

## Wildcat Wind Power Team



### Team leaders

Lawryn Edmonds	President
Lee Evans	Vice President
Jake Meyer	Secretary
Caitlin Ingham	Treasurer
Broden Bowell	EE Team Lead
Alex Dzewaltowski	ME Team Lead

### Faculty advisers

Ruth Douglas Miller, ECE associate professor  
Warren White, MNE associate professor

**Second place in 2017  
Technical Challenge  
of the Collegiate Wind  
Competition**



K-State's Wildcat Wind Power Team stormed the competition and came away with second place in the 2017 Technical Challenge of the Collegiate Wind Competition.

The April 20-22 event at the National Wind Technology Center near Boulder, Colorado, featured teams from 10 of the universities that participated in the U.S. Department of Energy's 2016 Collegiate Wind Competition, including K-State who placed fifth last year.

For the technical challenge, teams were focused on testing a small-scale wind turbine in a wind tunnel with the additional challenge of

testing a turbine in yawed inflow. To participate, teams had to design and build a turbine that is able to yaw, which allows the turbine to adjust to changing wind directions; that is safe, reliable and effective; and that uses sound electrical, mechanical and aerodynamic practices. The turbine also had to feature a load system that could match the power being generated.

The team prepared for the challenge by building and improving a wind tunnel for testing its turbine, and developing a computer-controlled data acquisition system. The mechanical engineering

students tried new techniques for blade-building, and the electrical engineering students enhanced electronics and controls, said Ruth Douglas Miller, associate professor of electrical and computer engineering. Douglas Miller and Warren White, associate professor of mechanical and nuclear engineering, are faculty advisers to the team.

The second-place finish provides great momentum, White and Douglas Miller said, as K-State has been selected to participate in the 2018 Collegiate Wind Competition, May 7-10, 2018.