Aerospace Engineering: Ph.D. Dissertation Topics

2021 Dissertation Titles

- Modeling and Analysis of Propulsion Systems and Components for Electrified Commercial Aircraft, Principal Investigator (P.I): Alejandra Uranga, Assistant Professor

2020 Dissertation Titles

- Biomimetics and Bio-inspiration for Moderate Reynolds Number Airfoils and Aircraft, P.I: Geoff Spedding, Professor
- Design and testing of anisotropic, porous substrates for passive turbulence control, P.I: Mitul Luhar, Assistant Professor
- Development and Characterization of Transparent Metal/Ceramic and Ceramic/Ceramic Nanomultilayers, P.I: Andrea Hodge, Professor
- Modeling and analysis of parallel and spatially-evolving wall-bounded shear flows, P.I: Mihailo Jovanovic, Professor

2019 Dissertation Titles

- Large Eddy Simulations of Turbulent Flows Without Use of the Eddy Viscosity Concept, Julian Domaradzki, Professor
- Dynamic Modeling and Simulation of Flapping-Wing Micro Air Vehicles, P.I: Nestor Perez-Arancibia, Assistant Professor
- Biomimetics and Bio-inspiration for Moderate Reynolds Number Airfoils and Aircraft, P.I: Geoff Spedding, Professor
- Development and Characterization of Transparent Metal/Ceramic and Ceramic/Ceramic Nanomultilayers, P.I: Andrea Hodge, Professor
- Design and Testing of Anisotropic, Porous Substrates for Passive Turbulence Control, P.I: Mitul Luhar, Assistant Professor

2018 Dissertation Titles

- Aerodynamics at low Re: Separation, Reattachment, and Control, P.I: Geoffrey Spedding, Professor

2017 Dissertation Titles

- Physics-based and Data-Driven Models for Bio-inspired Flow Sensing and Motion Planning, P.I: Eva Kanso, Professor