Climate Education and Careers in Climate Action

ANANT NATIONAL UNIVERSITY
॥ प्रज्वालितो ज्ञानमयः प्रदीपः ॥

Anant School for Climate Action

The Earth’s climate is changing

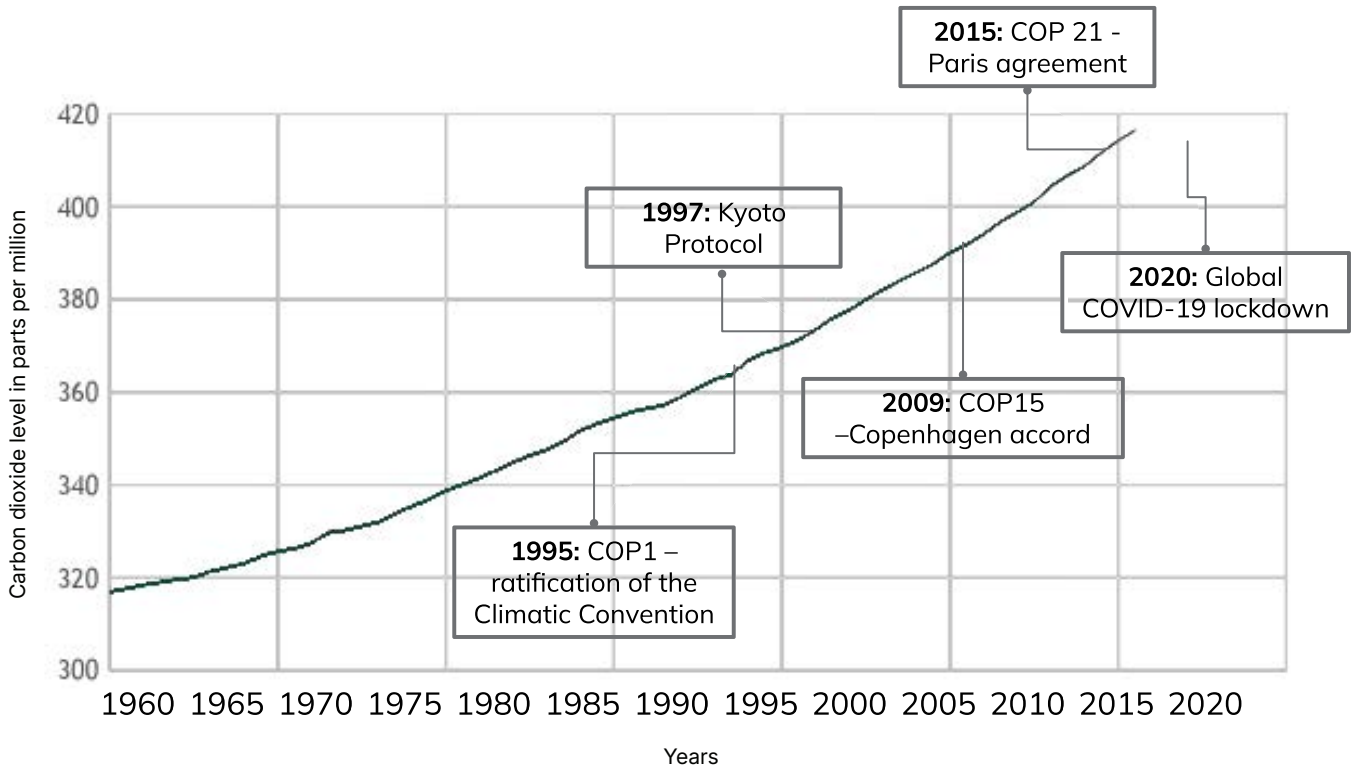
In 2025, several climate records broke. January was the fifth driest month in India since 1901, and February marked the warmest in 124 years.

Heavy rain, floods and landslides remained the deadliest types of extreme weather, accounting for 2,440 deaths in 2025. These were followed by lightning and storms (1,456 deaths), cloudbursts (135), heatwaves (21) and snowfall (12).

If unchecked, climate change will put 80% of India’s GDP at risk, with sectors like services, manufacturing, retail, tourism, construction and transport possibly incurring the most significant climate-related losses over the next 50 years.

Image source: Drought texture background - AI image via Freepik: https://www.freepik.com/premium-ai-image/drought-texture-background_47723691.htm

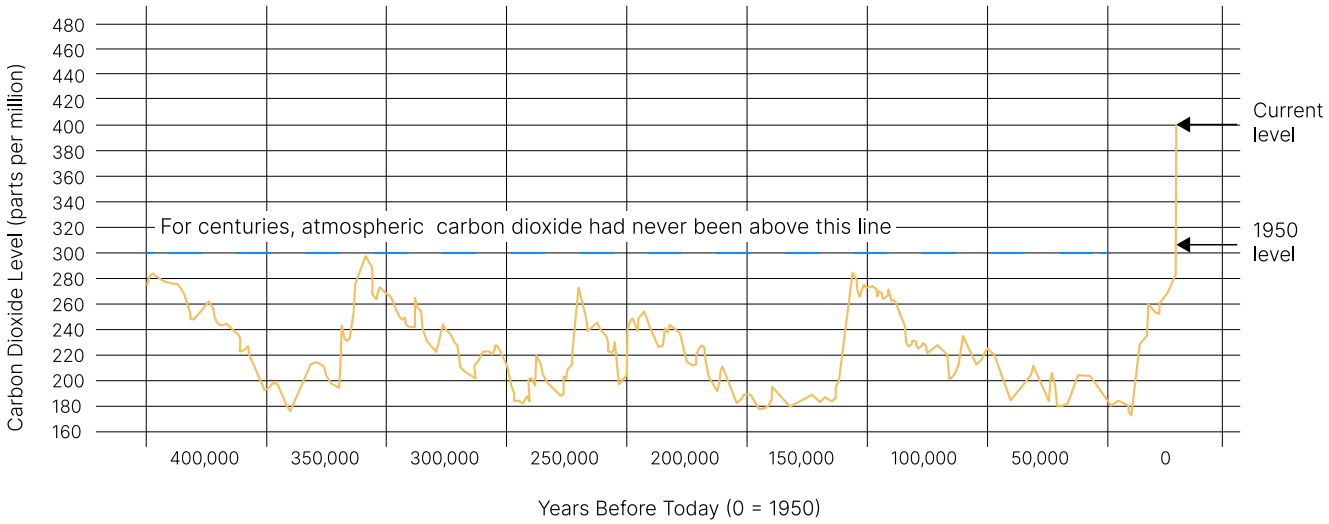
There has been an increase in global greenhouse gas emissions



Source - NOAA Global Monitoring Laboratory

Image source: "Environmental disaster factory," image via Freepik. https://www.freepik.com/premium-photo/environmental-disaster-factory_11019275.htm

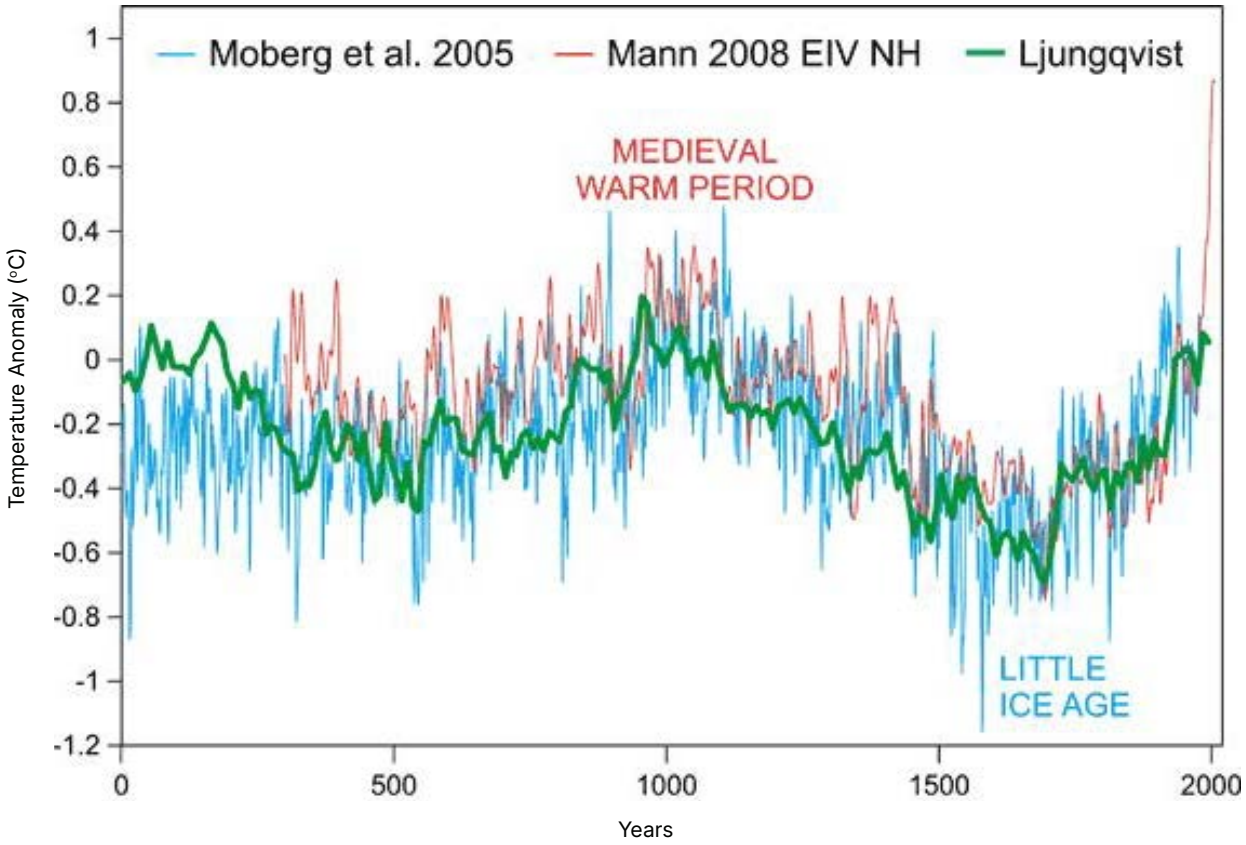
These emissions are higher than ever before in human history



Source: This graph, based on the comparison of atmospheric samples contained in ice cores and more recent direct measurements, provides evidence that atmospheric CO2 has increased since the Industrial Revolution. (Credit: Luthi, D., et al.. 2008; Etheridge, D.M., et al. 2010; Vostok ice core data/J.R. Petit et al.; NOAA Mauna Loa CO2 record.

Image source: "Smog urban city," image via Freepik.
https://www.freepik.com/premium-photo/smog-urban-city_17735248.htm

With the warmest five years on record



Source: Moberg et al. 2005 NH (blue), Mann et al. 2008 EIV NH (red), and Ljungqvist 2010 NH (green).

Image source: "Drought texture background," AI-generated image via Freepik.
https://www.freepik.com/premium-ai-image/drought-texture-background_47723691.htm

Time for action is short

Image source: Photo by Chris LeBoutillier – Pexels.
https://www.pexels.com/
photo/a-smokestack-emission-of-an-industrial-exhaust-pipes-6675078/

Companies are responsible for the majority of global greenhouse gas emissions

Yet they also have the unique ability to develop and scale innovative solutions

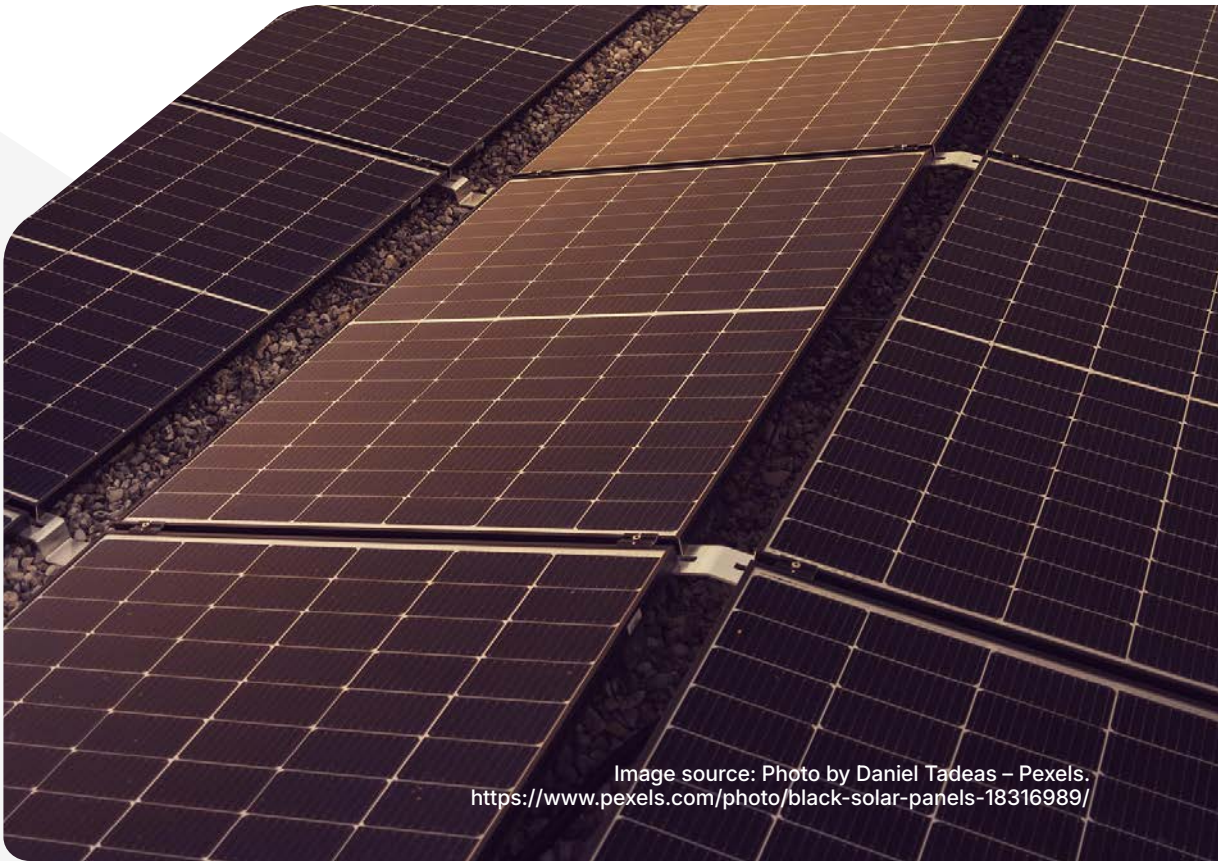


Image source: Photo by Daniel Tadeas – Pexels.
https://www.pexels.com/photo/black-solar-panels-18316989/

But for companies to do so, there is a critical problem...

Demand

The International Finance Corporation (IFC) estimates a $23 trillion opportunity in the global climate industry by 2030, with $2.2 trillion specifically tied to climate-resilient infrastructure in India and Bangladesh. Additionally, India alone has the potential to generate 3 million renewable energy jobs by 2030, highlighting significant growth prospects in sustainable development and green energy sectors.

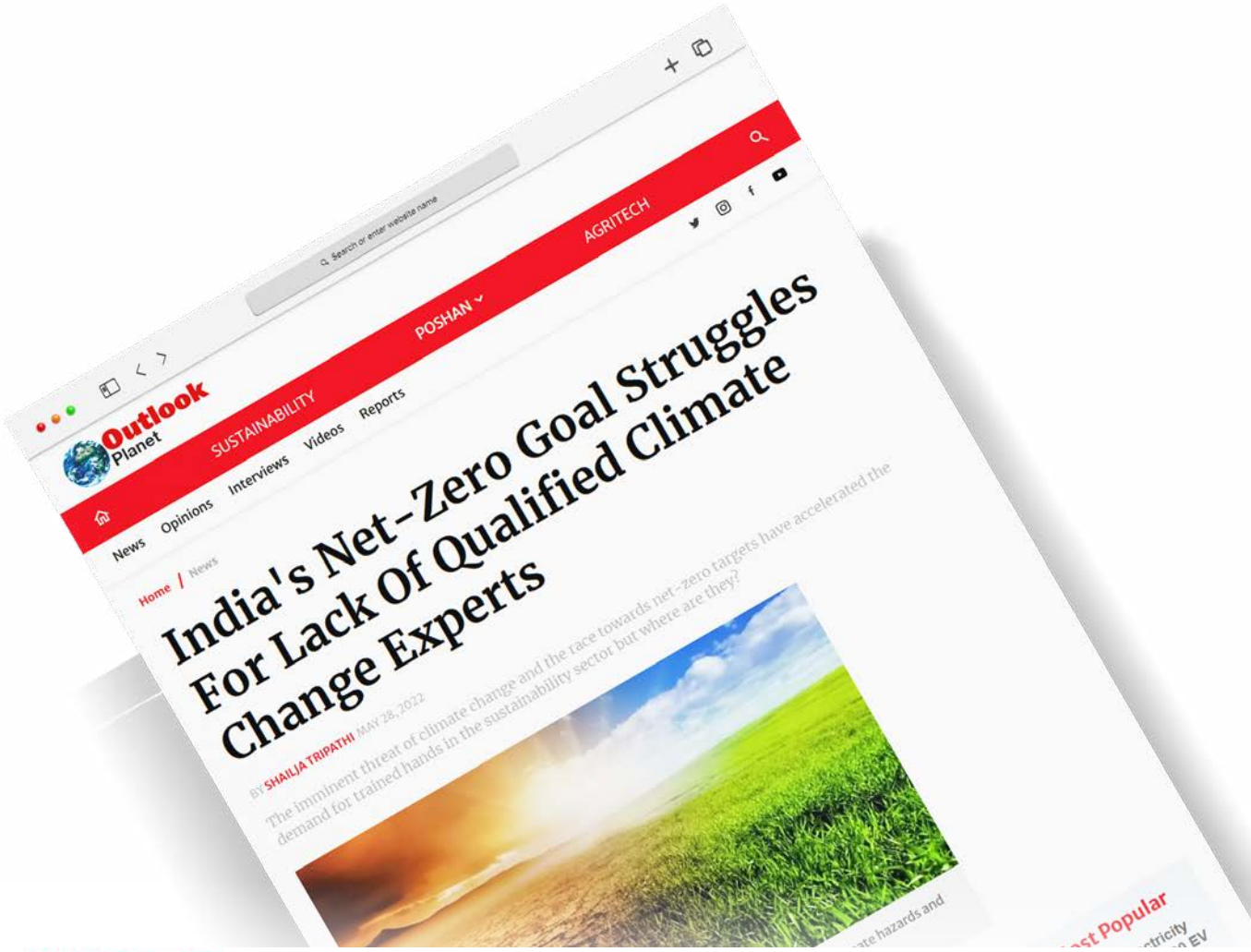
Supply

Yet, 120,000 people globally, and less than 5,000 people in India, are formally trained to adequately cater to the burgeoning climate industry. While a few leading international universities now offer undergraduate degrees in climate sciences, there is no university in India that offers this. Ironically, India is both a major greenhouse gas emitter and one of the most vulnerable countries to projected climate change.

... a people problem

The climate sector is experiencing a boom across industries, research and policy

But there's scarcity of qualified professionals to fill these roles



OUTLOOK BUSINESS

India's Net-Zero Goal Struggles For Lack Of Qualified Climate Change Experts

The imminent threat of climate change and the race towards net-zero targets have accelerated the demand for trained hands in the sustainability sector but where are they?

Every sector is hiring climate specialists

Sunrise industries climate specialists can join	Jobs created
Biofuels and sustainable aviation fuels	1,000,000+
Carbon capture, use and storage	1,000,000+
Climate finance	1,000,000+
Climate modelling and AI	1,000,000+
Rooftop solar	2,300,000+
Utility-scale solar	780,000+
Wind energy	89,000+

Industries with hard-to-abate emissions that climate specialists can join	Jobs created
Construction and building materials	↑ 100 million jobs
Energy production	
Manufacturing	
Steel, power, infrastructure	
Transportation	

Source: CEEW-NRDC analysis, 2022; Sustain Labs Paris 2023.

And many more sectors...

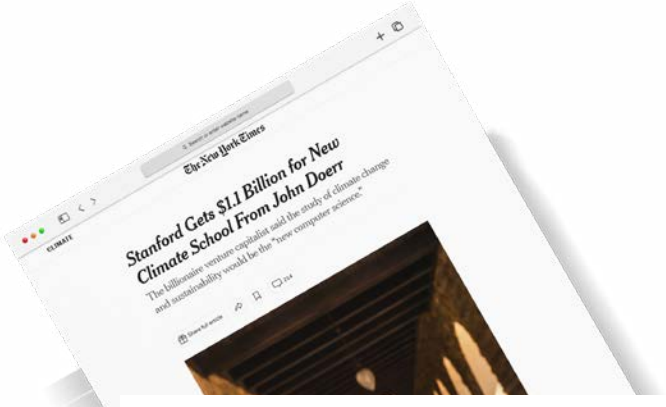
- Business consulting
- Education
- Hardware and networking
- Healthcare
- Manufacturing and construction
- Public administration
- Software and IT services
- Waste management

Prestigious global universities recognise the need and have started establishing climate-focused schools

Columbia to Establish a Climate School to Meet the Challenges of a Warming World

The Columbia Climate School will provide the education, research and global partnerships needed to create and maintain a sustainable society.

July 10, 2020



Stanford Gets $1.1 Billion for New Climate School From John Doerr

The billionaire venture capitalist said the study of climate change and sustainability would be the "new computer science."

Anant National University

Anant National University, India's premier design university, is dedicated to training students to devise solutions for global problems. Anant follows the DesignX pedagogy, where 'X' is the symbol drawn from mathematics, representing enhancement. This new learning approach multiplies traditional design pedagogy with liberal arts disciplines, emerging technologies and knowledge drawn from hands-on community experiences to help understand our world better and to devise impactful solutions.

Our multidisciplinary undergraduate, postgraduate and doctoral programmes in design, architecture, climate action and visual arts harness knowledge from various disciplines and traditional practices to integrate it with cutting-edge technology to address diverse challenges. We train our designers to become solutionaries — revolutionary thinkers with a solution-oriented mindset.

Anant National University has been recognised as the Centre of Excellence by the Government of Gujarat, highlighting our efforts to provide our students with world-class education, innovative pedagogy, high employability and enhanced entrepreneurial and research opportunities. Anant has also received the prestigious '5-Star Rating' in the category of Architecture and a '4-Star Rating' in the University category in the Gujarat State Institutional Rating Framework (GSIRF) 2023-24. These recognitions reinforce our commitment to creating a world-class institution of great eminence and excellence.

Anant School for Climate Action

The Anant School for Climate Action at Anant National University is dedicated to climate education, offering comprehensive sustainability-focused undergraduate and postgraduate programmes. The BTech in Climate Change programme is India's first and only engineering degree that prepares students for the $23 trillion climate economy.

Founding Team

Mr Ajay Piramal
President, Anant National University
Chairman, Piramal Group

Dr Sanjeev Vidyarthi
Provost, Anant National University

Dr Pramath Raj Sinha
Founding Provost, Anant National University
Founder, 9.9 Group
Founding Dean, ISB, India

Bachelor of Technology in Climate Change

Launched in 2022, the BTech in Climate Change equips our students with skills, knowledge and expertise to create technology-driven solutions to climate change problems both at local and global levels.

The comprehensive curriculum blended with engineering tools and design thinking principles, practical application-oriented learning and collaborations with industries and government research laboratories make this course unique.

The students gain proficiency in using engineering tools and applying design thinking principles through a hands-on and practical learning experience within the industry, the government, and research laboratories to create technology solutions for climate change.

A BTech in Climate Change pays 40% above the average BTech salaries

Examples of roles	Average entry-level salaries in India
Climate data scientist	INR 13 LPA
Climate finance analyst	INR 13 LPA
Climate scientist	INR 11 LPA
Consultant	INR 12 LPA
Geo-engineer	INR 11 LPA
Renewable energy developer	INR 10 LPA
Researcher	INR 9 LPA
Project associate	INR 8 LPA
Space engineer	INR 11 LPA
Sustainability officer	INR 13 LPA

Bachelor of Technology in Climate Change

For aspiring engineers determined to create technology-driven solutions for climate change

Year 1	Year 2	Year 3	Year 4
Climate Lab industry projects			Industry experience

Semester 1- 6

There are 8 streams through semester 1-6

- Climate simulation
- Engineering mathematics
- Environmental engineering
- Climate chemistry
- Energy and technology
- Climate finance
- Design thinking and behavioural science
- Technology and society

Each stream will have 6 incremental steps across 6 semesters

Semester 7

The students get 20 credits of specialisation by choosing from the following:

- Climate in business
- Climate policy
- Innovation

Semester 8

The students get 16 weeks of experiential learning with an industry partner on climate projects

Do you aspire to be the next climate solutionary?

Join the BTech in Climate Change programme at Anant National University

Admissions are open!

Main features:

- **Eligibility:** Passed 10+2 examination with Physics/ Mathematics/Chemistry/ Computer Science/ Electronics/ Information Technology/ Biology/ Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/ Business Studies/ Entrepreneurship
- **Admissions for the batch of 2026-30 are now open.** https://anu.edu.in/programme/b-tech-in-climate-change/
- **Two-step process:** Online application + interview
- **Passion** for technologies, environment and sustainability
- **No age limit** so students from previous years can also apply
- **Affordable tuition fees**
- **Upto 100% scholarships available** based on merit and financial need

To know more,

click **here**

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