

Mechanical Engineering 463 – Innovation Awards

1. Leg UP Design: (Team members David Armbrust, Christie DeWert, Bryce Duncan, Dan Gorsky, Brian Schoolcraft, Tommy Thigpen) The scope of this design project was to design a custom prosthetic leg for a young man that had different knee heights.
FINAL RESULT = PLACED 1st



 **Our Solution**

- ▶ Four-bar linkage
- ▶ Residual limb drives motion of prosthetic



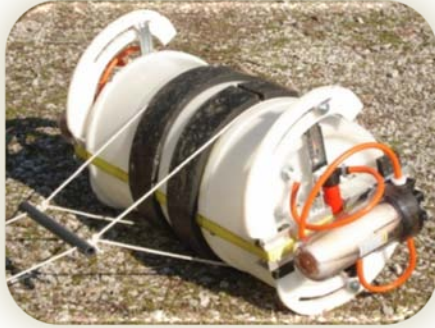
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2. Attachment to Power a Manual Wheelchair: (Team members Arka Roy Chaudhowry, Edward Kaiser, Daniel Maier, Lindsay Petrovich, Claudius Schuck) The scope of this design project was to create a device that could attach to a standard, non-powered wheelchair for a fraction of the cost of a larger, more expensive, and non-collapsible power chair.
FINAL RESULT = PLACED 2nd



3. Water Transport Solutions: (Team members Nathan Enders, Alan Swearingen, Dave Toth, Trevor Totten) This project was designed for not only transporting water, but filtrating it while in motion, the goal being to create an innovative and effective solution to the problem of water transportation and potability in underdeveloped nations.

FINAL RESULT = PLACED 3rd



4. Windworks (Team members Matt Cermak, Dillon McKenzie-Veal, Doug Paulus, Gabe Wilfong, Eric Yeung): The purpose of this project focused on creating renewable wind energy through technology based on the sport of kite boarding. Similar to energy produced by wind turbines, this design allows access to higher wind speeds at greater altitudes at a more efficient and flexible cost.

FINAL RESULT = PLACED 4th

