

2011 Senior Design Winners

Bioengineering Session 1

Surgical Fire Safety and Prevention System

West Askew, Michelle Bohner

Advisor: Paul Davison

Bioengineering Session 2

Probing the Mechanical Properties of Muscle Stem Cells

Lauren Jauregui, Sandeep Kaur, Arille Jeriza Virrey

Advisors: James Grainger, Unyoung Kim

Civil Engineering Session 1

EBNet Haiti Bamboo Connections

Jake Echeverria, Chris Sampson

Advisors: Mark Aschheim, Tonya Nilsson

Civil Engineering Session 2

Sustainable Design of an Outdoor Classroom

Anne Drinkward, Jeanine Ruffoni

Advisor: Mark Aschheim

Civil Engineering Session 3

Low-Tech Coconut Shell Activated Carbon Filter

Ami Cobb, Mikell Warms

Advisors: Steven Chiesa, Edwin Maurer

Civil Engineering Session 4

Residential Hill-Top Design: Phase Two

Jonathan Perez

Advisors: Reynaud Serrette, Sukhmander Singh

Civil Engineering Session 5

Traffic Control and Pedestrian Bridge Design

Leanna Elserougi, Gabriela Mercado

Advisors: Rachel He, Reynaud Serrette

Computer Science and Engineering Session 1

The Future Is Green

Melissa Conlin, Michael Truong

Advisor: Rani Mikkilineni

Computer Science and Engineering Session 2
Web-based Satellite Mission Operations Dashboard

Laura Bica

Advisor: Christopher Kitts

Computer Science and Engineering Session 3

FACE: Fair Trade Aid Calculator for Everyone

Ryan Davidson, Eva Jensen, Rosalie Tolentino

Advisors: Silvia Figueira, Rani Mikkilineni

Computer Science and Engineering Session 4

Fixing Return Oriented Programming Vulnerabilities

Kevin Rowe, James Taguchi

Advisor: Joanne Holliday

Electrical Engineering Session 1

Portable Laser Guitar

Joseph Oloju, Kurt Robinson

Advisor: Sarah Kate Wilson

Electrical Engineering Session 2

Organic Polymer Solar Cells

Mark Loiseau

Advisor: Mahmud Rahman

Mechanical Engineering Session 1

Fuel Efficient Cook Stove

Abimael Bastida, Miguel Gomez, Saul Hernandez, Alejandro Lobato

Advisor: Hohyun Lee

Mechanical Engineering Session 2

SCU|MotorSports Baja SAE

Caitlyn Alexander, M. Jared Guerrero, Jason LeBlanc, E.J. McKay, Ben Richter, Zach Sanchez, Harman Sekhon

Advisors: Drazen Fabris, T. Kim Parnell

Mechanical Engineering Session 3

Hydrodynamic Test Fixture for Prosthetic Aortic Heart Valves

Nick Devich, Edward Hayes, William Hendricks

Advisors: Drazen Fabris, T. Kim Parnell

Interdisciplinary Projects

Omoverhi

Collin Burdick, Katherine Fazackerley, Ben Frederiksen, Nick Greos, Katherine Mardula, Simi Olabisi, Matt Renner; Business students: Maria Veronica Lleva Bass, Kristen Lee

Advisors: Shoba Krishnan, Hohyun Lee