

## ABOUT THE SCHOOL

Greenko Group and IIT Hyderabad have collaborated to establish the **Greenko School of Sustainability** at the Indian Institute of Technology Hyderabad in 2022. The School of Sustainability is designed to shape a world that harmonizes with nature and empowers future generations toward a more sustainable tomorrow. The objectives of the school are to conduct research and development, education programs. The Greenko School of Sustainability is structured as a cross-disciplinary center that manages seamless participation and knowledge flow from all existing departments and centers of IIT Hyderabad.

The Greenko School of Sustainability (GSS) is currently offering three masters' programs:

- (i) Sustainable Engineering
- (ii) Energy Science & Technology
- (iii) E-waste Resource Engineering and Management

## PHD PROGRAM

The Greenko School is inviting applications from highly motivated and enthusiastic students interested in working on the identified inter-disciplinary thrust areas of the school.

## RESEARCH THRUST AREAS FOR THIS ROUND OF ADMISSIONS

The school has the following six thrust areas:

- (i) Climate Change Mitigation
- (ii) Energy Transition & Industrial Transformation
- (iii) Circular & Regenerative Economy
- (iv) AI & Space Technology for Climate Change mitigation
- (v) Green Chemistry & Industrial Processes
- (vi) Recycling, Reuse, and Repurposing
- (vii) Sustainable manufacturing and Decarbonization

## Contact Us:

**Greenko School of Sustainability**  
**Indian Institute of Technology Hyderabad**

**Email:** [dpgc@gss.iith.ac.in](mailto:dpgc@gss.iith.ac.in)  
[office@gss.iith.ac.in](mailto:office@gss.iith.ac.in)

**Website:** <https://gss.iith.ac.in/>

# Admission Brochure

# Ph.D. in Sustainable Engineering

*July 2024 Session*

**Greenko School of Sustainability**  
**Indian Institute of Technology**  
**Hyderabad**



## PHD PROGRAM

The Greenko School of Sustainability is inviting applications from highly motivated and enthusiastic students interested in working on the identified inter-disciplinary thrust areas of the school (for details, see overleaf).

## ADMISSIONS

The school is offering Fellowships in TWO categories:

1. **Project Fellowships: 6 Nos. (INR 75,000/ month up to 4 years. For details, see next page)**
2. **\*MoE Fellowships: 4 Nos. (As per GoI Norms for 5 years)**

## ELIGIBILITY

All candidates should have cleared national eligibility tests UGC-NET/GATE/CEED/CSIR, etc. However, need not have a validity at the time of application.

Candidates with **First Class degrees** in their respective bachelor's and master's programs can apply.

For MoE fellowships, candidates shall hold M.Tech/M.Sc/M.Arch/M.Des in any discipline aligned with the research thrust areas of the school.

For project based fellowships, the specific eligibility criteria and essential/desirable requirements for each project are given in the next page.

### \*External PhD Program:

Candidates with at least 2 years of relevant experience with an NOC from their organization are eligible for admission as External Ph.D.

\* All other institute's admission guidelines are applicable.

## SELECTION CRITERIA

**The selection is through a written test and/or Interview.**

Selected applicants will be communicated through emails. The applicants should ensure the accuracy of the email address provided and check their emails regularly for updates.

## HOW TO APPLY

Applications are accepted online • Create a login on IITH webpage at: <http://www.iith.ac.in/phdadmissions/> • For more info, visit <http://www.iith.ac.in/>

## RESEARCH PROJECTS

Title of the Project	Eligibility
<i>Development and Performance Evaluation of an Direct Injection Ammonia based Dual Fuel CI engine</i>	Essential: 1.BTech/BE in Mechcal/Aerospace/Production Engineering 2.MTech/ME in Mechanical Engineering with specialization in Thermo-fluids Desirable: Hands-on experience in IC engine experiments
<i>Development and Realization of High Energy Lithium-based Rechargeable Batteries for Electric Vehicles</i>	M.Sc. in Chemistry/ M.Tech in NanoTechnology-Material Science, with GATE/CSIR/UGC(JRF/NET).
<i>Unassisted Solar Seawater Splitting PEC Cells for Sustainable Hydrogen Generation</i>	MSc degree in Chemistry/Nano or M.Tech in Energy/Environment/Chemical/Civil Engineering
<i>Electric Swing Adsorption for Carbon Capture And Lithium Recovery</i>	At least one (Bachelors or Masters) Degrees in Materials Science, Mechanical Engineering or Chemical Engineering. Desirable qualification: Knowledge in electro-chemistry.
<i>Development of Low-Cost Organic Porous Solids for CO2 Capture</i>	M.Sc. degree in Chemistry
<i>Biomass valorization: Developing novel methods for pretreatment and biopolymer (bioplastic) synthesis</i>	Criterion A: M.Tech./M.E. in any of the following engineering disciplines: Civil (specialization in Environmental Engineering) Engineering, Environmental Engineering, Chemical Engineering, Material Science & Material Engineering; OR, First Class in M.Sc. in Chemistry.  Criterion B: B.Tech./B.E. in any of the following engineering disciplines: Civil Engineering, Environmental Engineering, Chemical Engineering, Material Science & Material Engineering; OR, First Class in B.Sc. in Chemistry. (Shall meeting Criteria A&B).