

Recruitment of Research Fellow (to join as PhD Scholar)



ONE Position of Cross Disciplinary Research Fellow (CDRF)

Research Area: Digital-twin of EV Powertrain-Converters

Pilani | Deadline: July 25, 2026 | Joining: At the earliest

Date: 07 July, 2026

Applications are invited for **ONE** position of Research Fellow on a project, “*Real-Time Prototyping and Development of a Digital Shadow for an Energy-Efficient Multiport Converter in EV Powertrain Applications*” under the supervision of Prof. Aditya R. Gautam (Electrical and Electronics Engineering, Pilani Campus) and Prof. Sangita Yadav (Mathematics, Pilani Campus).

This position is open only to candidates (PhD Aspirants) who intend to pursue a full-time, on-campus PhD program. The candidates check the eligibility criteria and qualification process of the PhD program of BITS Pilani: (<https://admissions.bits-pilani.ac.in/PhD/phd.html>)

Scope of work	Essential Qualification	Desirable Qualification
This inter-disciplinary project aims at developing a digital-shadow/twin for an Energy-Efficient Multiport Converter in EV Powertrain Applications. The multiport converter will connect multiple sources to multiple loads at different voltage and power levels for EV application. A digital-shadow or twin of the developed system will be prepared with real-time & IOT based data interface with their real counterpart. The digital twin will give better monitoring, control and predictive maintenance option for powertrain and improve its performance through operation optimization and more accurate forecasting.	M.E./M.Tech. in Electrical Engineering or Power Electronics or Electrical Drives or Energy Systems B.E./B.Tech. in Electrical Engineering or equivalent	Work Experience in projects related to power electronic converters, Electrical drives, Electrical vehicles, Control techniques, Digital-twin, Forecasting, optimization, machine learning.

Fellowship: ₹37,000 - ₹42,000 per month (based on the year of PhD and performance)

Duration: As per BITS Pilani norms (<http://www.bitsadmission.com/phmain.aspx>)

Place of work: BITS Pilani, Pilani Campus, Pilani, Rajasthan.

Benefits: *Opportunity to work on cutting edge research areas- Electric vehicles, Power electronic Converters and their control, digital twin, and harness inter-disciplinary skills in control, forecasting & optimization. Candidate can register for PhD in BITS Pilani in the same field of research. Hostel or Married scholar accommodation can be provided subject to availability and per the institute's rules and regulations.*

Application process: Please apply with **CV** on the following link:

- <https://forms.gle/tUEymdXprXdFQpHA8>
- **Deadline:** July 25, 2026

Preliminary shortlisting will be based on resume and telephonic/audio-visual interview within a week of last date of application. For final interview, the candidate will be informed through e-mail for interview. No TA/DA will be provided in case of personal interview. For more details, please contact:

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<https://www.bits-pilani.ac.in/pilani/aditya-r-gautam/>