

Structures Intern – Mechanical Engineering

How to Apply: Send your resume and cover letter to <u>careers@reactiondynamics.space</u> and indicate the position you are applying for.

About the Company:

Reaction Dynamics is a rocket manufacturing company standing at the crossroads of new space and clean tech. We aim to enable routine access to space in the most sustainable, safest and affordable way. Our proprietary hybrid propulsion technology meets the performance and combustion duration needed for orbital launch, while being more cost-effective, safer and more sustainable than traditional liquid rockets used by the vast majority of rocket companies.

About the Role:

The company is actively designing all the structural elements of the rocket, quickly moving toward manufacturing and testing. These include for example pressure vessels, airframes, thrust plates and interfaces, and composite materials are heavily used to help reduce mass. We are looking for an engineering undergraduate to assist in the design and analysis of the launch vehicle's structure, as well as support the incoming effort to manufacture, test and validate prototypes.

Responsibilities:

- Design structural systems and components that meet needs and requirements
- Perform structural analysis of structures using standard engineering tools
- Generate detailed drawings and coordinate manufacturing with suppliers and vendors
- Prepare design and analysis reports and documentation
- Participate in the manufacturing, assembly and testing effort

Necessary Skills and Qualifications:

- Understanding of core concepts of design and manufacturing processes
- Experience working with composite materials
- Familiarity with 3D CAD tools (NX preferred)
- Good understanding of structural analysis tools (NX/Simcenter Nastran preferred)
- Technical writing skills with Latex or Microsoft Word and ability to communicate technical knowledge in a clear and understandable manner
- Resourcefulness, adaptability, and good learning capacity are necessary
- Great knowledge of rocketry, and in particular launch vehicle's structure

Language:

- English (Required)
- French (Preferred)