Boeing Engineering Intern Program—Flight Engineering

	Primary Responsibilities	Preferred Majors	Available Sites*
Aerodynamics	▪ 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.	Aerodynamics, Mechanical	Huntsville, AL; Mesa, AZ; Southern California; Potomac region; Seattle, WA, area
Propulsion: Air Breathing and Rocket	▪ 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	▪ 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	▪ 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.		
Configuration and Integration	▪ 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	▪ 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	▪ 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.	Aerodynamics, Mechanical, Electrical, Software	

*Site availability is subject to change.