

## Inviting Applications for DTBMS2023 Internship under AV VRITIKA Scheme-2023

### About IIITDM Kancheepuram

IIITDM Kancheepuram, a centrally funded institute offers UG and PG programs in computer, electronics and mechanical engineering with the mandate of excelling in IT and IT enabled Design & Manufacturing pedagogy and research. B.Tech, M.Tech, in core areas of engineering and specializations such as are offered by us. Curricula for these programmes augment engineering domain with relevant design & manufacturing skills. More details at [www.iiitdm.ac.in](http://www.iiitdm.ac.in)

### About VRITIKA Research Internship Scheme

VRITIKA' is the call for initiation and practice in science through Training and Skill Internship. This program aims to provide opportunities to promising PG students from universities and colleges to get exposure and hands-on research skill development experience. These internships will primarily be facilitated by organizations / institutions / laboratories of national importance. For further details visit the following links: <https://acceleratevigyan.gov.in/programs/abhyas/vritika> & <http://serb.gov.in/abhyaas.php>

### About the Internship

### DIGITAL TWIN FOR BATTERY MANAGEMENT SYSTEM 2023 (DTBMS 2023)

The proposed internship programme is in the area of developing a Digital Twin for Battery Management Systems for practical applications.

#### USP's of the Programme:

- Modelling a single cell using data driven methods and estimating SoC and SoH for the cell.
- Study the behaviour of the cell from the real world and tune the model information to adapt to this.
- Safety and control: Thermal safety, charging control and battery balancing
- Fault prediction and diagnosis.

### Internship Details

- ❖ **Duration:** 1<sup>st</sup> May to 29<sup>th</sup> June 2023
- ❖ **Place of Internship:** IIITDM Kancheepuram, Chennai
- ❖ **Required Number of Interns:** 05
- ❖ **Reporting Date for Selected Candidates:** May 01, 2023
- ❖ No Stipend will be provided for the Internship. Boarding and Lodging Expenditures, and other expenditures incurred as part of internship for consumables, travel, etc. shall be supported as per the Scheme Approval of SERB AV VRITIKA.
- ❖ Certificate will be provided to the interns after the successful completion of the internship tenure.

### Who can Apply?

- ❖ Regular PG-Level Students who are currently pursuing their degree from Institutions within India.
- ❖ The Intern should be interested/knowledgeable in mathematical modelling.

### How to Apply?

- ❖ The candidate shall apply by filling out the given google form.
- ❖ [https://docs.google.com/forms/d/1Qod0ZOle2fTxZj1MAOLBPINBkNnxEFzPAsADgg0DmjE/viewform?edit\\_requested=true](https://docs.google.com/forms/d/1Qod0ZOle2fTxZj1MAOLBPINBkNnxEFzPAsADgg0DmjE/viewform?edit_requested=true)
- ❖ Deadline for Application: 28<sup>th</sup> April 2023.
- ❖ Shortlisted candidates shall be intimated via email on or before 30<sup>th</sup> April 2023.

### Selection Process

- ❖ Based on applicant profile merit
- ❖ Candidates with prior research exposure, area match and performance in national level exams will be prioritized.
- ❖ Consistent Good Academic Record

### Address for Correspondence:

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