

# MRSD Project Sponsorship

Thank you for your interest in the Masters of Robotic Systems Development program!



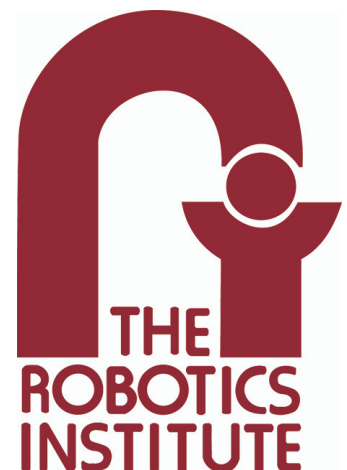
## The MRSD Project

### What is it?

All MRSD students are required to participate in a two-semester on-campus lecture and laboratory-style project course. The project course requires them to form small teams, usually of 4-5 students, to work on a hands-on robotics topic proposed by an industry partner. This topic is also of interest to the field of robotics at large.

The project allows students to acquire hands-on experience and apply concepts and methods taught in class. They learn the interconnection of theory and practice, and they begin to understand the challenges of real-world application. The outcome of this two-semester endeavor is a working and integrated robotic system, a public demonstration, a poster, and a final report.

Projects begin every January at the start of the spring semester.



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# Guidelines to Project Sponsorship

## What does sponsorship entail?

In order to properly manage expectations between sponsoring companies, individual mentors, and the student team members, we are providing a simple set of structured guidelines and reminders to all parties involved with the MRSD Project. Both the mentor and the students are to read this.

## The Nature of the Project

Student teams are expected to develop a feasibility/pre-prototype demonstration of a potential real-world system/service/artifact that could be useful for further exploration. It is unlikely and should not be expected that students will either (i) develop a production-ready prototype, or (ii) be engaged in a purely academic exercise. A team's effort is not to be regarded as a form of low-/no-cost project-effort aiding the sponsor in critical/funded product/research work.

## Timing & Students' Effort Level

The project is spread across two semesters (Spring/Fall) with major milestones including a Conceptual Design Review, mid-semester presentations, and System Validation Demonstrations at the end of each semester (late April and early December). Student teams, typically 5 students each, tend to spend no more than 20 hours per week on their project effort.

## Interactions

It is advisable for project teams and their mentor to interact at least every other week, whether by phone/Skype or other mutually agreeable means. We expect this interaction to consume about one hour every two weeks for the mentor. We recommend that this interaction be more frequent during the beginning of the first semester due to the need for communicating performance requirements, reviewing system specifications, and supporting design-review feedback sessions.

## Intellectual Property Ownership

Note that any potential IP generated as part of this project will be the property of the students (not CMU or the sponsoring company or the individual mentor), as it is part of a student-paid course at CMU.

## Important Dates

**mid-July**

Project Proposals Due

**mid-September**

Projects Chosen & Teams Formed

**December 10**

Educational Project Agreement  
(EPA) Due

**mid-January**

MRSD Projects Begin

**early May**

Projects pause for students'  
summer internships

**late August**

Projects Resume

**early December**

Projects End

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## Financial Support

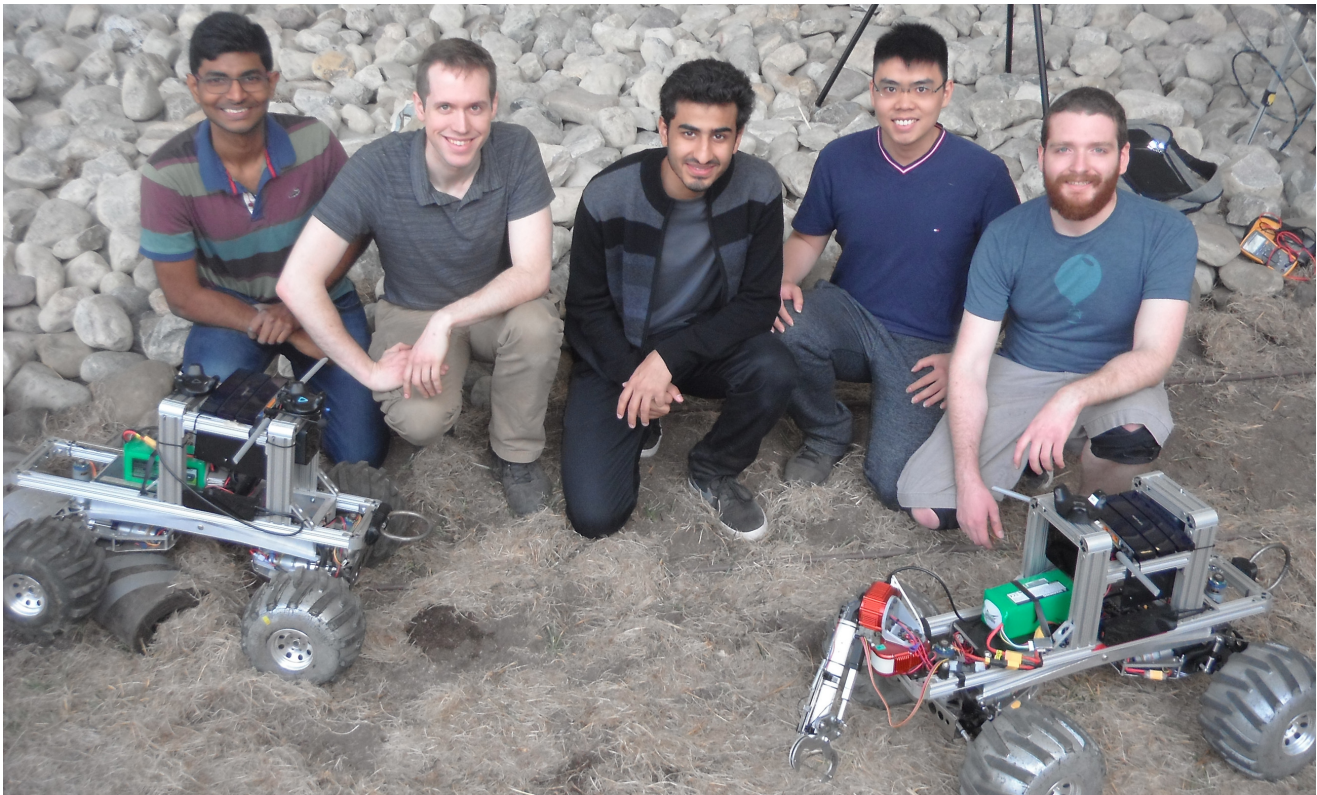
Industrial sponsors are required to pay \$15K per student, up to a maximum of \$60K per project. A reduced rate is available for companies with less than \$10M annual revenue. Sponsoring companies are encouraged, but not required, to consider equipment loans/donations to increase project fidelity and maturity. The MRSD program provides a \$5K equipment budget to each team to acquire project-specific equipment that is not already in the MRSD inventory.

## Course Deliverables

Teams are required to develop a project website, and to provide multiple in-class design-review presentations, a final instructor-supervised demonstration, and a university-open poster and video session showcasing the results of their work. Mentors are invited to attend any of the public demonstrations.

## Public Information Release

Both the resulting website and video will be made public for all projects. To view past projects, please visit the *Project Examples page* on the MRSD website.



For more information, please contact  
Dr. John Dolan at [jdolan@andrew.cmu.edu](mailto:jdolan@andrew.cmu.edu)  
and/or visit the *Project Sponsorship webpage*.