



Satellite Systems Engineer

School of Physics

Faculty of Science

- **Opportunity to design, build, integrate, test, deliver 6U satellite for NSW Government Space Qualification Mission**
- **Full time 12 month fixed term position with possibility of extension**
- **Camperdown location**
- **Academic Level A. Base Salary range: \$78,143 p.a. - \$105,305 p.a. plus leave loading and a generous employer's contribution to superannuation.**

About the opportunity

We are seeking to appoint a Satellite Systems Engineer to design, build, integrate, test, deliver a satellite for the NSW Government Space Qualification Mission code-named Waratah Seed. You will manage the integration of payloads for the Waratah Seed CubeSat into the CubeSat bus, including testing before and after integration to make sure the payloads are suitable and working appropriately. You will take responsibility for development of the Waratah Seed satellite project under the Director's overall supervision and that of the CUAVA Centre Engineer, collaborating with, supervising, and leading other team members as required, including chairing one or more committees

PRIMARY ACTIVITIES AND RESPONSIBILITIES:

- To design, build, integrate, test, and deliver the first CubeSat for the Waratah Seed project;
- To manage the integration of the payloads for the Waratah Seed CubeSat into the CubeSat bus, including testing before and after integration to make sure the payloads are suitable and working appropriately.
- To coordinate the design, testing, building, and software for the Waratah Seed CubeSat bus
- To provide advice to payload teams on engineering aspects of their payloads and integration with the CubeSat bus.
- To take responsibility for development of the Waratah Seed satellite project under the Director's overall supervision and that of the CUAVA Centre Engineer, collaborating with, supervising, and leading other teammembers as required, including chairing one or more committees;
- To develop financial budgets, keep track of expenses, and revise plans as needed;
- To mentor and supervise students as required;
- To keep very good records of activities and results, setting up appropriate systems as needed;
- To perform other duties as required by the Training Centre's Director and Operations and Research Administration Manager.



About you

We are looking for a Satellite Systems Engineer who meets the following

ESSENTIAL CRITERIA:

- A postgraduate degree in Aerospace, Electrical, or Mechatronic Engineering (or equivalent) with an undergraduate degree in Engineering or Science (or equivalent);
- At least 1 year designing, building, integrating, and testing CubeSats or other small satellites,
- At least 1 year designing, building, testing, and integrating instruments or platform (spacecraft or similar platform) system hardware,
- Working knowledge of electronics for spacecraft (or similar platform) hardware
- Writing, developing, implementing, and troubleshooting software;
- Working in a research-intensive environment as a member of a team;
- Experience in a multi-person engineering team for a space project;
- Writing excellent reports and proposals;
- Delivering excellent oral presentations at professional conferences and events;
- Management of the financial, scheduling, and time management aspects of a spacecraft (or similar platform) engineering project.

Level of appointment will be commensurate with experience and qualifications.

About us

The ARC Training Centre for CubeSats, UAVs, and their Applications (CUAVA) is funded by the Australian Research Council. Working with Industry Partners, our mission is to train the next generation of workers in advanced manufacturing, commercial space and Uncrewed Aerial Vehicle (UAV) applications. In doing so we aim to develop new instruments and technology to solve crucial problems, and develop a world-class Australian industry in CubeSats, UAVs, and related products. We have been in operation since December 2017, and our headquarters are based in the School of Physics, University of Sydney, Camperdown Campus.

The Waratah Seed project is Australia's 1st Ride-Share with the 1st Australian-built industry & commercially –focused 6U satellite. Funded by the NSW government, Waratah Seed is a pilot space qualification project to launch NSW-developed space technology into orbit to test and prove functionality. The project is focused on developing the NSW space sector in particular, and the Australian space industry as a whole.

The School of Physics at the University of Sydney is the leading Physics department in the country, with outstanding staff and students undertaking world-leading teaching and research. Our 114 academic staff and 157 postgraduate students conduct research across a vast range of interests from nanoparticles to clusters of galaxies and from theoretical modelling to laboratory



experiments. With access to supercomputers, modern laboratory facilities and observatories, locally, nationally and internationally, the School of Physics is the premier environment for physics education and research. The School of Physics is committed to creating a diverse workplace by improving equity, access and opportunity. We want to create an environment where individuality is welcomed and celebrated. We are continuously working to identify and remove biases and barriers in an effort to make our workplace open, supportive and safe for everyone.

Since our inception 160 years ago, the University of Sydney has led to improve the world around us. We believe in education for all and that effective leadership makes lives better. These same values are reflected in our approach to diversity and inclusion, and underpin our long-term strategy for growth. We're Australia's first university and have an outstanding global reputation for academic and research excellence. Across our campuses, we employ over 6000 academic and non-academic staff who support over 60,000 students.

We are undergoing significant transformative change which brings opportunity for innovation, progressive thinking, breaking with convention, challenging the status quo, and improving the world around us.

For more information on the position and University, please view the candidate information pack available from the job's listing on the University of Sydney careers website.

How to apply

To be considered please send:

- Up to date CV
- Details of 3 relevant referees
- A cover letter / statement addressing the above **essential criteria**

Applications should be sent to Reign MacMillan, CUAVA Operations and Research Administration Manager, at reign.macmillan@sydney.edu.au.

Applications due by July 31st, 2021.