

**FIRST Sponsorship = Excellent Corporate Strategy  
(For Inspiration and Recognition of Science and Technology)**

Rolls-Royce has been involved with education and hands on learning for decades. The Indianapolis facility has been utilizing the “Co-Operative Education” programs from universities to identify, develop and recruit top engineering students for more than 30 years.

Involvement with FIRST has opened up another option for the company to provide opportunities for talented students while also continuing to identify and recruit new employees. Currently, Rolls-Royce is involved with every FIRST team in Indianapolis and provides both funding and engineering volunteers to each one. The High School / FIRST / Rolls-Royce partnership is proving to be very beneficial for everyone involved. Rolls-Royce also helps support engineering students through the opportunity for High School Senior Internships, University level Co-Operative Education Programs and other special training opportunities.

**High School Senior Internships**

Two years ago, the Rolls-Royce Indianapolis facility began a High School Senior Internship (HSSI) program. To be eligible, students have to be seniors in high school, have a minimum 3.5 (4.0 scale) GPA, show a mastery of higher level math and science courses, have a demonstrated interest in engineering and technology (through coursework and extra-curricular activities), and be selected through an interview process. Students work ½ day, every other day or two hours every day, depending on their school’s scheduling plan. Students are assigned to an engineer who has volunteered to be their mentor and supervisor for the work session. They are given real, meaningful projects to work on and are expected to treat the assignment seriously. All interns are required to take an “All Turbine Familiarization Class” to become better informed of the company’s products.

This program is open to all high school students in the Indianapolis area and FIRST students make excellent candidates. Although FIRST involvement is not a requirement for candidates, these students have a clear advantage. They have demonstrated an interest in science and technology. They know how to work on teams and how to work toward a deadline. FIRST students know how to work with adults and solve problems. Through the spring semester of 2005, about 30% of HSSI students have come from FIRST teams.

These HSSI students are not paid during their work assignment, but the experience and learning they receive carries a very high value. Students receive class credit and a semester grade for their experience.

These students are eligible for two specific forms of recognition from Rolls-Royce. They may receive a small scholarship to assist with their college education or they may transition to the Co-Op program.

**Co-Operative Education**

Rolls-Royce continues its’ commitment to the philosophy of co-operative education programs to educate, identify and recruit top students for future employment opportunities. Many of the current co-op students are alumni of the HSSI program. Students that have been High School Senior Interns or part of a FIRST team are eligible to begin as Co-Op students after their senior year in high school instead of needing to wait until after their freshman year of college.

As a ‘Co-Op’ employee, students are assigned to work in different areas of the Rolls-Royce organization. Assignments may be in Indianapolis or other areas of the country. Students alternate between work and school sessions and their responsibilities increase with each assignment. Co-Op positions are paid and salaries increase as students progress through their formal education. There is a close coordination between Rolls-Royce, the students, and the students’ universities during the entire co-op experience.

### **Other Training**

Rolls-Royce has also offered special training courses for some local FIRST students. In the summer of 2004, 16 students had the opportunity to learn “Introduction to Turbines,” “Lean Manufacturing,” “Quality,” and “Basics of Blueprint Reading.” Six other students used their 2005 Spring Break to participate in a hands-on small gas turbine familiarization and maintenance course. More classes are expected for the summer of 2005.

Rolls-Royce is also a supporter of the “Women In Engineering” Summer Camp held each year at the University of Dayton. Several students attend each year on Rolls-Royce scholarships.

### **Full Time Employment**

Rolls-Royce has been involved with FIRST since 1999, and the alumni from those early years are just finishing their university study and moving onto the workforce. At least three alumni from sponsored FIRST teams are now full time employees. The goal is to continue to increase this number as students transition from FIRST to Senior Intern to Co-Op Student to their careers.

### **Summary**

At a time when enrollment and graduation from engineering colleges and universities is considerably below the required needs, FIRST programs are generating an increased interest from high school students.

For companies like Rolls-Royce that absolutely depend on recruiting and retaining top engineering talent to remain competitive, support of FIRST just makes sense. It is great for the schools and the communities where we work and live, it helps maintain a positive corporate image in every school that is involved, and it allows us to provide opportunities for talented young people to begin to experience the exciting world of engineering and technology while they are still in high school. Through the HSSI and Co-Operative education programs, we allow these students to continue to grow and learn in a dynamic, world-class work environment while they complete their university level education.

Rolls-Royce takes great pride and satisfaction in our involvement with FIRST and other development programs. While one of our goals is that many of these students will want to become “Rolls-Royce Engineers,” we also know that the students we help develop today will be making our world a better place tomorrow, regardless of where their careers take them.

### **More Information**

For more information about Rolls-Royce and FIRST, contact Chris Fultz, FIRST Robotics Coordinator for the Engineering Education Committee at Rolls-Royce, at [Christopher.B.Fultz@rolls-royce.com](mailto:Christopher.B.Fultz@rolls-royce.com).

*Rolls-Royce is a leader in the world-wide gas-turbine market. The company's products operate world-wide, in civil, defense, marine and energy markets. The company employs over 35,000 people, including 8,000 in North America. There are 15 North American facilities including Indianapolis, IN where the company manufactures the AE 1107, AE 2100, AE 3007, T56 and Model 250 engines.*

*Rolls-Royce is a proud sponsor of FIRST Teams 234, 393, 829, 868, 1018, 1024 and 1529.*