



AMITY UNIVERSITY

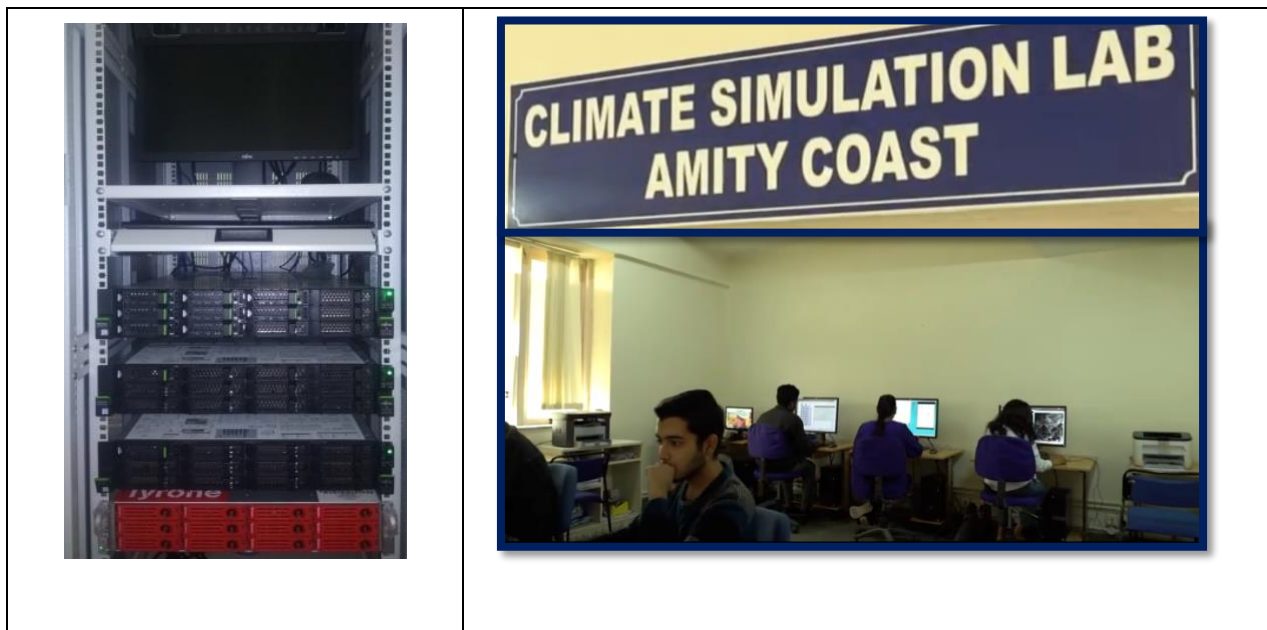
RAJASTHAN

Courses On Climate Science And Environmental Sustainability.

Centre For Ocean-Atmospheric Science & Technology (ACOAST) was established with a view to developing manpower in Weather and Climate Sciences, Environmental monitoring and analysis, The Centre is equipped with high performance computational resources for the running Numerical Weather Prediction models for weather and climate systems, understand the physics and dynamics of weather extremes like severe thunderstorms, tropical cyclones, flood, dust storms, drought, Monsoon System and its variability, Oceanography, Disaster Management & Mitigation etc

The University provide minor track degree in **Climate Science** for under graduate students, that include on various courses on climate science and/or environmental sustainability. The objective of the programme to promote interdisciplinary research in cutting-edge science & technology and public services. It encompasses numerical modeling of atmosphere and ocean, monsoon studies, high impact severe weather forecasting, air pollution, land- air-sea interaction, and climate change to understand its physical and social consequences. The programme will also develop a strong research and capacity building in the area of atmospheric and climate science.

Climate Simulation Lab



Climate Simulation Lab (CSL) placed with six high-end stand-alone workstations extensively used by the Student and Research Scholars for weather and climate and Environmental modelling research. HPC Server comprising of 3 nodes with total cores, providing~ 6 Tera Flops clock speed and 184 TB storage. CISCO network switch of 100 GB/s is connected to HPC for fast data transfer to remote user supported with 10 KV USB for uninterrupted power supply. The HPC server is fortified with parallel processing capabilities and meteorological data handling software. This is primarily utilized to simulate state-of-the-art numerical models of weather and climate for short and medium to seasonal scale prediction.

The highly qualified faculty not only teach in graduate and postgraduate programmes but also undertakes the cutting-edge research on climate science. The faculty of the Centre supervises PhD and MS student and the research outcome had been published in peer reviewed journals.



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Environmental Monitoring Facility: has been established at Amity COAST with the collaboration of India Meteorological Department (IMD), New Delhi.



The Sky Radiometer to measure scattered solar radiation at multiple wavelengths for the estimation of aerosol properties Aerosol Optical Depth (AOD).



Aethalometer: to measure the concentration of optically absorbing (black') suspended particulates in a gas colloid stream; commonly visualized as smoke or haze, often seen in ambient air under polluted conditions



Automatic Weather Station: AWS is an integrated system of components that measures weather parameter such as wind speed and direction, humidity, temperature, atmospheric pressure, & precipitation.



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Dedicated FTE staff of the Research Centre

Prof. (Dr) P.V.S. Raju is currently working as a Professor and Director at Centre for Ocean Atmospheric Science and Technology, Amity University Rajasthan. He has over 25 years of research and teaching experience in the field of Atmospheric Science. He holds a PhD from IIT Delhi, and M.Tech., M.Sc., from Andhra University. He has awarded CSIR-SRF; Junior Associate, ICTP, Italy. His research interest includes Regional Weather & Climate Modeling and Diagnostic Studies; Monsoon Dynamics and its Variability. He has published more than 75 research papers in peer-reviewed journals. (<https://scholar.google.co.in/citations?user=L9WAoaMAAAAJ&hl=en>).

Dr. Shatrughan Singh, an Assistant Professor at the ACOAST, has completed his Ph.D. in Earth and Atmospheric Sciences from Mississippi State University, USA. His Ph.D. research investigated dissolved organic matter (DOM) characteristics in diverse aquatic ecosystems while exploring the role of hydrological and climatological changes. His current research interest focuses on investigating ecohydrological changes, both in terms of quality and quantity, in freshwater ecosystems inevitably pertinent to humans, especially considering climate change scenarios. His future research interests target to offer meaningful solutions in addressing water quality-related issues in freshwater ecosystems while utilizing modern tools and techniques and advanced data analytics. More details on his research activities can be found on his Google profile here

(<https://scholar.google.co.in/citations?user=AXoHQAIAAAAJ&hl=en&authuser=2>).

Dr. Era Upadhyay is currently working as Associate Professor at Amity University Rajasthan, Jaipur. She acquired Doctorate in Botany with specialization in Environmental Sciences from Aligarh Muslim University, Aligarh. Her research interests include analysis of biochemical & morphological features of plants, soil characteristics, and impact of soil properties on plants; and currently she is engaged with Monitoring and Modeling of Air Quality, Data Analysis, Risk Assessment, Occupational Safety and Health research. During the last four years, she has contributed mainly on global issues related to health. She has published 05 book chapters and more than 51 research papers in peer reviewed and refereed journals including Nature, Nature Medicine, Nature Human Behavior, Lancet etc. Dr Era is also working on some novel concepts related to air pollution and herbal medicine and published 04 patents. (<https://scholar.google.com/citations?user=Usm1PLIAAAAJ&hl=en>)

The University offers Courses related to ***Environmental Science and Disaster Management*** for all branches of UG programs as prescribed by University Grant Commission (UGC). In addition to yhat Amity Institute of Biotechnology AUR offers the following courses as electives and for minor track:

Fundamentals of Carbon Footprints and Carbon Credits and Trading of UG and PG student. The faculty of AIB with the specialization in Environmental Sciences supervises PhD students also and the research outcomes are published in peer reviewed journals.

Courses on Environmental Sciences and Sustainability



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S.No.	Institute	Program	Course Code	Subject
1.	Amity Business School	Bachelor of Commerce (Hons.)-1	EVS001M	Environmental Science
2.	Amity Business School	Bachelor of Business Administration (Hons.)-1	EVS001M	Environmental Science
3.	Amity Institute of Behavioural & Allied Sciences	B.A. (Appl. Psychology) (Hons/Research)-I	Mooc*	Environmental Science
4.	Amity Institute of Behavioural & Allied Sciences	B.A. (Appl. Psychology) (Hons/Research)-VII	PSYH702	Environmental Psychology
5.	Amity Institute of Behavioural & Allied Sciences	B.A. (Appl. Psychology) (Hons/Research)-VIII	MCEVS001	Environmental Science
6.	Amity Institute of Behavioural & Allied Sciences	B.Sc. (Appl. Psychology) (Hons/Research)-I	Mooc*	Environmental Science
7.	Amity Institute of Behavioural & Allied Sciences	B.Sc. (Appl. Psychology) (Hons/Research)-VII	BPYH702	Environmental Psychology
8.	Amity Institute of Behavioural & Allied Sciences	B.Sc. (Appl. Psychology) (Hons/Research)-VIII	MCEVS001	Environmental Science-
9.	Amity Institute of Biotechnology	B.Sc. Biotechnology (Hon/Hons with Research)-I	MCEVS001	Environment Studies
10.	Amity Institute of Biotechnology	B.Sc. Biotechnology (Honours/Honours with Research)-I	MCEVS001	Environmental Biotechnology
11.	Amity Institute of Biotechnology	B.Sc. Biotechnology (Honours/Honours with Research)-III	BSBH305	Environmental Biotechnology lab
12.	Amity Institute of Biotechnology	B. Tech Food Technology-III	BSBH325	Environmental Sciences
13.	Amity Institute of Biotechnology	B.Tech. Bioinformatics-III	EVS001	Environmental Sciences
14.	Amity Institute of Biotechnology	B.Tech. Biotechnology-III	EVS001	Environmental Sciences
15.	Amity Institute of Biotechnology	M.Sc. (Biotech)-II	EVS001	Environment Biotechnology
16.	Amity Institute of Information Technology	Bachelor of Science (Information Technology) -I	MCEVS001	Environmental Science
17.	Amity Institute of Information Technology	Bachelor of Computer Applications (BCA) -I	MCEVS001	Environmental Science
18.	Amity Institute of Microbial Technology	Bachelor of Science (Hons) Microbiology-I	MCEVS 001	Environmental Sciences (MOOC)
19.	Amity Institute of Microbial Technology	Bachelor of Science (Hons) Microbiology-VII	MCEVS 001	Environmental Sciences (MOOC)
20.	Amity Institute of Microbial Technology	Master of Science (Industrial Microbiology)-III	MMC 302	Environment & Agricultural Microbiology
21.	Amity Institute of Microbial Technology	Master of Science (Industrial Microbiology)-III	MMC 322	Environment & Agricultural Microbiology Lab
22.	Amity Institute of Microbial Technology	B.Pharm-II	BP206T	Environmental Sciences
23.	Amity Institute of	Bachelor of	EVS001	Environmental Studies



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	Physiotherapy	Physiotherapy-I		
24.	Amity Law School	BA. LLB (H)-I	LEVS101	Environmental Studies & Disaster Management
25.	Amity Law School	BA. LLB (H)-VIII	LLBC804	Environmental Law
26.	Amity Law School	BBA. LLB (H)-I	LEVS101	Environmental Studies & Disaster Management
27.	Amity Law School	BBA. LLB (H)-VIII	LLBC804	Environmental Law
28.	Amity Law School	B.Com. LLB (H)-I	LEVS101	Environmental Studies & Disaster Management
29.	Amity Law School	B.Com. LLB (H)-VIII	LLBC804	Environmental Law
30.	Amity School of Applied Science	B.Sc. (FS)-I	EVS001M	Environmental Science
31.	Amity School of Applied Science	B.Sc. (FS)-III	BFSH306	Energy, Ecology and Environment
32.	Amity School of Applied Science	B.Sc. (FS)-III	BFSH326	Environment Lab
33.	Amity School of Applied Science	M.Sc. (AC)-II	MAC-208	Environmental Chemistry
34.	Amity School of Architecture and Planning	B.Arch. -I	BAR 114	Environmental Science
35.	Amity School of Architecture and Planning	B.ID -I	EVS 001	Environmental Science
36.	Amity School of Communication	BA (J&MC) (H/R) -V	BJMH534	Science and Environmental Journalism
37.	Amity School of Communication	BA (J&MC) (H/R) -VII	MCEVS001	Environmental Science
38.	Amity School of Communication	B.Sc. (A&VG) -III	EVS 001	Environment Studies
39.	Amity School of Engineering and Technology	B.Tech CSE -II	EVS 001	Environmental Studies
40.	Amity School of Engineering and Technology	B.Tech IT -II	EVS 001	Environmental Studies
41.	Amity School of Engineering and Technology	B.Tech. Civil Engg. -II	EVS 001	Environmental Studies
42.	Amity School of Engineering and Technology	B.Tech. Civil Engg. -VI	BCE 601	Environmental Engineering - I
43.	Amity School of Engineering and Technology	B.Tech. Civil Engg. -VI	BCE 621	Environmental Engineering Lab
44.	Amity School of Engineering and Technology	B.Tech. Civil Engg. -VII	BCE 701	Environmental Engineering – II
45.	Amity School of Engineering and Technology	B.Tech (ECE) -II	EVS 001	Environmental Studies
46.	Amity School of Engineering and Technology	B.Tech (EEE) -II	EVS 001	Environmental Studies
47.	Amity School of Engineering and Technology	B.Tech (MAE) -II	EVS 001	Environmental Studies
48.	Amity School of Engineering and Technology	B.Tech.Chem. Engg. -II	EVS-001	Environmental Studies
49.	Amity School of Engineering and Technology	B.Tech.Chem. Engg. -VI	BTH- 605	Environmental Pollution and Control
50.	Amity School of Engineering and Technology	B.Tech.Chem. Engg. -VI	BTH- 625	Environmental Pollution and Control Lab
51.	Amity School of Fashion Technology	B. Des (Fashion Design)-II	EVS 002	Environmental Science



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52.	Amity School of Fine Arts	BFA-II	EVS 001	Environmental Studies
53.	Amity School of Languages.	B.A. English (Hons/Research)-VIII	MCEVS001	Environmental Studies
54.	Amity School of Languages.	B.A. French (Hons/Research)-VIII	MCEVS001	Environmental Studies
55.	Amity School of Liberal Arts	Bachelor of Arts Economics (Hon./Research) -I	MCEVS001	Environmental Science
56.	Amity School of Liberal Arts	Bachelor of Arts Economics (Hon./Research) -VII	BAEH 731	Environmental Economics
57.	Amity School of Liberal Arts	Bachelor of Arts Economics (Hon./Research) -VIII	MCEVS001	Environmental Science
58.	Amity School of Liberal Arts	B.A. Liberal Arts-II	EVS 001	Environmental Studies
59.	Amity School of Hospitality	Bachelor of Hotel Management -III	EVS003	Environmental Studies