

INGENUITY

Russ College seniors bring national scholarships home

Senior mechanical engineering major Tom Moehring and senior civil engineering major Blake Andrews were among 69 students nationwide selected to receive a nationally competitive scholarship awarded by Tau Beta Pi. Tau Beta Pi is the nation's second-oldest honor society. Each student is applying his \$2,000 scholarship toward his final year of undergraduate work at the Russ College.

Computer science students programmed to win

Russ College computer science students out-programmed more than 120 teams from universities across the region in a qualifying competition for the Association for Computing Machinery's International Collegiate Programming Contest (ICPC). Held at the University of Cincinnati in November 2004, the contest challenged teams to write several computer programs in only a few hours.

A lawnmower that thinks for itself?

A team of Russ College seniors came in first place—for the second year—in the second Autonomous Lawnmower Competition, sponsored by the Institute of Navigation's Dayton Section. Participants had to design a lawnmower that could trim a field quickly and work entirely on its own, using only the Global Positioning System for guidance. Along with its \$2,500 first prize, the team also won the \$1,500 prize for the best production report for having designed a manufacturing process to build the mowers. The team's students selected the project for their senior year capstone design project.



The autonomous lawnmower team receives its first-place check. Left to right: Electrical engineering master's student Nirav Parikh; Andy Shupe, B.S.E.E. '05; Josh Kehl, B.S.E.E. '05; Tommy Della Rocco, B.S.E.E. '05; electrical engineering master's student Dustin Bates, B.S.E.E. '04; Duke DeVilling, B.S.E.E. '05; and Nathan Hay, B.S.E.E. '05; with Dr. Mikel Miller of the Air Force Research Laboratories.

Flying Bobcats land 11th in nation

Ohio University's flight team placed 11th among 29 schools at the 2005 National Intercollegiate Flying Association's Safety and Flight Evaluation Conference (NIFA SAFECON) in late April. The Flying Bobcats out-competed the U.S. Naval Academy and host school Kansas State University, ending just one place behind Embry-Riddle Aeronautical University-Daytona.

Student technology society honored

The newly reactivated chapter of Epsilon Pi Tau received the technology honor society's Region 3 Outstanding Chapter Award in recognition of the group's accomplishments during its first year back in operation after two decades. The award came with a certificate and a \$500 honorarium. This year, the chapter's seven members organized a workshop on lean manufacturing (how to increase manufacturing efficiency), conducted fundraisers, tutored fellow students, and developed a chapter constitution and bylaws.



The 2004–2005 members of Epsilon Pi Tau (front, left to right): Troy Miller, B.S.I.T. '04; industrial technology seniors Adam Wood and Carlos Morris; Steve Belknap, B.S.I.T. '04; and Industrial Technology Chair James Fales. (Back, left to right): Professor of Industrial Technology Timothy Sexton; Advisor and Assistant Professor of Industrial Technology Todd Myers; Mark Paisley, B.S.I.T. '05; Matthew Henriksen, B.S.I.T. '05; and industrial technology senior Adam Noll.

When the dust settles, the Russ College wins

A team of Russ College chemical and civil engineering students won the Bechtel Award for the most innovative approach to their task at the annual Waste Management and Environmental Research Consortium contest at New Mexico State University in Las Cruces, New Mexico, this April. In order to control fugitive dust from surface operations such as construction in the dry, dusty western U.S., the students took the waste product vegetable oil from deep frying operations and converted it to glycerin, which is an inert material ideal for spraying over large areas to control dust. The process creates a byproduct, biodiesel, which could be used to fuel the trucks used to deliver the glycerin to the sites requiring dust control. The team, which shared the award with the University of Manitoba, won \$1,250 and other prizes. 2005 marked the seventh consecutive year that the Russ College has sent teams to the contest.

Fifth time's a charm

Elizabeth Cellar, B.S.Ch.E. '05, took first place in the research paper competition at the 2005 American Institute of Chemical Engineers (AIChE) North Central Regional Student Conference, hosted by Western Michigan University in Kalamazoo, Michigan, April 1–3, 2005. Cellar's paper, "Feasibility of Electrolyzing Ammonia Effluents for the Production of Hydrogen," represented work performed under the direction of Dr. Gerri Botte. This marks the fifth consecutive year that a Russ College chemical engineering student placed first or second in the regional conference.

Civil engineering student organization honored

The Ohio University student chapter of the American Society for Civil Engineers (ASCE) received a letter of honorable mention for its outstanding activities in 2004.

Best bid of the bunch

The Ohio University Estimating Team brought home the bid at the 2005 Ohio Contractors Association Heavy Highway Estimating Competition in Columbus, Ohio, February 25–26, 2005. Each year, student teams from 10 Ohio universities receive plans and specifications, a partially completed bid worksheet, and labor and equipment rates for a challenging project such as bridge rehabilitation using advanced methods. Teams must price individual items of work, schedule activities and logistics, and answer questions drawn from the contract documents before presenting a completed bid. This year, the team from the Russ College—which has consistently placed in the top five for the last three years—came in closest to the real bid.

Engineers, start your engines!

In its first year of competing in the April 2005 Micro-Truck Baja Design Competition, the Russ College student chapter of the Society of Automotive Engineers (SAE) won first place in design and engineering, and second place overall in the stock modified class. The competition, sponsored by the SAE Detroit chapter and held at the SAE World Congress, challenges students to conceive of, design, fabricate, and test their own designs.



Society of Automotive Engineers student chapter president Jesse Megenhardt, industrial technology senior, tests the team's micro baja truck on the downward incline, one of the most challenging portions of the track.

Student civil engineers establish national honorary

This spring, civil engineering students established the 129th chapter of Chi Epsilon, the national civil engineering honor society. Thirteen undergraduate students, four alumni, and one faculty member were initiated as charter members in May. Each initiate was invited to become a member of Chi Epsilon because of his or her outstanding academic achievements.



The Ohio University Estimating Team (left to right): Phil Lash, B.S.C.E. '05; and senior civil engineering majors Robert Heady, Daniel Shonk, Kristopher Ruggles, Robert Phillips, and Donald Rose.

Pie in the sky

Aviation sophomore Daniel Jones was named team manager for Stars of Tomorrow, a program designed to mentor and train future national and world aerobatic champions. Jones was responsible for logistics and operations of the stars at four major air shows in 2005.



Aviation sophomore Daniel Jones in the cockpit of one of the aviation program's new Piper Warrior III training aircraft.