

Flight Engineering Internship Opportunities

Primary Responsibilities		Preferred Majors	Available Sites*
Aero-dynamics	<ul style="list-style-type: none"> Perform design and analysis of aerodynamic and aerothermodynamic flight vehicles. Develop new and improve existing technologies, tools and processes to enhance technology readiness, improve vehicle performance, and reduce cycle time and cost. Develop test requirements (e.g., wind tunnel, ground, flight, accident and incident and product support testing of aerodynamics or aeroheating and thermal characteristics) of flight vehicles. 	Aero, Mechanical	Huntsville, Al.; Mesa, Az.; Southern California; Potomac region; Seattle, Wash. area
Propulsion Air Breathing and Rocket	<ul style="list-style-type: none"> Define requirements for propulsion systems, auxiliary power systems, and vehicle fuel and tank systems. Define, coordinate and control the functional and physical interfaces between the propulsion system and the vehicle. Document configurations and designs of propulsion subsystems and components. Estimate or calculate system performance by use of various testing, analysis, modeling and simulation tools. 		
Weight and Mass Properties	<ul style="list-style-type: none"> Develop weight, balance and mass properties data, and define requirements. Provide vehicle or system configuration guidance. Estimate, calculate, measure and verify mass, weight, stiffness and inertias of components, assemblies and completed vehicles or systems. Develop and maintain weight, balance and mass properties accounting systems and generate weight and balance reports. 		
Acoustics	<ul style="list-style-type: none"> Define basic test programs for research in acoustics and apply acoustic analytical techniques to determine suppression system program results and adequacy to meet specified and regulatory noise requirements. Design basic structural, airframe, nacelle and component elements of flight vehicles. 		
Config-uration and Integration	<ul style="list-style-type: none"> Synthesize conceptual and preliminary aerospace and/or aeronautical vehicles and support multidisciplinary design cycle analysis and configuration data. Design vehicle configuration from customer requirements; document trade studies, baseline management and change control. 		
Flight	<ul style="list-style-type: none"> Define and integrate vehicle performance characteristics to meet mission performance requirements, including full product life cycle from initial vehicle concept definition, through design, test, validation and in-service support. 		
Guidance, Navigation and Control	<ul style="list-style-type: none"> Design guidance, navigation and control systems for aircraft, missiles and spacecraft. Evaluate system-level requirements to support flight control and mission or trajectory requirements definition. Translate functional requirements into specifications (hardware or software) and designs; specify and evaluate systems and architectures to comply with company, customer and regulatory requirements. 		