

Internship opportunity



The company

Virya Paramita Energy (VPE) Pvt Ltd is a start-up. It is working to harvest ocean wave energy. India is having 7500 km long coastal length which can give 40GW power. This is equivalent to 14% of India's power requirement. VPE and Indian Institute of Technology Madras jointly focus on the research and development of a point absorber wave energy converter. The produced power can be used for multiple purpose such as water desalination, power supply to local grid etc.

Job description and topics: We are seeking enthusiastic and creative engineering and economics students with a sound technical background who can work on developing the system. The interns will be involved in designing and analysis of various subsystems of point absorbers. The internship topics are as follows:

SN.	Topic	Work details	Vacancy
i.	Power management system design	For a point absorber, the Power Management System (PMS) is in charge of controlling the electrical system. The task is to make sure that the electrical system is safe and efficient.	1
ii.	Software interface design and data acquisition	Real time data acquisition and monitoring software development.	1
iii.	Control algorithm	To develop a control algorithm that will automate the system functions for continuous power production	1
iv.	Finite element analysis	To study the structural integrity of float and spar when these are exposed to direct wave forces.	1
v.	Power take off mechanism design	PTO converts mechanical energy into electrical energy. It must be designed and tested carefully.	1
vi.	Design of mooring and anchoring system	For safe operations the point absorber must be kept stationary with specified tolerance even in the event of a storm. The mooring has an important role here.	1
vii.	Techno-economic analysis*	Economic evaluation of a wave energy system installation at any given location along the Indian coast	1

Qualifications: B.Tech/M.Tech/MSc in Mechanical/ Ocean/ Electrical/ Computer/ Design engineering/ Economics or relevant branch students can apply. Only students having good CGPA/% of marks/Class rank should fill the form: <https://forms.gle/ZCBoNbnYMfhm822x8>.

Duration: 6-12 months. Mode of work: Online/offline <https://forms.gle/ZCBoNbnYMfhm822x8>

Last date of application: Feb 25, 2022 (5pm).

Email: hr@viryaparamita.co.in (For any specific queries only, no CV to this email id please.)