Aerospace Engineering Department

Higgins Labs 218

8:20 am

Design, Fabrication, and Testing of a Multi-Domain Autonomous Aerial-Submersible Vehicle

Matteo Mazzenga, Nicholas Steenbruggen, Christian North, Emily Herrera, Julia Kunesh

Advisor: Prof. Michael Demetriou

8:40 am

Performance Analysis of the North American Aviation P-51 Mustang

Dylan Wagner, Zachary Roethlein, Henry Wright, Grace Cink, Anastasia Siryk, Jaden Gitlow, Arjun Ramakrishnan, Caitlin Veltrup

Advisor: Prof. John Blandino

9:00 am

Fixed-Wing VTOL Aircraft Design Project

Joshua Cole, Adam Hanna, Colby O'Connell, Tyler Sirot, Joshua Klee, Michael Troiano, Jan Eshun, Juliana Ricci

Advisor: Prof. Ameya Jagtap

9:20 am

Design of Morph Wings with Tunable Properties for Ultralight Aircrafts

Thomas McGraw, Finn Smith, Brian Chen, Mason Forcier, Andrew Randall, Kaylee Braham-Rivera, Emma Nagy, Kent Simmons

Advisor: Prof. Zhangxian Yuan

9:40 am

Aircraft Design for the 2026 AIAA DBF Competition

Garrett Bolan, Zachary Zoladz, Rachel May, Ava Montovani, Ryan Smith, Othman Adel Dan-Othman, Andrew Bisi**g**

Advisors: Prof. Jielong Cai, Prof. David Olinger

10:10 am

Design of a Low-Cost Cruise Missile and the Design, Assembly, and Testing of a Rocket Motor Thrust Stand

Aaron Walter, Spencer Smith, Emily Johnson, Peter Roth, Catalina Mudgett, Zachary Zambardi, Nicolas Pulgar Brito, Stephen Sequira

Advisors: Prof. Zachary Taillefer, Prof. Jielong Cai, Prof. Raghvendra Cowlagi

10:30 am

Design of a CubeSat for Measuring and Monitoring of Aerosols in the Atmosphere

Sean Lukas, Ryan Hannigan, Edward Ribeiro, Kate Lindsay, Asher Burstein, Nicholas Shannon, Joshua Bemis, Victor Luquin

Advisor: Prof. Zachary Taillefer

10:50 am

Small Spacecraft Explores Neptune Without RPS

Sean Okamoto, Mukundan Srivatsa, Jacob Donovan, Ben Peters, Brady Fox, Deanna Polosino, Estefania Contreras Rivas, Alexander Wong

Advisor: Prof. Ye Lu

11:10 am

Evaluation of the High-Temperature Dynamic Loading Response of Aerospace Materials

Alexander Mann, Hew Dowd, Zachary Safford

Advisor: Prof. Nikhil Karanjgaokar

11:40 am

Experimental Evaluation and Demonstration of Ionic Wind Propulsion on a Semi-Rigid Airship

Charles Barnett, Nathan Barry, Christopher Manxhari, Garv Patel, Kolya Cochran, Dani Masom. Drew Howard. Klejvi Sulaj

Advisors: Prof. Zachary Taillefer, Prof. Michael Demetriou

12:00 pm

Evaluation of Mechanical Properties of TBCs for Jet Engines

Jaya Bhatt, Sky Wu, Nikolaos Gerakaris, Noah Ashnaswami

Advisor: Prof. Nikhil Karanjgaokar

12:20 pm

Design of a Fan Array Wind Tunnel for Drone Flight Tests

Marley Roy, Christopher Fletcher, Andreas Muzila, Alba Munoz Henriquez, Emilia Miller, Olivia Hollenbeck

Advisor: Prof. David Olinger

12:40 pm

Development of a Low-Cost, High-Precision Two-Stage Airdrop Model

William Kiley, Tanner Ferguson, Paige Rust, William Scheirey

Advisor: Prof. Raghvendra Cowlagi