



Higher Education Support for the Washington Aerospace Industry

Washington's higher education system provides the state's aerospace industry with the skilled employees, managers and business executives needed to maintain world leadership in this critical industry. Our public, private, 2-year, and 4-year institutions produce graduates in key fields such as engineering and engineering technologies, international business and supply chain management, marketing and sales, computer science and software development, and executive leadership. In response to changing needs, Washington's institutions continuously update and improve curricula by working closely with industry employers.

In 2007 alone, Washington's higher education institutions conferred 918 engineering degrees in aerospace-related disciplines (electrical, mechanical, computer, aerospace, industrial, and materials engineering). Washington institutions also offer programs uniquely focused on the industry, including those in the box at right.

Special initiatives to encourage today's youth to become the aerospace workers of tomorrow are being offered by all the state's universities. The Washington NASA Space Grant Consortium brings together Washington's 4-year colleges, community colleges, museums and industrial affiliates in a program aimed at furthering science, mathematics and technology education and aerospace research for students of all ages. Other initiatives include the state's Mathematics, Engineering and Science Achievement program, University of Washington's "Gear Up" program, Seattle University's "Project Lead the Way," etc.

Finally, Washington's higher education institutions support the aerospace industry through research and development in new technologies and production processes. The National Science Foundation reports that Washington's colleges and universities expended \$104 million in engineering R&D in FY2007, and an additional \$62 million in math, computer, and physical sciences R&D. Successful collaborations between the University of Washington and industry have facilitated startup efforts such as Insitu, Inc. (now owned by Boeing), an innovative drone maker that has reshaped the Columbia Gorge economy, and EAS Software, LLC—a company that makes software that optimizes flight paths to save fuel and time. Boeing Commercial Airplanes is a licensee of UW technologies.

Programs Serving the Aerospace Industry

- **University of Washington:** Professional masters programs in Composite Materials and Structures, Mechanical Engineering, Electrical Engineering, and Applied Mathematics; certificate programs in Global Integrated Systems Engineering, Aircraft Composite Materials and Manufacturing, and Modern Aircraft Structures (some offered in Everett); executive educational programs in the business school.
- **Washington State University:** Masters in Material Science Engineering, Certificates in Sustainable Design and Manufacturing and Electrical Systems for Airplanes
- **Central Washington University:** Bachelor's in Supply Chain Management, Flight Technology
- **Seattle University:** Executive Leadership Program/Leadership-Executive MBA
- **Western Washington University:** Undergraduate minor in Materials Science and Engineering.