Industry Guide: Aerospace and Defense

Aerospace and Defense Industry Introduction
The Aerospace and Defense Industry is comprised of companies involved in the design and construction of aircraft as well as the design and construction of equipment used by the armed forces. With the exception of some small, private aircraft companies (like Cessna and Terrafugia), most Aerospace Companies in the United States also have divisions dedicated to supporting the armed forces through designing and building weaponry. Because this industry is closely linked to the US Department of Defense and also works with technologies sensitive to national security, there are citizenship restrictions that need to be considered by people seeking jobs in this sector.

Positions in Aerospace and Defense
An Engineering-heavy Industry
In addition to being an industry focused around engineering, this industry is closely tied to the federal government and the armed forces. Many positions in aerospace and defense are can be found in research divisions of the various branches of armed forces in addition to companies. Employees in this industry generally need to undergo background checks to achieve security clearance.

Courses and Programs Typical for Aerospace and Defense

Not everyone employed in the Aerospace and Defense Industry graduated with one of these majors, but many of the MIT graduates working in the industry come from these courses and programs. If you’re interested in a career in Aerospace and Defense, the best way to learn about it is through experience so consider doing a summer internship.

Major Employers
A Consolidated Industry
The Aerospace and Defense industry is an industry with relatively few employers but those employers are generally very large. This is because of both governmental regulation and the massive expense of doing research in this area. The companies on the right are a few in this industry that hired MIT students in recent years.

These Companies Recruited Interns at MIT
This information comes from the Summer Experience Survey and MIT GEC’s CareerBridge website and is not an exhaustive list and this doesn’t necessarily mean they are hiring interns now. Use this list as a place to start your search for an internship. Be sure to look for others in our Summer Experience Survey.
Research is Great Experience

Valuable Experience can be Gained at MIT
UROPs and graduate research done at MIT can be very helpful to enhance your candidacy for a position in Aerospace and Defense. Many of the companies in this industry partner with labs at MIT on projects and research. Here are a few examples of labs with research sponsored by companies in the Aerospace and Defense Industry. The value in doing research isn’t strictly in the experience either. Many of the people you’ll meet here at MIT are well connected to important players in the major employers.

The Job Search and Interview Process

Security Clearance Can be a Long Process
Many positions in Aerospace and Defense require a Security Clearance from the Federal Government. This will involved a background check and an investigation into your past and can sometimes take months. Aside from this, most positions will require at least two interviews. For Undergraduate and Master’s level positions, it is helpful to be aware and try to search for positions beginning with the annual fall career fair however, usually there are job opportunities year round.

Salary Information
This salary information comes from the 2013 Graduating Student Survey
Average SB Salary $70,000, Range $57,000-$80,000
Average SM Salary $93,800, Range $69,500-$134,000

Additional Resources

Professional Organizations
Aerospace Industries Organization
Association for Unmanned Vehicle Systems International
National Defense Industrial Association

Industry Journals or Trade Publications
National Defense Magazine
Journal of Aviation/Aerospace Education and Research
Aerospace Science and Technology

GECD Services

Drop-in Hours: Monday-Friday 11am-3pm

GECD Staff are available year round for appointments. To make an appointment, login to CareerBridge and select “Make Appointment” from the left side of the welcome page. You can also book by coming in to our office at E39-305 or by calling 617-253-4733

Check out our Calendar for Events and information on Employer Presentations!
http://gecd.mit.edu/calendar