

## Join the Team for Intelligent Ground Vehicle Competition (IGVC) 2011!

We are actively recruiting to build an inter-disciplinary team from mechanical, electrical, computer science and business departments, in order to build a robot for the Intelligent Ground Vehicle Competition (IGVC) 2011. This is a prestigious international competition with over 40 teams competing in 2008, and over 50 in 2009. The aim is to build an autonomous off-roading robotic platform which can navigate around natural and man-made obstacles in the shortest amount of time. Design and construction of an Intelligent Vehicle fits well in a two semester **senior year design capstone course**, or an extracurricular activity earning design credit. For more information about the competition please visit the IGVC website at: <http://www.igvc.org>. The current budget estimate is around 20-30K. If you have any one or more of the following skillsets, please feel free to get back to us:



Warthog robot made by University of Delaware, IGVC 2008

- **Overall Mechanical Design** including *suspension design* for an off-roading vehicle (involves making CAD drawings, running simulations, FEA analysis, etc.). While its helpful to have machining, welding, milling or painting experience, we'll likely work with the same companies who build the SAE vehicles.
- **Sensor interfacing** including GPS, Digital compass, LIDAR, cameras, ultrasonics, Inertial Measurement Units (IMU), and Quadrature optical/hall-effect wheel encoders (familiarity with Serial protocols and C++/C#/VB programming experience required).
- **Power distribution and battery management** (familiarity with various battery chemistries, fuses, chargers, protection circuitries, and DC-DC converters required)
- **Business students only:** Fundraising, public relations, graphics design (brochures, posters), event planning, logistics and support.

### Contact Us

If you are interested in joining the team, please contact:

#### Siddhant Ahuja (Sid)

Team Lead

Rm. 219 Essex Hall,  
401 Sunset Avenue,  
Windsor ON, N9B3P4

E-mail: [ahuja5@uwindsor.ca](mailto:ahuja5@uwindsor.ca)

Phone: +1-519-253-3000 ext. 4860

Fax: +1-519-971-3695

Web: <http://uowteaminvincible.wordpress.com>

For more information about the team and the past wins, please visit the team website at:

<http://uowteaminvincible.wordpress.com>