



## Department of Electrical Engineering National Institute of Technology Silchar, Assam

### SERB Student Internship Program वृतिका / VRITIKA

This program aims to provide opportunities to promising UG/PG/PhD students from universities and colleges to get exposure and hands-on research skill development experience in **Health monitoring, fault diagnosis and failure prognosis of Electrical Machines and Drives used for EV applications**. This is a one-month internship program, funded by SERB, DST, and Govt. of India, to support regular UG/PG/PhD level students who are having a strong orientation towards scientific and engineering research and are pursuing their UG/PG/PhD from University/Institute within India in the fields of Science & Engineering and having an interest in scientific research. This internship program is organized by the Department of Electrical Engineering, National Institute of Technology Silchar, Assam.

#### Who can apply:

- Regular UG/PG/PhD level students pursuing their degree from University/Institution within India who **have completed or undergoing B.Tech. degree in Electrical Engineering or Related Course**
- **Research Topic:** Health monitoring, fault diagnosis and failure prognosis of Electrical Machines and Drives used for EV applications.
- **Skills Required:** Understanding of Electrical Machines, Power Electronics, Electrical Drives, Control System, system modelling and parameter estimation. Ability to write code and simulate in MATLAB/Simulink.

#### How to apply:

- **Step 1:** Prepare the Annexure-I, II and III and scan those documents and save it in PDF format.
- **Step 2:** Apply using the following google form:  
<https://forms.gle/TT4PcpAGHnP64Zoj6>
- Last Date of application: **16 July 2023**.
- The Acknowledgment to only shortlisted candidates on or before **20 July 2023**.

#### Details of the Internship & Selection Process

- Duration: **1 month (07/Aug/2023 to 06/Sep/2023)**
- Proposed domain of Internship: **Health monitoring, fault diagnosis and failure prognosis of Electrical Machines and Drives used for EV applications.**
- Number of Inters Required: **5 (Five)**
- Last date for application: **16 July 2023**.
- Acknowledgement to the selected students latest by: **20 July 2023**.
- The intern will be entitled to **Travelling Allowance as per govt of India norms**.
- **Stationery, consumables, food, accommodation etc. will be provided free of cost.**
- **Students are advised to bring their own laptop.**
- **Selection Process:** Students who are currently enrolled and have completed at least five/six semesters of the UG/ Enrolled for PG degree (B.Sc./B.E./B.Tech./M.Sc/M.Tech/M.E.) and Pursuing PhD in a relevant discipline from any institute in India with the following criteria:
  - CGPA > 7.0 for IITs/IISc; CGPA > 7.5 for NITs/ IISERs/ NISER/IIEST/IIITs; CGPA > 8.0 for student's other universities/ institutes or equivalent.

#### ADDRESS FOR CORRESPONDENCE:

**Dr. Amrish Devanshu,**  
Assistant Professor, Department of Electrical Engineering, National Institute of Technology Silchar, Assam, 788010, India.  
Email: [amrish@ee.nits.ac.in](mailto:amrish@ee.nits.ac.in)

## Annexure – I

### Endorsement cum No Objection Certificate from the Head of the Department (To be given on University/ Institute/ College Letterhead)

#### This is to certify that:

1. Mr. / Ms. / Mrs. \_\_\_\_\_, is a bonafide student of our University / Institute / College and will assume full responsibility for actively participating in the SERB Student Internship Program on “Health monitoring, fault diagnosis and failure prognosis of Electrical Machines and Drives used for EV applications” sponsored by SERB under the Accelerate Vigyan Scheme, and organized by the Department of Electrical Engineering, National Institute of Technology Silchar, Assam during 01 August 2023 to 31 August 2023.
2. The Applicant is a Full-time / part-time student of our University/ Institute/ College and enrolled in B.Tech/ M.Tech. / M.Sc. / M.E. Programme in ..... Department of ..... University/ Institute/college.....
3. The candidate has secured \_\_\_\_\_ % / CGPA / CPI till date (if applicable).
4. The University/ Institute/ College also endorses the conduct of the applicant to be of highest order who bears a good moral character.
5. The University/ Institute/ College has “No-Objection” for the candidate participation during the above said period.
6. The candidate, if selected for participation, shall be duly permitted to attend the Training and Skill Internship on physical mode during **14/Aug/2023 to 13/Sep/2023**.

**Signature and Seal  
(Head of the Department)**

**Annexure – II**  
**Undertaking from the Student Applicant**

1. I hereby provide my consent to participate in the SERB Student Internship Program titled “Health monitoring, fault diagnosis and failure prognosis of Electrical Machines and Drives used for EV applications” organized by the Department of Electrical Engineering, National Institute of Technology Silchar, Assam.
2. Vouch for participating in this Training and Skill Internship whole-heartedly and attend all the lab sessions, sincerely with utmost dedication.
3. I shall also be responsible and attentive to involve myself during the discussion/interaction session.
4. I am aware that it is mandatory to attend all the lab sessions, compulsorily qualify for the course assessment and submit report to successfully avail the certification.
5. I understand that the materials supplied during this Training and Skill Internship are only for educational/academic purposes.
6. Uploading/hosting/sharing any content on any platform shall be unlawful on the grounds of Intellectual Property Rights.
7. Any Proxy participation in the Training and Skill Internship shall invite immediate cancellation of his/her candidature and same shall be reported to parent institution.
8. I understand to ensure my physical presence and any support in this regard is to be sought from the applicant’s parent Institution. The organizing institute shall not be liable for the same.
9. I shall strictly follow the COVID guidelines issued by Government of India and State of Assam.
10. I agree to abide by any other terms and conditions of Organizing Institute and SERB.

**Name of the Applicant :**

**Gender & Age :**

**Degree (B. Tech/M.Tech/M.Sc./ M.E.) :**

**Department/Specialization:**

**Institution/College/University :**

**Date :**

**Place :**

**Signature of the Applicant :**

## Annexure – III

### Biodata

<b>Personal Information</b>	
Prefix	Mr./Mrs./Ms
Full Name of the Applicant (Full name as described on certificate)	
Father's/ Mother's/ Guardian's name	
Date of birth (DD/MM/YY)	
Gender	
Nationality	
Email Address	
Correspondence Address	
Permanent Address	
Contact Number	
Emergency Contact Person	
Emergency Contact Person's Mobile Number	
<b>Details of the UG Curriculum (For UG and PG applicants)</b>	
U.G. Degree	B.Sc./ B.Tech./ B.E./ Others_____
U.G. Degree Specialization Subject	
Name of the Institution/University/College (U.G. Degree)	
Institution/University/College Address (U.G. Degree)	
Division/Department/School (U.G. Degree)	
Degree completed? (Yes/No)	

CPI/CGPA/Percentage obtained in U.G. Degree *Attach a proof for CPI/CGPA/% obtained in UG Degree (Provide current CGPA for student who have not completed their course)			
Knowledge of programming Language:	MATLAB (Yes/No)		
	Other (Yes/No)	Name:	
<b>Details of the PG Curriculum (For PG applicants only)</b>			
P.G./PhD Degree Pursuing	M.Tech./ M.E./ M.Sc./ Others _____		
P.G/PhD Degree Specialization			
Name of the Institution/University/College (P.G. Degree/PhD)			
Institution/University/College Address (P.G. Degree/PHD)			
Division/Department/School (P.G. Degree/PhD)			
CPI/CGPA/Percentage obtained in P.G./PhD Degree (Fill whichever applicable) * Attach self-attested photocopy of all available marksheets	1 <sup>st</sup> Sem	2 <sup>nd</sup> Sem	3 <sup>rd</sup> Sem
<b>Details of the undertaken courses related to Health monitoring, fault diagnosis and failure prognosis of Electrical Machines and Drives used for EV applications.</b>			
Course Title	Grade/Marks Obtained	Maximum Grade/Marks	

**I agree that all the information mentioned is correct and I shall be liable for the same.**

**Place:**

**Date:**

**Signature of the Applicant**