

# ENVIRONMENTAL ENGINEER

Environmental Engineers use the principles of soil science, biology, and chemistry to design solutions for ecological issues such as waste disposal, erosion, water and air pollution. They design technological solutions to control pollution and contamination. They are responsible for improving the environment and public health.

## PERSONAL COMPETENCIES

- You have strong communication skills
- You like to analyze and solve problems
- You like to work in a team
- You are concerned about the environment related issues



## SCHOLARSHIPS

- Merit-cum-Means based Scholarship - About 20,000 such engineering scholarships are awarded by the Ministry of Minority Affairs every year. The full course fees of awardees is directly paid to their institutions under this scheme. \*
  - Indian Oil Educational Scholarship- The IOC Ltd offers 300 scholarships every year to eligible students. Students need to be enrolled in an undergraduate course. The scholarship particularly focuses on students with physical disabilities, women and students from North East and J&K.\*
  - "Ishan Uday" Special Scholarship Scheme - For promoting higher education and for encouraging children belonging to economically weaker section of the NE region, the UGC has launched "Ishan Uday" Special Scholarship Scheme for North Eastern Region students.
  - Visit [www.scholarships.gov.in](http://www.scholarships.gov.in) the National Scholarship Portal. Under this portal there are other central government schemes offered by different departments, UGC/AICTE Schemes and State Schemes.\*
  - Visit [www.buddy4study.com](http://www.buddy4study.com) a gateway to scholarships starting from Class XI.\*
  - Scholarships are also available in institutes based on merit.\*
- \*(Availability of these scholarships vary from time to time)

## LOANS

- VidyaLakshmi, [www.vidyalakshmi.co.in](http://www.vidyalakshmi.co.in), is a portal for students seeking education loan. This portal has been developed under the guidance of the Department of Financial Services, (Ministry of Finance), Department of Higher Education (Ministry of Human Resource Development) and Indian Banks Association (IBA). Students can view, apply and track the education loan applications on the website.
- Some states have student credit cards with low interest rates, for instance, West Bengal, Odisha, Bihar, etc.
- All banks give education loans.



The approx. course fee ranges between **INR 20,000 - 2,00,000\***  
\*(The above mentioned figures are approximate numbers. This will vary from Institute to Institute)

## ENTRY PATHWAY

1. Complete 10+2 in Science stream ( Physics, Chemistry and Mathematics)
  2. Complete Bachelor's degree (B.Tech/B.E.) in Environmental Engineering
- OR**
- Complete Bachelor's degree in Environmental Engineering, followed by a Master's degree (M.Tech/M.E.)
- OR**
- Pursue your Diploma in Environmental Engineering.

Students must qualify for JEE Mains and JEE Advanced or the entrance examination conducted by respective state governments such as WBJEE or AP EAMCET.

*Please check the duration of the course during enrolment*



## EXPECTED INCOME

The figures are indicative & subject to change

The salary for an Environmental Engineer is approx. **INR 15,000 to 82,000\*** per month.

Source - [https://www.payscale.com/research/IN/Job=Environmental\\_Engineer/Salary](https://www.payscale.com/research/IN/Job=Environmental_Engineer/Salary)



## WHERE WILL YOU WORK

**Places of Work:** Central Pollution Control Board (State Government), Scientific and technical consulting services, Petrochemical industries, Hydro-chemical industries, NGOs working for health and safety of Public, Organizations involved in research and innovation

**Work Environment:** You have to work for minimum of 8 hours each day and may need to work overtime if required. Shift system may be available.

*Opportunities for differently abled exist in this field*

## EXPECTED GROWTH PATH

Environmental Engineering Technician → Environmental Science Engineer → Environmental Science Health and Safety Officer → Project Officer → Professor/Scientist/Researcher

## WHERE WILL YOU STUDY?

The course is offered by the Department of Environment Engineering.  
*This list of institutes is indicative only*

### GOVERNMENT INSTITUTES

1. NIT, Kurukshetra
2. IIT Roorkee
3. NIT, Warangal
4. DTU Delhi
5. MSU Baroda
6. IIT Bombay
7. IIT Dhanbad
8. JNTU, Hyderabad

### PRIVATE INSTITUTES

(Please check if institute is affiliated and accredited with UGC and AICTE before applying)

1. Hindustan Institute of Technology and Science, Chennai
2. VJTI Mumbai (Diploma)
3. Singhania University, Rajasthan (Diploma)
4. Shri KJ Polytechnic, Bharuch (Diploma)
5. University of Technology, Jaipur (Diploma)
6. COEP Pune
7. SRM University Chennai
8. MIT Manipal

Information on the institute rankings can be found at -  
[www.nirfindia.org/2022/Ranking.html](http://www.nirfindia.org/2022/Ranking.html)

### DISTANCE LEARNING INSTITUTE

Indira Gandhi National Open University (IGNOU)

### ONLINE COURSES

NPTEL\* Swayam - <https://nptel.ac.in/courses/103107084>

\*NPTEL - National Programme in Technology Enhanced Learning. It is by the Government of India and offers a variety of courses in an audio - video form.

Search keywords... 

*environmental engineer,  
environment science,  
environmental engineer jobs*

## EXAMPLE FROM THE FIELD

**Dr. Rakesh Kumar** served as the Director of CSIR-National Environmental Engineering Research Institute (CSIR-NEERI). He obtained Ph.D. in environmental engineering from RTM Nagpur University. He has a vast experience in all fields of environmental science and engineering, especially air pollution control and management, urban air quality monitoring, climate change and health. Dr. Kumar has contributed in developing technologies for reuse and recycle of domestic and industrial wastewater which brought a paradigm shift in the country.\*  
Source: <https://indair-neeri.res.in/team-member/22>

*\*The above information is for training purposes only and will not be used for any commercial gains.*