environmental Risk assessment. He has been regularly contributing to high impact academic journals.



DR. SAPAN THAPAR

Associate Professor & Head of the Department, Department of Sustainable Engineering

Dr. Sapan Thapar has completed his doctoral research as well as Masters from the Indian Institute of Technology, Delhi. Dr. Thapar, a certified Energy Manager, has over two-decade long experience in the energy sector, with expertise in energy policy, project finance and energy efficiency. He has several research publications to his credit. In the past, Dr. Thapar has been associated with IREDA, TERI and Tata Consultancy Services (Energy Division).





DR. SMRITI DAS

Associate Professor Department of Policy and Management Studies

Dr. Smriti Das, research and scholarship are focused on areas at the interface of environment and development at local and regional scale. She specifically engages with topics such as environmental policy, processes and politics, forest policy and governance, institutional analysis, sustainable livelihoods and communities, decentralized governance, gender and resource politics.

DR. SUDIPTA CHATTERJEE

Associate Professor Department of Natural and Applied Sciences

Dr. Sudipta Chatterjee has been working for conservation of forests and biodiversity since the past 21 years. He is the recipient of the Whitley Associate Award, UK, 2009 for conservation of Rhododendrons in Eastern Himalaya. Dr. Chatterjee worked as Biodiversity Conservation and Protected Areas Management Specialist in Sikkim Biodiversity and Forest Management Proiect. Conservation Development Division, Louis Berger Group Inc, Head, Forests Conservation Programme of WWFIndia and Biodiversity Conservation Programme of Winrock International India. He served as Team Member Biodiversity in the Technical Facilitation Organization for Sustainable Ecosystem and Land Management Country Partnership Project at the Indian Council of Forestry Research and Education (ICFRE), Govt. of India. Dr Chatterjee worked as Heads the Communities and Biodiversity Division and Forests and Carbon Division of Wildlife Trust of India (WTI). He joined TERI SAS in 2014.

DR. SWARUP DUTTA

Assistant Professor Department of Policy and Management Studies

Dr. Swarup Dutta is an Anthropologist and joined TERI SAS as an Assistant Professor. Earlier he worked as Consultant in Indian Council of Social Science Research (ICSSR), Ministry of HRD, Government of India. He holds a Ph.D. in Social Anthropology and has profound research experiences in various national and international development organizations. Dr Dutta, along with Professor SK Thorat, Chairman ICSSR and Former Chairman, UGC, and Dr. Samar Verma (IDRC, Canada) have edited a Book titled "Social Science Research in India: Status, Issues and Policies". Recently, he has been nominated as Fellow of Royal Anthropological Institute, Great Britain and Ireland. He was also an Associate Fellow in Council for Social Development, New Delhi. Dr. Dutta's research interests lies in Sustainable development, Agricultural Anthropology, Environmental Anthropology, Tribal and Dalit issues. He has been a visiting Faculty in the Department of Environmental Studies, University of Delhi; and National Museum Institute of History of Arts, Conservation and Museology, Ministry of Culture, Government of India.

Student's Profiles

M.Sc. Environmental Studies and Resource Management



Aditi Sharma

Academic Background: B.Sc Life Sciences

Institution: CSK Himachal Pradesh Agriculture University Palampur Minor Project Title: Gap analysis of waste Collecters in Delhi NCR Minor Project Institution: Indian Pollution Control Association

Major Project Organisation (If Applicable): AICL Communication Ltd.

Areas of Interest:

Waste Management, ESG, Decarbonisation, Impact Assessment, Sustainable Agriculture

Experience: 2 Months of internship with Indian Pollution Control Association



Amlan Rov

Academic Background- B.Sc. Economics (Hons) **Institution-** Symbiosis School Of Economics Minor Project Title- Information Dissemination of ESG Disclosures Minor Project Institution- Parameter Softwares -(Sustainify-Nature Calls) Major Project Organisation (If Applicable)- KPMG Global Services Areas of Interest- Climate change, Solid Waste, Energy Economics, Wildlife Conservation, Natural Resource Management, Pollution Control Experience- Research Associate - Institute for Quality and Environment



Aparajita

Academic Background: B.Sc. Forestry

Institution: BFIT, Hemvati Nandan Bahuguna Garhwal (Central) University Minor Project Title: Developing Nature and Biodiversity ESG Solutions

Management Services, Former Liaison Officer - Parameter Softwares

Minor Project Institution: Gramener

Major Project Organisation (If Applicable): Earthood

Areas of Interest: Habitat management and wildlife conservation through the use

of technology such as GIS, environmental law, and education.

Experience:

Internship under Dehradun Forest Department (1+ months)

Volunteer at WWF, India (2021 onwards)

Minor project at Gramener (1 month 3 weeks)

Part of team Vasundhara (Content Executive of the 9th Issue, Water Palette)



Aparna Binjola

Academic Background: B.A.Programme (Economics & Political Science)

Institution: Indraprastha College for Women, University of Delhi

Minor Project Title: Performance Evaluation of WAYU Device for Air Pollution

Control Using GRIMM Aerosol Spectrometer in Gurugram

Minor Project Institution: Indian Pollution Control Association

Areas of Interest: Air Quality Management, Sustainability Reporting, ESG,

Impact Assessment and Life Cycle Analysis

Experience:

2 months internship at Indian Pollution Control Association

Social Media Officer, SDG Hub, TERI School of Advanced Studies



Archana Pandey

Academic Background- B.A (Hons.) Geography **Institution-** Vasanta College for Women (BHU)

Minor Project Title- Analysis of scope 1 and scope 2 GHG emission of top 7 companies based on their market capitalization of the transportation sector.

Minor Project Institution- ESGBook (formerly Arabesque), New Delhi.

Major Project Organisation (If Applicable)- Morningstar India Pvt Ltd.

Areas of Interest- ESG, Integrated Impact Assessment , Climate mitigation , Disaster Management , Sustainable Agriculture, Sustainable and nature based solutions

Experience-

2 months internship at ESGBook (formerly Arabesque) (New Delhi)

Part of content team of Vasundhara Magazine, TERI-SAS



Archie Kapoor

Academic Background: B.Tech (Electronics and Communication)

Institution: Dr. A.P.J. Abdul Kalam Technical University

Minor Project Title: Sustaining Water Consumption: Role of Water Conservation

Techniques in Mitigating Water Crisis in and Around Bengaluru

Minor Project Institution: Biome Environmental Trust

Major Project Organization: BDO India LLP

Areas of Interest: Marine Ecosystem, Wildlife Conservation, Disaster

Management and GIS

Experience:

Summer Intern at Biome Environmental Trust, 2months

Engineer at Citrus Consulting, 6 months

Senior Analyst at HCL Technologies, 24 months



Arti Pandit

Academic Background: B.Sc. Triple Major Botany, Chemistry, Environmental Science

Institution: Mount Carmel College Autonomous (Bangalore University)

Minor Project Title: Crop Health Assessment for Rabi 2022 In Bemetara, Chhattisgarh

Minor Project Institution: Agriculture Insurance Company of India Limited, New Delhi.

Major Project Organisation (If Applicable): Areas of Interest: Air Quality Management, Waste Management, Integrated Impact Assessment, GIS, Life Cycle Analysis, Climate change mitigation and ESG

Experience: Remote sensing and GIS Intern at Agriculture Insurance Company of India Limited (June 2022 - August 2022)



Ayushi Kashyap

Academic Background: B.Sc Zoology Honors **Institution:** Hansraj College, University of Delhi

Minor Project Title: Assessment of Vulnerability of Himalayan Springs for the

State of Uttarakhand

Minor Project Institution: IIT Roorkee, Centre of Excellence in Disaster

Mitigation and Management

Major Project Organisation (If Applicable):

Areas of Interest: Biodiversity and conservation, Nature Based Solutions, waste management and circularity

Experience: Worked as a research intern under the department of Disaster Mitigation and Management and employed research skills and knowledge of geoinformatics to carry out primary research.

Interned at Green Revolution and operated as a climate counsellor with an objective to promote and gather participants for the Green Revolution course.



Ayushi singh

Academic Background: Bsc in Biosciences

Institution: Banasthali vidyapeeth, Banasthali University, newai, Jaipur Minor project title: 'potential of Blue carbon and it's restoration in India'

Minor project institution: The energy and resource institute, RES , The Indian habitat centre.

Areas of Interest: Carbon financing/ auditing, Impact assessment, Solid waste management, Biodiversity & Wildlife Conservation, Climate change mitigation, sustainable agriculture, Weather and climate studies.

Experience: 2 months internship at TERI RES under the supervision of Mr. Aniruddh Soni sir, Senior research associate & areas convenor.



Devaki B Nair

Academic Background: B.Sc Life Sciences

Institution: Kirori Mal College, University of Delhi

Minor Project Title: KAP of people in Uttarkashi regarding rabies and free

roaming dogs.

Minor Project Institution: Ahmedabad University Major Project Organisation (If Applicable):

Areas of Interest: Wildlife conservation, nature based solutions, urban ecology,

animal behavior, disaster risk reduction

Experience: 2 months internship (minor project)

Part of design team of Vasundhara Magazine, TERI-SAS



Dipanshu Chaturvedi

Academic Background: B.Sc (Hons) Botany

Institution: Sri Venkateswara College, University of Delhi

Minor Project Title: Development of a Carbon Finance Project through

Agroforestry

Minor Project Institution: TERI- The Energy and Resources Institute, New Delhi

Major Project Organisation (If Applicable): KPMG Global Services

Areas of Interest: Carbon Financing, Decarbonisation Strategies, ESG, Waste Management, NbS, Circular Economy, GHG Auditing, and Impact Assessment **Experience:** Trainee at TERI India under Land Resources Division, worked on Carbon Financing (2 Months)

Carbon Financing (2 Months)

Interned at Nestle India on their Live Project on Alternate Fuels : Roadmap for India (3 Months)

iliula (3 Moliula)

Summer Research Intern at Sri Venkateswara College on Key Environment Indicators (4 Months)

Council Member, TERI-SAS Student Council

Education Officer, SUN Team, SDG Hub-TERI SAS

Organising Team Member of LCOY, India 2022 held at Nadiad, Ahmedabad

Part of Graphic Designing Team- Vasundhara Magazine, TERI-SAS

Volunteer at ENACT- Enabling Necessary Action through Climate Talk & SPIC-MACAY Chapter



Gauranshi Chamoli

Academic Background: B.Sc Biology
Institution: Azim Premii University Bend

Minor Project Title: KAP of people of Uttarkashi regarding Rabies and Free roaming dogs.

Minor Project Institution: Ahmedabad University

Areas of Interest: Wildlife, Animal behavior, Ecology, Biodiversity and conservation, Nature Based Solutions.

Experience:

Project on Biodiversity and Road Construction

Project on Hydropower projects in India

Project on Dogs' Population and Behaviour, and Human Behavior and Public Health

Talent Pools of TERI-SAS

ECO CLUB

The Eco Club is a group of highly motivated individuals who are dedicated to make a positive impact on climate change, environmental sustainability, social sustainability, and resource optimization. In 2021-2022 school year, our team took on new initiatives while maintaining the dignity and integrity of Eco Club, which had been passed down to us by our beloved seniors. The TERI SAS family has always been supportive of our efforts, particularly throughout the lockdown time. Our mission is to raise awareness on issues related to environmental and social sustainability. In addition, we hope to instill sustainable habits throughout the TERI SAS family, which includes students, scholars, and other stakeholders. The goal is to Educate and Inspire Lives in order to instill a sense of sustainable behaviors and practices. We regularly engage in talks, Eco-Charcha, Nature Walks and Campaigns that promote Sustainability.

VASUNDHARA

Vasundhara encapsulates a wide range of youth perspectives as well as the perspectives of area specialists on a number of current hot subjects. Exclusive interviews with prominent persons add to the value of the programme. Vasundhara is a complete package that includes academic write-ups with factual information, constructive suggestions, and personal opinions. It is curated from a holistic and global perspective, taking into account laws, norms, rules, and traditional knowledge systems under a variety of distinct themes. Vasundhara was first published in hard form in the 5th edition, and it was also the time when the magazine became the official Magazine of TERI SAS. It is now available at the University library and reception. With future editions, Vasundhara intends to reach a bigger audience and raise awareness about the current climate catastrophe and how sustainability may be used as a weapon to combat it. In times like these, Vaundhara strives to disseminate balanced, thought-provoking, and grounded-in-reality youth viewpoints. The magazine is a powerful instrument for getting our message to policymakers and industry professionals, resulting in real change through varying Thematic themes and areas to touch on.

SDG HUB

SDG Student Hub TERI SAS is a student-led hub that comes under one of the impactful initiatives of UN Sustainable Development Solutions Network (SDSN) Youth. Our activities revolve around the idea of simplifying the 17 sustainable development goals, thereby transforming our university and bringing a change in the community. Foremost is to develop a Network across nation and globally. Activities that run throughout the year includes S-Talks, Newsletters, Campaigns, School Level Awareness, Podcasts, Blogs, etc.



Gourav Mali

Academic Background: B.E. Environmental Engineering

Institution: KIT's College of Engineering, Shivaji University, Kolhapur

Minor Project Title: Design and Implementation of Integrated Solid Waste

Management for goSTOPS Hostels to Promote Responsible Tourism **Minor Project Institution:** goSTOPS Hospitality Private Limited

Major Project Organisation (If Applicable):

Areas of Interest: Integrated Solid Waste Management, Sustainability Reporting, ESG, Integrated Impact Assessment, Climate Change Mitigation Strategies, Sustainable development

Experience:

Sustainability Intern at goSTOPS Hospitality Pvt. Ltd. (2 Months)
Project Coordinator (Indian Railways) at Rekart Innovations Pvt. Ltd. (7 Months)
Operations Management Intern at Optismart Eco Solutions Pvt. Ltd. (3 Months)
GIS Internship Trainee at InfraPlan Engineering Services Pvt. Ltd. (1 Month)
Coorganizer and Finance Head, TEDxKITCoEK 2019



Isha Narayan

Academic Background: B.Sc in Environmental science

Institution: Fergusson College, Pune

Minor Project Title: Performance assessment of the measures to control air

pollution in the selected NCAP cities

Minor Project Institution: Centre for Science and Environment, Delhi (CSE)
Major Project Organisation (If Applicable): KPMG Global Services (KGS)
Areas of Interest: ESG, CSR, EMS, Impact Assessment, Waste Management,
Green infrastr huucture, Renewable & clean energy, Environmental Resource
Management

Experience: Summer internship as Research intern (2 months)| CSE, Delhi

Core executive committee member| Ecoclub, TERI SAS

Editing and content team | Vasundhara, TERI SAS

Environmental blogging- Founder and blogger (2 years)| earthyandyoung

Youth delegate for sustainable living (EU Switch-Asia)



Lovish Raheja

Academic Background: Integrated B.Sc-B.Ed. (Physics, Chemistry, Mathematics and Education)

Institution: Parishkar College of Global Excellence, University of Rajasthan Minor Project Title: Development of a Framework for Behavioral Study for Protecting Monuments from Air Pollution

Minor Project Institution: The Energy and Resources Institute, New Delhi Major Project Organisation (If Applicable): The Energy and Resources Institute (TERI)

Areas of Interest: Environmental Education, Sustainability Education, Air Pollution

Experience: 2 Months (Minor Project Internship) & 3 years (Teaching)

Sustainable living and Gardening



Mahima Kejriwal

Academic Background: B.Sc. (Chemistry, Botany, Zoology)

Institution: Mount Carmel College Autonomous (Bengaluru Central University) **Minor Project Title:** Potential of ARR in the Tea Estates of Assam and the social and ecological benefits achieved through it.

Minor Project Institution: TERI- The Energy and Resources Institute, New Delhi.

Major Project Organisation (If Applicable): KPMG Global Services. **Areas of Interest:** Carbon Financing, ESG, Waste Management.

Experience:

Trainee at TERI, New Delhi (Land Resources Division), worked in developing Carbon Financing Projects. (20th June- 10th August, 2022)

Council Member, TERI SAS- Student Council



Manas Agrawal

Academic Background: B.A. Economics(Hons.)

Institution: School of Liberal Studies, Pandit Deendayal Energy University

Minor Project Title: Reviewing Carbon Emissions in the Indian Cement

Industries: A Study of Decarbonisation Pathways for 2030

Minor Project Institution: Centre for Science and Environment, New Delhi

Major Project Organisation (If Applicable): pwc Areas of Interest: Sustainability, ESG, Research

Experience:

Research Internship under Centre for Science and Environment, Industrial

Pollution Department(2 months)

Journalism Internship at Ahmedabad Mirror, Times Group



Minu Kumarswami

Academic Background- B.Sc. (Hons.) Environment Studies Institution- Maharaja Savajirao University of Baroda, Gujarat

Minor Project Title- Study of scope 1 and scope 2 emissions of top 5 global food and beverage industries.

Minor Project Institution- ESGBook (formerly Arabesque), New Delhi Major Project Organisation (If Applicable)- PwC

Areas of Interest- ESG, Sustainable finance and development, Integrated Impact Assessment, Climate Change and Disaster Risk Reduction, Nature based solutions

Experience-

Bachelor's dissertation: intern at Green Circle Inc., Baroda, Gujarat (3months): role- EIA exec. And lab researcher.

Master's minor project internship: intern at ESGBook (formerly Arabesque) New Delhi (2months): role- climate change data analyst.



Muskan Rawat

Academic Background: B.Sc Life Sciences

Institution: Sri Venkateswara College, University of Delhi

Minor Project Title: Study of Decarbonization Scenario of Indian Oil and Gas

Companies.

Minor Project Institution: GAIL (India) Limited. **Major Project Organisation (If Applicable):**

Areas of Interest: ESG, Waste Management, Circular Economy, Climate

Change, Sustainability Reporting.

Experience:

Sustainability Intern - GAIL (I) Ltd. (Coordinated with EY's CCaSS team for the data collection and preparation of GAIL's Sustainability Report and Business Responsibility & Sustainability Report (BRSR) for FY 21-22)

Social Media Officer - SDG Hub (TERI SAS)

Jr. Business Analyst - Padmavati Imports (Identified new clients by researching to create networking opportunities and Establishing KPIs to meet goals and supporting clients throughout the project partnership)

Research Intern - SARK E-Waste Management (Streamlined waste disposal process and reduce waste management and operational cost)



Neha K N

Academic Background: B.E Civil Engineering

Institution: Dayananda Sagar College of Engineering, Bangalore

Minor Project Title: E-Waste Management in India: Current and Future Scenario

Minor Project Institution: E-Parisaraa Pvt. Ltd., Bangalore

Major Project Organisation (If Applicable): PwC

Areas of Interest:

Waste Management, Water resource management, ESG, Impact Assessment studies, Community engagement in natural resource management.

Experience:

Interned at E-Parisaraa Pvt. Ltd., Bangalore (June 2022-August 2022) Editorial and Content Team, Vasundhara, Eco Club, TERI SAS Interned at Specs Consulting Civil Engineers, Bangalore (June 2019)



Prerna Goel

Academic Background: BSc in Chemistry with Maths

Institution: Shaheed Rajguru College of Applied Sciences for Women, Delhi Minor Project Title: Four Pillars of ABInBev and Sustainability Reporting Analysis

Minor Project Institution: ABInBev India

Major Project Organization: Morningstar India Pvt Ltd.

Areas of interest: Carbon finance, GHG Accounting, Climate Change and ESG Reporting.

Experience:

1 year with Agritech start-up (Ayata Intelligence Pvt Ltd) as a Core Team Member, 3 months with Pappco Greenware as Business Management Trainee, worked with ABInBev India as EDF Climate Corps Fellow'22 in sustainablity reporting.



Rajvidya Wadalkar

Academic Background: B.Sc Environmental Science

Institution: Fergusson College, Pune

Minor Project Title: ASSESSING THE IMPACT OF SHORT-RANGE TRANSPORT OF PM2.5 USING DISPERSION MODELLING: A CASE STUDY

OF NOIDA CITY, INDIA

Minor Project Institution: Centre for Environmental Science and Engineering, IIT

Kanpur

Areas of Interest:

Ecology and Evolution, Biodiversity Monitoring, Community Conservation, Air Quality Management, Landscape Restoration, Marine Ecosystem, Dispersion Modelling.

Experience:

At the Center of Environmental Science and Engineering, IIT KANPUR under the supervision of Dr. Mukesh Sharma did Air Quality Dispersion Modelling (AERMOD Model).June 2022- Aug 2022



Academic Background: B.Sc. (Life Sciences)

Institution: Zakir Husain Delhi College, University of Delhi

Minor Project Title: The Impact of Tourism on agriculture in The Indian

Himalavan Region

Minor Project Institution: TERI School of Advanced Studies

Major Project Organisation (If Applicable):

Areas of Interest: Food security and Sustainable agriculture, Water resource

management and conservation.

Experience:

Intern at TERI SAS (2 months)

Script-writing and voice-over volunteer at ZHDC (2021)



Ruby

Academic Background: B.tech. (Biotechnology)

Institution: Meerut Institute of Engineering & Technology, Meerut

Minor Project Title: Implementation of Waste Management System in goStops

Hostels

Minor Project Institution: goStops

Major Project Organisation (If Applicable): AICL Communication Ltd.

Areas of Interest: Waste Management, Sustainability Reporting, ESG,

Nature-based solution

Experience:

34 months of experience in pharma consulting firms as Associate.

9 months of Operations Manage<mark>r experience with a zero waste e-commerce company</mark>



Sakshi Mishra

Course: M.Sc. Environment Studies and Resource Management

Academic Background: B.Sc Life Sciences **Institution:** MJP Rohilkhand University

Minor Project Title: Analyzing Greenhouse gas emission data of FMCG pre and

post Paris Agreement

Minor Project Institution: ESGBook (formerly Arabesque), New Delhi.

Areas of Interest: ESG, Sustainability Reporting, Sustainable finance, Impact

Assessment, Climate mitigation, Sustainable Finance

Experience:

Minor project internship from ESGBook (formerly Arabesque) (New Delhi) for 2

months.

Part of Content team and Design Team of Vasundhara Magazine, TERI-SAS



Shreya Satish Gadre

Academic Background: B.Sc. Environmental Sciences 2018-2021

Institution: Fergusson College (Autonomous), Pune

Minor Project Title: Analysis of June 2022 Heatwave Over Delhi-NCR Using

WRF-ARW

Minor Project Institution: Indian Institute of Technology, Roorkee

Major Project Organisation (If Applicable):

Areas of Interest: Behavioural Change, Capacity Building and Skill Development, Circular Economy, Energy Economics and Management, Environmental Psychology, EPR, NBS, RS-GIS, Waste Management, Sustainability

Communication, Weather and Climate Studies

Experience:

Intern at Mitrakida Biosolutions Pvt. Ltd. (2 months) - Bioremediation of Freshwater Bodies Using Nature-Based Solutions; Research Intern at Indian Institute of Technology, Roorkee (3 months) - Analysis of June 2022 Heatwave Over Delhi-NCR Using WRF-ARW

Education Officer, SUN Program, SDG Hub, TERI SAS



Spandan Kumar

Academic Background: B.A (H) Economics

Institution: Bihar National College, Patna University

Minor Project Title: Study of Rehabilitation Activities at Red Mud Pond, Hindalco,

Muri, Jharkhand

Minor Project Institution: TERI (The Energy and Resource Institute)

Major Project Organisation (If Applicable):

Areas of Interest: Sustainability strategy and operations, resource efficiency, Energy Conservation, Rejuvenation project, Climate mitigation, Disaster management

Experience:

8 weeks of internship at TERI, 2 Months experience at ICICI Prudential Mutual Fund



Srihitha Veeranna

Academic Background: BTech in Information Technology **Institution:** CVR College of Engineering, JNTU Affiliated

Minor Project Title: Comparative study of Soil Moisture between in-situ observations and SMAP data products for Agar watershed region in Uttarakhand **Minor Project Institution:** Indian Institute of Technology), Roorkee, Centre of

excellence in Disaster Mitigation and Management

Major Project Organisation (If Applicable):

Areas of Interest: Water Resource Management, Waste mitigation

Experience:

Research Intern at IIT Roorkee | 2 months | Trend analysis Member of Eco club and SPIC MACAY at TERI SAS

Software developer at Capgemini and Adonmo | 30 months | Data management and analysis



Stefi Basumatary

Academic Background : B.Sc (Hons) Forestry

Institution : Sam Higginbottom University of Agriculture Technology and Sciences, Prayagraj, U.P

Minor Project Title: Effectiveness of solar fence in reducing human-elephant conflict in Udalguri, Baksa and Tamulpur districts, Assam.

Minor Project Institution : Aaranyak Organization, Guwahati, Assam.

Major Project Organisation (If Applicable): Earthood

Areas of Interest: Carbon auditing, Forestry projects, Wildlife conservation, Solid waste management, Impact Assessment, Food Security and Sustainable Agriculture.

Experience:

2 months internship with Aaranyak Organisation in Assam.



Surabhi Modhiya

Academic Background: B.Sc. Environmental Studies

Institution: Government science college, Gujarat University, Ahmedabad, Gujarat Minor Project Title: Evaluating strategies for waste management startup - A case study

Minor Project Institution: Durogreen Waste Management Company, Ahmedabad, Gujarat

Major Project Organisation (If Applicable):

Areas of Interest: Waste Management, Corporate Social Responsibility, Integrated Impact Assessment, Life Cycle Analysis, Circular Economy, Organic farming, GHG auditing,

Experience:

Intern: Durogreen Waste Management Company, Ahmedabad, Gujarat- Strategic fundraising for CSR initiatives in decentralized wet waste management,

Volunteer: Sundarvan, CEE, Ahmedabad, Gujarat



Titikhya Barman

Academic Background: B.Sc. Agriculture

Institution: Doon P.G College Of Agriculture Science And Technology

Minor Project Title: Madhya Pradesh: Programs policies and strategic actions for

improvement of sustainable agriculture

Minor Project Institution: World Resources Institute Major Project Organisation: Thinkthrough Consulting

Areas of Interest: Food Security and Sustainable Agriculture, Integrated Impact Assessment, Sustainability strategies and operations, Disaster Management,

ESG, Sustainability Reporting, Life Cycle Analysis

Experience:

2 months internship at World Resources Institute

1 month as Rural Agriculture Work Experience (RAWE)



Tiyasha Sengupta

Academic Background: BA (Hons) Geography

Institution: Shaheed Bhagat Singh College, Delhi University

Minor Project Title: FACTORS DIFFERENTIATING SELF-REPORTED RECOVERY FROM NATURAL DISASTERS IN VILLAGES OF MORI AND

UKHIMATH

Minor Project Institution: Indian Institute of Technology, Roorkee, Centre of

excellence for Disaster Mitigation and Management

Major Project Organisation (If Applicable):

Areas of Interest: Disaster Management, Biodiversity and Wildlife, ESG, Climate

Change Mitigation, GIS.

Experience:

Interned at IIT Roorkee (June 2022-August 2022)



Ujjay Mohan

Academic Background: B.Sc.(hons) Forestry Institution: Kerala Agricultural University, Thrissur

Minor Project Title: Afforestation: Industries best practices on sustainability

Minor Project Institution: Nestlé India Limited

Major Project Organisation: PwC

Areas of Interest: Impact Assessment and Life Cycle Analysis, ESG, Sustainable and nature based solutions, Climate change and Disaster Risk Reduction.

Experience:

2 months internship at Nestlé

5 month as ForestWork Experience Program (FOWE) with Kerala Forest and

Wildlife Department



Urvika Goel

Academic Background: B.Sc Life Sciences

Institution: Sri Venkateswara College, University of Delhi

Minor Project Title: Capacity Building Module for increasing Energy Efficiency of

Boilers

Minor Project Institution: WRI- World Resource Institute

Major Project Organisation (If Applicable):

Areas of Interest: Air pollution Management, Environmental Policies,

Environment management and Impact Assessment

Experience:

Intern at WRI India under Air Pollution Management Division, on building a training module for boiler operators to reduce energy consumption and abate air pollution in Surat, Gujarat.

Interned at TERI as Data Management Intern under Environmental education and awareness department.

Summer Research Intern at Sri Venkateswara College - To study the knowledge and popularity of alternative strategies for boosting immunity during Covid-19 Summer Research Intern- Consumers India- To study the knowledge and demand for Ready to Eat food, in the consumer welfare team

Part of Content Team- Vasundhara Magazine, TERI-SAS



Vanshi M Shukla

Academic Background: B.Sc. Environmental Studies

Institution: Government Science College, Gujarat University, Gujarat.

Minor Project Title: Efficient Wet Waste Management : Business Strategy and

Scaling

Minor Project Institution: Durogreen Waste Management Pvt. Ltd.

Major Project Organisation (If Applicable):

Areas of Interest: Waste Management, Integrated Impact Assessment, Environment Management Systems, ESG, Nature Based Solutions, CSR, Sustainable Development.

Experience:

Intern at Durogreen Waste Management Pvt. Ltd, Gujarat. (2 months) (June 2022-August 2022)



Varsha Yadav

Academic Background: B.Sc.(HONS) (Forestry)

Institution: Sam Higginbottom University of Agriculture, Technology and

Sciences, Prayagraj, Uttar Pradesh

Minor Project Title: Pre-Intervention KAP STUDY of Solid Waste Management

Among Delhi Residentials

Minor Project Institution: Indian Pollution Control Association

Areas of Interest: Carbon financing ,ESG,Waste Management,Impact

Assessment

Experience:

15 days training on Mushroom cultivation at Orissa University of agriculture and technology

1 month training on Agriculture waste management at Farm Unit Cordet

2 months internship at Indian Pollution Control Association



Vishal Bijani

Academic Background: B.sc. Environment sciences Institution: Dev Sanskriti Vishwavidyalya, Haridwar

Minor Project Title: Analyzing scope 1 and scope 2 data of airlines

Minor Project Institution: Arabesque

Major Project Organisation (If Applicable): Stenum Asia

Areas of Interest: Sustainability strategy and operations, resource efficiency, Energy Conservation, Rejuvenation project, Climate mitigation, Disaster

management **Experience:**

8 weeks of internship at Arabesque



Academic Background: B.Sc. Environmental Science Honours

Institution: Asutosh College, University of Calcutta

Minor Project Title: Qualitative study on Supply of water in and around

Bangalore

Minor Project Institution: Biome Environmental Trust Major Project Organization: Morningstar India Pvt Ltd.

Areas of Interest: ESG, EIA, IIA, Community engagement for water and wildlife

conservation. **Experience:**

Wrishika Bhattacharya Summer Intern at Biome Environmental Trust, 2months



Group Photograph Batch 2021-23

M.SC Climate Science and Policy (CSP)



Adhya Burman

Academic Background: B.A.(Hons) Geography **Institution:** Dyal Singh College, University of Delhi

Minor Project Title: Flood Risk Mapping using Multi-criteria Analysis: A case

study of the Gandak River Basin

Minor Project Institution: WWF- World Wide Fund for Nature, New Delhi Major Project Organisation (If Applicable): Thinkthrough Consulting Areas of Interest: Risk and Impact Assessment, GIS and Remote Sensing Experience:

8- week internship at WWF- World Wide Fund for Nature, New Delhi (June - August, 2022)

12- week internship with WII-Wildlife Institute of India (May – July, 2019)

4-week internship at TERI-The Energy and Resource Institute (December, 2018)



Akshita

Academic Background: B.Sc. Environmental Science Honours

Institution: Asutosh College, University of Calcutta

Minor Project Title: Qualitative study on Supply of water in and around

Bangalore

Minor Project Institution: Biome Environmental Trust **Major Project Organization:** Morningstar India Pvt Ltd.

Areas of Interest: ESG, EIA, IIA, Community engagement for water and wildlife

conservation. **Experience:**

Summer Intern at Biome Environmental Trust, 2months



Arna Ghosh

Academic Background- B.Sc Honors Geography

Institution- Shri Shikshayatan College, Calcutta University

Minor Project Title- Climate Change Impact On Land Use and Livelihood In Sundarbans, A Case Study Of Sagar Island

Minor Project Institution- National Institute of Disaster Management Major Project Organisation (If Applicable)- Thinkthrough Consulting

Areas of Interest- Climate change impact assessment, climate change mitigation, vulnerability and adaptation, disaster management and capacity building, sustainability reporting, ESG, climate change policy.

Experience- Research intern at National Institute of Disaster Management, NIDM Delhi (8 weeks)

Intern at College Tips (1 month)



Bhoomika Ramesh

Academic Background: BE Civil Engineering

Institution: BMS College of Engineering

Minor Project Title: Advancements in Solar PV Energy and its applications (ISA)

Minor Project Institution: Verdurous Solutions Private Limited

Major Project Organisation (If Applicable):

Areas of Interest: Intersectional areas of climate science and public policy, Climate change mitigation strategies, feasibility studies of renewable energy options, Integrated Solid Waste Management, Sustainable development, impact assessment studies, wildlife and ecosystem services.

Experience:

8-week Internship at Verdurous Solutions Private Limited(2022) and at NHAI for a Roadway Under Bridge construction project (2019)

Completed GDC FieldOps Cadet Training program(2022) and a global climate reality leader under Climate Reality Leadership Corps(July 2020);



Janhavi Bhujabal

Academic Background: B.Sc Physics, Chemistry and Mathematics (Triple Major)

Institution: CHRIST (Deemed to be) University

Minor Project Title: Impact of Heatwaves on Outdoor Workers - Street Vendors.

Minor Project Institution: National Institute of Disaster Management (NIDM),

New Delhi

Major Project Organisation (If Applicable):

Areas of Interest: Climate Modelling, Climate Adaptation and Mitigation (Nature Based Solutions), Climate Disasters and Risk Reduction, Policy Frameworks in Climate Change, Climate Change and Wildlife conservation, Carbon Trading and GHG auditing

Experience:

8 weeks Internship at National Institute of Disaster Management (NIDM), New Delhi (June - Sep 2022),

Member SDG Hub - TERI (2022-),

Head of Human Resources at Indian Space Society (2020-2022),

Research Internship at Society for Space Education and Development (Aug Oct 2020),



Manal Iqbal

Academic Background: B.Sc (H) Physics

Institution: Kirori Mal College, University of Delhi

Minor Project Title: Disaster Risk and Climate Change Impacts in the Himalayas

- A Case Study of the Satlui River Basin

Minor Project Institution: National Institute of Disaster Management (NIDM)

Major Project Organisation (If Applicable): KPMG Global Services

Areas of Interest: Climate change vulnerability, adaptation, and resilience, with

focus on Disaster Risk Reduction associated with climate change **Experience**: Intern at NIDM (July-September 2022, 3 months)



Neha B Singh

Academic Background: B.E.I.T.

Institution: SITRC, Savitribai Phule Pune University

Minor Project Title: Study of Net-Zero Governance Practices in Oil & Gas

Companies

Minor Project Institution: GAIL (India) Ltd, Noida

Major Project Organisation (If Applicable): Thinkthrough Consulting, New Delhi **Areas of Interest:** Decarbonization / Net-Zero Pathways, Climate Mitigation, ESG **Experience:**

-Sustainability Intern at GAIL (India) Ltd (June 22 - August 22) | Sustainability Reporting

-Volunteer at Vasundhara (Eco Club), TERI SAS (Sept 21 - 22) | Contributing Writer

-Mktg Consultant | 31 months | Mirum WPP Group (Wunderman Thompson Network), New Delhi | WAT Consult (Dentsu Aegis Network), Mumbai



Paritosh Joshi

Academic Background: B.Sc. Economics (Hons.)

Institution: Symbiosis School of Economics, Pune (SIU).

Minor Project Title: Geospatial analysis of Forest Fires and Community Engagement for Integrated Impact Analysis: Case Study of West Singhbhum, Jharkhand

Minor Project Institution: National Institute of Disaster Management (NIDM), New Delhi

Major Project Organisation: KPMG Global Services

Areas of Interest: Climate Finance, ESG, Sustainable Accounting,

Experience:

Intern at National Institute of Disaster Management (NIDM), New Delhi (2 months)

Content Writer at Possibillion Tech Pvt. Ltd (3 months)

Senior Content Writer at CAClubIndia (3 months)

Trainee-Finance at Indiabulls Ventures Limited (1 month)

Intern at PASS-PAS (NGO) (1 month)



Pratyush Pranjal

Academic Background: B.sc. Environment Sciences Institution: Fergusson college, Pune university, Pune

Minor Project Title: Assessment of heavy metals in biological samples collected from Gangetic plains of Bihar.

Minor Project Institution: Mahavir Cancer Sansthan and Research Centre, Patna

Major Project Organisation (If Applicable):

Areas of Interest: Sustainability strategy and operations, resource efficiency, Energy Conservation, Rejuvenation project, Climate mitigation, Disaster management

Experience: 8 weeks of internship at Mahavir Cancer Sansthan and Research Centre, Patna, 3 Months experience at Centre of Energy and Environment Development | Air Quality Data Analyst



Shivanshi Patwal

Academic Background- B.A Geography (Hons.)

Institution- Kamala Nehru College, University of Delhi

Minor Project Title- Impact of Climate Change on Agriculture of Telangana

Minor Project Institution- TERI school of advanced studies, New Delhi

Major Project Organisation (If Applicable)-

Areas of Interest- Climate change Policy, Mitigation and adaptation, Climate change and Its Impact, Climate change and Disaster Management.

Experience-

Teri SAS (July-September 2022, 3 months),



Shivika Tiwari

Academic Background- B.Sc. Zoology **Institution-**

Minor Project Title- Impact Assessment of Outdoor Workers(Traffic Police) to Heatwaves in India.

Minor Project Institution- National Institute of Disaster Management (NIDM), NIDM, New Delhi.

Major Project Organisation (If Applicable)-

Areas of Interest- Climate change Policy, Mitigation, Climate change and Its Impact on Biodiversity, Wildlife Conservation, Climate change and Disaster Management.

Experience-

Intern at NIDM (July-September 2022, 3 months),

Member at SDG HUB ,TERI SAS(2021-2022)



Srishti Anand

Academic Background- B.Sc. Environment Science and Water Management Institution- Anugrah Narayan

Minor Project Title- ESG

Minor Project Institution- Knight Frank Private Limited

Major Project Organisation (If Applicable)- Indian Institute of Science, Divache Center for Climate Change, Bengaluru, Karnataka

Areas of Interest- Climate change UI and Policy, Renewable Energy, Mitigation, Impact Assessment

Experience- Trainee at Asian Development Research Institute ,on the program, "River life Management System" under Green Skill Development Program by MoEFCC,Govt.of India, Climate change blogger at Wearthwhile, GHG Auditor at True Quality Certification

PLACEMENT PROCEDURE

The campus recruitment activity for M.Sc. Environmental Studies and Resource Management (ESRM) and M.Sc. Climate Science and Policy (CSP) is conducted to serve a dual purpose:

- Major Project Placement fourth semester of the programme
- Formal job recruitment on completion of the programme.

Major Project and Job Placement

Recruitment Period Round-1: October – December 2022

Availability of Students for Major Project: February-June 2023

Recruitment Period Round-2: January-June 2023

Availability of Students for Placements | June 2023 onwards

We welcome organizations/corporates/institutions/others to visit our campus for interviewing and selecting the students for fourth semester masters' thesis project and final placements. You may interact with our students through telephone, video conferencing, or in person.

Interested organizations may contact the Placement Cell, the details of which are mentioned at the back of the brochure.

Placement Cell

Student Placement Coordinators:

M.Sc. (ESRM)

Dipanshu Chaturvedi dipanshu.chaturvedi@terisas.ac.in

> Prerna Goel prerna.goel@terisas.ac.in

> > M.Sc. (CSP)

Adhya Burman adhya.burman@terisas.ac.in

Shivanshi Patwal shivanshi.patwal@terisas.ac.in

Faculty Placement Coordinator:

Dr. Chander Kumar Singh Associate Professor. Department of Natural and Applied Sciences chander.singh@terisas.ac.in

For Further Information, Contact:

Ms Sonika Goyal Placement Manager, TERI School of Advanced Studies 10, Institutional Area, Vasant Kunj New Delhi-110070, India

Email: sonika.goyal@terisas.ac.in Website: www.terisas.ac.in Phone: 011-71800222

