



Job Situation

Aerospace laboratory. Fabrication workshops. Office, meeting rooms. Computer, phone, fax. Close co-operation and teamwork. Reporting to Project Director. Deadline pressures. Long, flexible hours.

Weekly Hours of Work

55

Overtime

As required

Monthly Salary

\$5,600

Student Loan – Owing

Student Loan – Monthly Payment

\$360

Duties

Analyze problems and requirements. Research. Design solutions. Train and supervise staff. Collaborate with other section leaders. Report to project directors. Network with other scientists.

Prospects

Project direction. Research. Consulting. Senior management.

Job Title

Aerospace Design Engineer

National Occupational Classification (NOC)

2131

Job Description

As a section leader of the structural design team, you continue to create and innovate, and are also discovering a talent for team-building and leadership. Once requirements are defined by the project directors, you go into a huddle with your team. Brainstorming is a critical part of the creative process and you encourage everybody to contribute ideas, even if they seem impractical. Another team member may be able to add a slight twist that makes a crazy idea into a brilliant one.

You explain exactly what function the design has to accomplish, what problems are anticipated, and what the most up-to-date research has to offer in the way of materials and processes for you to work with. In structural engineering you are often concerned with making something smaller, lighter, or stronger than a previous design. You jump-start the creative process by starting the team off with some of your own best ideas, giving them tasks which will engage their interest or give them a chance to shine.

Then you start to ride them a bit, using your interpersonal skills to determine whether praise, empathy or challenge will motivate them best. As section leader, keeping your team moving along on schedule, and co-ordinating their work with the efforts of other teams, is your responsibility, and you report frequently to the project directors. Deadline pressures are intense in the commercial sector, and your reputation is always on the line.

You also train and supervise engineers, technicians and technologists in the production of the prototype models, which you really enjoy because it is so hands-on. Somehow you also find time to read reams of printed material including materials specifications from suppliers, reports from other teams, science journals and research papers. You correspond with scientists all over the world on the Internet and occasionally enjoy a chance to attend a seminars in interesting places.