

Blast Mechanical Engineering

Who Is **BakerRisk**?

BakerRisk began as our founder's retirement project and has grown to become one of the industry's leading providers of risk management solutions. With offices in the U.S., U.K., UAE, and Canada, BakerRisk is globally recognized, employee-owned risk management company providing hazard mitigation services in 75+ countries. Find out how our unique blend of in-house expertise, full-scale testing capabilities, and state-of-the-art tools helped us become who we are today.



Testimonials

"The most important thing I learned at BakerRisk is safety. I learned how to ensure I work safely and efficiently when performing non-routine tasks that have a high level of injury and in my daily life."

— Texas A&M student

"Oftentimes, real-world engineering is not as intricate or elegant as one would believe. In many cases decisions boil down to this: A client would be expected to consider the safety of its employees, as should us - the consultant. It's not always the easiest and least expensive route."

— UT Austin student



Co-op Program - Blast Effects

Co-op students receive hourly compensation and paid holidays. They are eligible for 401k, if age 21+; and may be eligible for flexible work schedules.



Opportunities for

- BS - Juniors and Seniors (some exceptions may be made for Sophomores).
- Masters and PhD candidates.



Experience gained

- Highly technical work as well as manual labor at the test site.
- Design, build, and execution of large-scale vapor cloud explosion testing.
 - Mathematical models to make test predictions.
 - Use of power tools and the like to construct test articles and modify test rigs.
 - Deployment of and troubleshooting instrumentation (pressure transducers, accelerometers, etc.) to acquire test data.
 - Deployment and operation of high-speed cameras (3000 fps) and drone operation.
 - Process test data to make conclusions about test results.
 - Tests include both parametric studies as well as recreations of catastrophic events for investigative purposes.
- Assist the Process Safety and Structures groups with other test programs.
- Assist engineers in performing literature reviews and data input for computer modeling.
- Develop, demonstrate, and present an 8-month, individually assigned project aimed to fill a need specified by the engineering team; work with a dedicated mentor engineer.
- Freedom to pursue personal interests that align with company projects and goals.
- Build relationships with fellow Co-op students as well as the engineers within the Blast Effects group.



Schedule

- 8 months, primarily at Box Canyon Test Facility.
- Trips to the test site are on a weekly basis, departing Monday morning and returning Thursday evening.
- Outdoor manual labor.
- Small, free gym located onsite.
- Weekly meetings with Co-op supervisor to check-in on workload and have a chance to ask for support.



Why it's great

- One-on-one mentorship with a dedicated engineer.
- No busy work, i.e. the work done by our Co-ops MATTERS.
- The end goal is that the Co-ops gain the knowledge to independently run a vapor cloud explosion test by the end of their 8-month term.

Blast - 2024 Career Opportunities

- Blast Effects Engineering Student Co-ops
- Entry Level Blast Effects Consultants



Baker Engineering and Risk Consultants, Inc.

San Antonio | Houston | Los Angeles | Chicago | Toronto, CA | Chester, UK | UAE