UCT Space Society – Cars4Mars African Rover Challenge 2025

Sponsorship Proposal

About the Challenge

The *Cars4Mars African Rover Challenge 2025* is a continent-wide university competition coordinated by the Foundation for Space Development Africa. It invites student teams to conceptualise, engineer, and build semi-autonomous rovers inspired by real-world Mars exploration missions. These rovers must navigate rugged terrain and execute simulated scientific tasks under time and performance constraints.

This challenge isn't just about building a rover—it's about building capacity in the fields of robotics, artificial intelligence, embedded systems, and multidisciplinary systems integration, all within a real-world, high-stakes environment.

Our Team at a Glance

We are the **UCT Space Society**, a student-driven and student-led organisation representing the University of Cape Town at this year's competition. Our 18-member team brings together undergraduates from four faculties and eleven academic departments:

Faculty of Science

- Department of Mathematics & Applied Mathematics
- Department of Physics
- Department of Astronomy
- Department of Computer Science

Faculty of Engineering & the Built Environment (EBE)

- Department of Electrical Engineering
- Department of Mechanical Engineering
- Department of Chemical Engineering

Faculty of Commerce

- Department of Accounting
- Department of Information Systems

Faculty of Humanities

- Department of Anthropology

In order to address the multifaceted demands of the challenge, the team is structured into six core portfolios, as can be seen in our Project Strategy Report.

This initiative is entirely led, managed, and executed by students. We are currently in the engineering and construction phase, with a final rover presentation scheduled for **2 August 2025**.

How You Can Help

We are seeking sponsorship—both financial and in-kind—to help bring this ambitious and educationally transformative project to life. Support from industry partners like you will help us:

- Source critical electronic and mechanical components
- Access machining, 3D printing, and fabrication facilities
- Acquire high-precision sensors, microcontrollers, and power systems
- Transport equipment and personnel for testing and final demonstration
- Produce branded materials and outreach content to highlight our journey

Sponsorship Benefits

Your sponsorship isn't just a contribution—it's a collaboration. Benefits include:

- **Talent Pipeline**: Connect with some of South Africa's most capable and driven student engineers, developers, and problem-solvers
- **STEM Impact**: Support the growth of science, technology, engineering, and mathematics education in Africa
- **Recognition**: Prominent mention in all project documentation, presentations, online media, and press engagements

As a gesture of thanks, **your company's logo will be featured directly on the completed rover**—a visible and lasting symbol of your role in our journey to redefine what student innovation can look like.

Be Part of the Mission

The Cars4Mars project represents the future of collaborative, multidisciplinary learning. It combines the energy of student creativity with the rigor of real-world engineering.

We would be honoured to work with your organisation to help make this mission a success and showcase the power of youth-led innovation.

Achal Gupta
Chairperson – UCT Space Society
Team Lead – Cars4Mars UCT
Email: gptach001@myuct.ac.za