





# Department of Electrical and Electronics Engineering, NITK Surathkal

## VRITIKA (Training and Skill Internship)

'VRITIKA' is the call for initiation and practice in science through the Training and Skill Internship. This program aims to provide opportunities to promising PG students from universities and colleges to get exposure and research skill development experience. These internships will primarily be facilitated by organizations/institutions/laboratories of national importance such as IITs, IISc, IISERs, NITs, CSIR, ICAR, ICMR etc. For more details, visit the following links: <a href="https://acceleratevigyan.gov.in/programs/abhyas/vritika">https://acceleratevigyan.gov.in/programs/abhyas/vritika</a> <a href="https://acceleratevigyan.gov.in/programs/abhyas/vritika">https://acceleratevigyan.gov.in/programs/abhyas/vritika</a> <a href="https://acceleratevigyan.gov.in/page/abhyas">https://acceleratevigyan.gov.in/page/abhyas</a>

## Call for Research Internship (Accelerate Vigyan – Vritika) – Physical Mode Title: Solar power Forecasting Using Machine Learning Techniques

### Who can Apply:

- Regular PG/Ph.D level (MTech/M.E./M.S/Ph.D) students pursuing their degree from AICTE approved University / Institution within India are eligible to apply.
- Specializations: Electrical Engineering related domains.
- The applicants must produce a letter of authentication from their Supervisor/Head of the Department/Head of the Institute indicating their association with the Institute and a "No Objection Certificate (NOC)" for allowing their student to undergo training in the workshop if selected. There is no dedicated format for the same; however, it must be obtained on the institute/university letterhead.
- Students who have demonstrated strong research, analytical & coding skills in their research/academic work are encouraged to apply, and exposure on AI/ML fundamentals, linear algebra, statistical analysis, and photovoltaic systems basics would be given preference.

How to Apply:

- Step 1: The candidate shall apply for the Internship program by filling out the following Google Form: https://forms.gle/YAZ8xFhvuB2LWbQJ7
- Step 2: Please fill the above Google form with the requested details and upload the scanned copies of the certificates and no objection certificate (from HOD/Head of the institution) by Tuesday, 13<sup>th</sup> June 2023.
- Step 3: Take the printout of the filled Google form (received in your registered email) and sign at the bottom of all pages.
- Step 4: E-mail the scanned copy of the signed registration form to <u>tukaram@nitk.edu.in</u> by Tuesday, 13<sup>th</sup> June 2023.
- The list of shortlisted students for the written test/interview shall be announced on or before Wednesday, 14th June 2023.
- Tentative date of written test/interview (online mode): 15<sup>th</sup> June 2023.
- No need to send the hard copy of the registration form.

### **Details of Internship & Selection Process**

- Duration: 22<sup>nd</sup> June 2023 to 19<sup>th</sup> July 2023 (4 Weeks)
- Venue: Department of Electrical and Electronics Engineering, NITK Surathkal, Mangaluru 575025
- Number of Interns Required: 05
- Last Date for application/registration: 13th June 2023
- List of selected students for the internship shall be announced on 15th June 2023 (Evening).
- Reporting date for the selected students: 22<sup>nd</sup> June 2023 (NITK, Surathkal/EED).
- No stipend will be provided for the internship.

#### Selection process:

- > The registered candidates shall be shortlisted for a written test/interview based on the eligibility criteria and academic performance/GATE score.
- > The shortlisted candidates shall be selected for the research internship program based on their performance in the written test/interview (online mode).

#### Accommodation:

- Selected interns will be accommodated in the Institute guest house/hostel rooms (if available) with catering facilities.
- A limited number of rooms in NITK Guesthouses/Hostels are available on shared basis. THE HOST INSTITUTION SHALL BEAR the boarding and lodging within the NITK premise only. If unavailable, the participants need to make self-arrangements for their stay outside the NITK premise, which the organizers do not bear. TA will be reimbursed for the train or bus's lowest fare (from home institute/hometown to NITK and vice versa).

#### WHAT'S IN IT FOR YOU?

- You will get a chance to learn and enhance your skills in machine learning areas and its application to solar power forecasting (including key concepts of basic machine learning models, implementation of ML models in Matlab/Python, time series analysis of solar irradiation data, data preprocessing techniques, and technical writing, etc.).
- This program would facilitate the young talent to choose a career path in Science and Technology at a later stage.
- Participation certificate will be provided to the interns after the successful completion of the internship.

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