

Job ID	Title of the position/project	A briefing on the type of work/project with an emphasis on the skills expected.	Name / Email Address	Eligibility / Skills Expected	stipend offered
SIITGOA001B	Spectroscopic investigation of molecules and materials.	Spectroscopic investigation of molecules and materials.	Dr. E. Siva Subramaniam Iyer essiyer@iitgoa.ac.in	MSc Chemistry at least (First year)	Nil
SIITGOA002B	1. Stock Price Prediction using Large Deep Learning 2) Inverse Problems in Signal/Image processing using Deep learning	Python and Matlab Programming (Pytorch, Numpy, etc.). Understanding of Signal processing is a good help.	Dr. Sujit Kumar Sahoo sujit@iitgoa.ac.in	B.Tech. CGPA of at least 8 Specialization: Electronics and Communication Engineering, Computer Engineering, Electrical Engineering	Nil
SIITGOA003B	Spectroscopy in ancient India	Survey and compilation of research work on Indian scientific developments in ancient and medieval India. Indian Knowledge traditions.	Dr. E. Siva Subramaniam Iyer essiyer@iitgoa.ac.in	MSc chemistry	Nil

SIITGOA004B	Design, fabrication, and testing of an in-flame soot sampling device for laboratory flames	Hydrocarbon flames are prone to the formation of soot/ smoke, which is undesirable. Developing soot reduction techniques often requires a more detailed understanding of the nature of soot present inside the flames. The project is aimed at developing such a soot sampler. A pneumatically-driven thermophoretic sampling system that can sample soot particles directly from flame is to be designed, fabricated, and tested for various flame conditions. The project will primarily focus on the mechanical design and electronic control of the device. The final phase will involve testing with real flames as a form of validation.	Dr. Anirudha Ambekar anirudha@iitgoa.ac.in	BE/BTech Electrical Engineering, Mechanical Engineering, Physics, or Computer Science completed 2nd year CGPA of at least 7	5000 per month
SIITGOA005B	Calibration and testing of a free-falling droplet combustion facility	A falling droplet combustion experimental setup was designed and fabricated previously. The setup consists of an inverted porous burner or a hot gas supply, a fall chamber, an exhaust blower, and a droplet generator. Although the components of the experimental setup are presently available, they need to be properly assembled, tested, calibrated, and validated against standard experimental data. In addition to bringing this setup to a working condition, the project will involve an experimental	Dr. Anirudha Ambekar anirudha@iitgoa.ac.in	BE/BTech Mechanical Engineering or Physics completed 2nd year CGPA of at least 7	5000 per month

		study of droplet combustion of liquid fuels/ propellants with additives. Temperature measurements, flow measurements, high-speed videography, and image processing will be involved.			
SIITGOA006B	Frontend development in Angular	This is a software development project	Dr. Rahul C S rahulcs@iitgoa.ac.in	BSc (at least completed first year) or BTech in Computer Science CGPA of at least 8 Specialization: Angular is a must; Node.js is preferable	Nil
SIITGOA007B	Liquid organic hydrogen carriers for hydrogen storage	The work involves the review of the literature on the Liquid organic hydrogen carriers for storing green hydrogen that is generated using renewable electricity. The work requires knowledge of electrochemistry, liquid organic materials synthesis and good writing skills.	Dr. Ravi Sankannavar ravi@iitgoa.ac.in	B.E./B.Tech, M.Sc. or Dual Degree CGPA of at least 6 or 60 % and above Specialization: Chemical/Nanotechnology/Material Science & Engineering/Chemistry/Electrochemistry/Allied specialization	Nil
SIITGOA008B	Development of novel phosphine ligands	Organometallic chemistry and catalysis	Dr. Raja Mitra rajamitra@iitgoa.ac.in	BS 3rd year or MSc 1st year completed CGPA of at least 7.5	5000 consolidated

SIITGOA009B	Art and AI	Python programming with ML components	Dr. Sudakshina Dutta sudakshina@iitgoa.ac.in	B. Tech Computer Science (completed till 2nd year) CGPA of at least 8	5000 per month
SIITGOA010B	Developing a compiler using ANTLR	C, C++ Programming, Basic data structures and algorithms	Dr. Sudakshina Dutta sudakshina@iitgoa.ac.in	B.Tech Computer Science(completed at least 2nd year) CGPA of at least 8 Chemistry, organic chemistry (desirable)	5000 per month
SIITGOA011B	Conditional DAG Scheduling in Automotive Systems	This project involves proposing novel scheduling algorithms for conditional DAG scheduling in automotive systems, in particular those deploying FlexRay. Conditional DAGs allow modeling a diverse set of applications with sequential and parallel subtasks, in which not all sub-tasks are executed always, rather they are executed conditionally. Proficiency in C is required, along with a strong understanding of Operating Systems concepts.	Dr. Niraj Kumar niraj@iitgoa.ac.in	B.E./B.Tech. (2nd/3rd Year) CGPA of at least 7 Specialization: Proficiency in C is required, along with a strong understanding of Operating Systems concepts.	Nil

SIITGOA012B	Synthesis and Oxidative Coupling of Pyrroles and Furans	The candidates will be undertaking synthetic organic chemistry projects in the domain of metal-catalyzed reactions. They are expected to have basic skills to work in an organic chemistry lab.	Dr. Rishikesh Narayan rishikesh.narayan@iitgoa.ac.in	B.Sc (III Year) or M.Sc CGPA of at least 7 Basic electrical	Nil
SIITGOA013B	Finite element analysis of composite laminate subjected to repeated low-velocity impact	Aerospace composite structures experience repeated low-velocity impacts during their service life. Simulating these events using finite element analysis (FEA) helps in understanding the structural response, damage accumulation, and fatigue life prediction of composite structures. In this project, FE studies will be performed using ABAQUS/RADIOSIS to identify the critical locations prone to damage, and potential design modifications or protective measures will be evaluated.	Dr. Harpreet Singh harpreet@iitgoa.ac.in	BTech (4 semesters) CGPA of at least 7 Specialization: Mechanical/Aerospace.	Nil

SIITGOA014B	Effect of moisture on the mechanical behaviour of fiber reinforced composites	<p>Fiber-reinforced composites, particularly the matrix component, can absorb moisture from the marine environment. This absorption can lead to changes in the mechanical behaviour of the material. In this work, microscale Finite Element Analysis (using ABAQUS) will be carried out for an RVE (representative volume element) consisting of fibers and matrix, along with the moisture absorbed in the pores or cavities. Periodic boundary conditions will be applied, and effective mechanical properties will be evaluated using multiscale modelling methodologies. In the initial phase of the project, the stiffness constants and constitutive properties will be calculated. Later on, we will evaluate the rate-dependent properties by imposing dynamic loading conditions. Essentially, the fundamental knowledge of FEM is required for the project, and prior experience of any commercial FEM software is desirable.</p>	<p>Dr. Harpreet Singh harpreet@iitgoa.ac.in</p>	<p>B TECH (6 Semesters) CGPA of at least 7 Specialization: Mechanical/Aerospace</p>	5000 per month
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SIITGOA015B	Interfacing of smart phone to a Raspberry Pi based motor control system for realtime data sensing and control	Android App development for accessing real time sensor data and sending control signal to an Raspberry Pi based control system through bluetooth communication	Dr. Sheron Figarado sheron@iitgoa.ac.in	B.Tech (completed at least 2nd year or 3rd year) CGPA of at least 6 or 60% Specialization: EE/EC/CSE with exposure to android app development, R-pi programming and interfacing	Nil
SIITGOA016B	Novel control and Voltage balancing schemes for Modular Multilevel converter.	Novel control and Voltage balancing schemes for Modular Multilevel converter. The project will involve simulation of MMC voltage balancing schemes in Simulink/ PSIM environment	Dr. Sheron Figarado sheron@iitgoa.ac.in	completed BTech 2nd year/ or 3rd year for direct entry (not in final year) CGPA of at least 8.5/10 or 85% Specialization: EEE	
SIITGOA017B	Optimization for Machine Learning and Applications	Project will be based on optimization and machine learning. Willingness to code in MATLAB/Python, and some knowledge of basic calculus is expected	Dr. Divya Padmanabhan divya@iitgoa.ac.in	BTech or MTech in CSE, MSc Mathematics CGPA of at least 8.5/10 or 85%	5000 per month
SIITGOA018B	Summer Intern	3D printing of Polymer/Polymer composites, Mechanical testing, FEM. It will be beneficial if the student is familiar with CAD/FEM.	Dr. Sandip Haldar sandip@iitgoa.ac.in	BTech Student in ME, AE, Material Sc CGPA of at least 6	Nil

SIITGOA019B	(Project 1) Fabrication and Characterization of Planar Optical Resonator, (Project 2) Fabrication and Characterization of Heterobilayer-T MDs nanophotonic structure	Project 1 skills requirement: Experience or understanding of Thin-film Deposition and Characterization Techniques, Desirable - Knowledge of transfer-matrix method on light propagation, Project 2: Basic understanding of semiconductor materials and their heterostructures;	Dr. Santosh Kumar skumar@iitgoa.ac.in	Appearing or completed 1st year of 2 years MSc (Physics) course; Project 2: Appearing or completed 3 years of bachelor programme like BSc, BS-MS or equivalent CGPA of at least greater than 7 or equivalent	Nil
SIITGOA020B	Inverse problem using Neural Network Radiation	The goal of this project is to use Neural Networks to study the inverse methods and to apply them to radiative heat transfer. Type of work is computational	Dr. Ponnulakshmi V K ponnu@iitgoa.ac.in	BE CGPA of at least 7.5	Nil
SIITGOA021B	High-speed analog and digital integrated circuits	Interns will be designing analog/digital blocks for high-speed ICs. They are expected to have done some courses in analog and digital circuits. Familiarity with simulation tools and HDL is desirable.	Dr. Nandakumar Nambath nnpandakumar@iitgoa.ac.in	B. Tech Specialization: ECE or equivalent	Nil