



INDIAN INSTITUTE OF TECHNOLOGY GANDHINAGAR

Research & Development Office

ADVERTISEMENT NO. SPON/10455/Advt0298 DATED 17.08.2026

Applications are invited for a temporary position of **Project Associate-II** at IIT Gandhinagar.
The details are as below:

Name of PI	Prof. Nihar Ranjan Mohapatra	Department	Electrical Engineering
Project title	Silicon and Advanced Semiconductor Manufacturing Research and Training Hub (SAMARTH)		
Designation	Project Associate-II		
Number of positions	One		
Application Link	http://recruitment.iitgn.ac.in/projectstaff/ Applicants must submit the following documents as part of their application: 1. Curriculum Vitae (CV) The CV should clearly include: • Educational qualifications, including degrees, institutions, year of graduation and CGPA/grades. • Details of relevant academic, research and industry projects. • Technical expertise and tool experience. • Professional experience, including internships or full-time employment (if applicable). • Publications, patents, open-source contributions, technical reports, or other notable academic/professional achievements (if applicable). • Awards, scholarships, certifications, and other accomplishments relevant to the position. 2. Statement of Purpose (SOP) (1–2 pages) The Statement of Purpose should address the following: • Your motivation for applying for this position. • Your prior experience and expertise relevant to the role. • How your technical skills, research experience and career aspirations align with the job description. • Your long-term career goals and how this position will help you achieve them.		
Last date of application submission	11.09.2026		
Consolidated Monthly Remuneration	Rs. 50,000/- to Rs. 90,000/- per month (based on the qualification)		
Duration of appointment	One year, extendable based on satisfactory performance.		
Eligibility Norms ¹	☒ Institute norms	☐ Funding Agency norms	

-Merely meeting the minimum eligibility criteria will not guarantee the shortlisting and/or appointment. A higher cutoff level may be used. The Institute reserves all rights, not to call an applicant for a selection test or not to fill up a position through this round of selection process without assigning any reason.



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Required Qualification*	M.Tech./M.S. or equivalent qualification in an appropriate discipline. OR B.Tech./B.E./M.Sc./M.C.A. or equivalent in an appropriate discipline with a minimum of 02 years of post-qualification experience. The percentage/grade points with respect to the academic qualification will be a minimum 60% or equivalent grade from graduation onwards and 55% or equivalent grade in class 10th and 12th.
Key Responsibilities	• Model and simulate coupled-oscillator networks, phase-synchronization behavior and associated analog interfaces. • Design multilayer PCBs, select components, coordinate layout and fabrication, and independently perform hardware bring-up. • Develop synthesizable Verilog/System Verilog modules for real-time control, data acquisition and phase-locking interfaces. • Develop Python-based test setups and use laboratory instruments to measure phase noise, latency, power and system performance. • Translate neural-network and optimization models, including Hopfield networks and Ising solvers, to phase-encoded ONN hardware. • Integrate analog, digital and software components; diagnose system-level issues; and establish repeatable validation procedures. • Prepare technical reports, maintain design and test records, track milestones, and guide junior project team members.
Essential Skills	• Strong fundamentals in analog and digital electronics, circuit analysis and hardware system integration. • Practical experience in at least two of the following areas: analog circuit simulation, PCB design and bring-up, FPGA development, or automated hardware testing. • Proficiency in Python and working knowledge of Verilog or System Verilog. • Ability to use circuit-simulation and hardware-design tools such as Cadence, LTspice, Altium, KiCad, or equivalent platforms. • Hands-on experience with laboratory instruments, hardware debugging and systematic fault diagnosis. • Strong technical documentation, communication, problem-solving and project-ownership skills.
Desirable Skills	• Experience with coupled oscillators, phase dynamics, phase-locked loops or synchronization-based computing. • Experience designing high-density, multilayer PCBs, including signal-integrity considerations. • Experience implementing FPGA-based real-time control, data-acquisition or mixed-signal interfaces. • Familiarity with Oscillatory Neural Networks, neuromorphic computing, Hopfield networks, Ising machines or hardware accelerators for optimization. • Experience automating measurements and analysing phase noise, latency, power and other hardware-performance metrics.

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	• A track record of independently executing hardware prototypes, contributing to research projects, or mentoring junior team members.
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For Query, Please Contact
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