

Closing the gap between industry needs and engineering education

Iron Range Engineering-Bell is a work-based way for junior and senior engineering students to complete a bachelor's degree from Minnesota State University, while learning on the job. Students in this program first attend the Bell Academy (in-person or virtually) where they gain a strong professional, technical, and design-based skillset. After the Bell Academy, students spend two years working for companies as engineering co-ops/interns around the world.

Benefits, Expectations, and Outcomes

<u>Providing Value:</u> Bell student engineers are capable of providing tremendous value to employers. They excel in skills such as project management, solving technical and open-ended problems, giving presentations, design work, utilizing modern tools, verbal and written communication, among others.

Revolutionary learning: Bell student engineers learn through innovative strategies and arrive for their first day of work ready to contribute as an engineer.

<u>Access to Technical Networks:</u> Iron Range Engineering-Bell employs Ph.D. professors and staff engineers with industry experience who act as liaisons between the student engineer and industry partners. The program networks reach beyond industry into research and academia.

Employer Time Obligations: Employers aren't required to provide any additional effort to meet educational requirements. Usually, the learning coach reaches out to the supervisor a few times per semester for feedback on the student.

Expected Co-op/Intern Outcomes: It is expected that student engineers complete engineering work during the co-op/intern experience. This is a requirement of the curriculum.

Engineers: Iron Range Engineering- Bell fosters all types of engineers including mechanical, electrical, computer, software, chemical, civil, aeronautical, among others.

How do students take classes?

Bell's hybrid courses offer a mixture of remote delivery, faculty-to-student learning conversation, and student to student collaborations. What is the duration of a typical co-op/intern relationship?

Between 6–12 months (time period is flexible)

Weekly Hours Spent by Student Engineers



How much does a student co-op/ intern typically make?

Between \$20-\$25 per hour (some employers offer housing or housing allowance in addition)

Award Winning Curriculum 2017 ABET Innovation Award Winner



Engineering Accreditation Commission

https://www.abet.org/awards/abet-innovation-award/

MIT Report 2018: "Emerging Leader" in Engineering Education



https://jwel.mit.edu/assets/document/global-state-art-engineering-education





Closing the gap between industry needs and engineering education

Interested in Hiring Bell Engineers?

We Make it Easy to Connect with Students!

Our goal is to empower students to be industry-ready and feel that they have earned their place in their roles. We try to provide students many opportunities to connect with companies and industry professionals to communicate their skills, receive job offers, and add tremendous value in their positions!

Here are some ways that we connect you with our amazing engineers!

<u>Career Fairs:</u> Each semester, Bell hosts a virtual career fair to connect students and professionals. Companies from all over the world attend and meet with students one-on-one to discuss the engineering opportunities at their companies and how the student engineer could fit in. If you are interested in participating in these events, please email us at bellprogram@ire.minnstate.edu to get added to the mailing list and find out when the next event will be hosted!

<u>Flex-Career Fair Model:</u> Are you trying to fill immediate opportunities and want to meet a talented pool of candidates? Why wait for the Spring and Fall career fairs?! Bell offers a "Flex-Career Fair" model that allows you to join our students in a Zoom meeting, or web meeting platform of your choice, to speak with our students one-on-one or in groups, share a presentation about your company and invite students to connect, or both!

Learn more and sign up here: https://www.ire.minnstate.edu/virtual-career-fair-flex-model.html

<u>Internal Job Board</u>: Are you interested in hiring Bell Engineers but can't fit either career fair model into your schedule? You can share your job posting with <u>bellprogram@ire.minnstate.edu</u> and we will share it on our internal, student-facing job board! We can either collect and send you a packet of documents from a pool of candidates, or we can instruct them to apply directly to the position through your company's website!

More Ways to Connect

If you want to get involved with Bell Engineers, but are not currently hiring in your company, please reach out to bellprogram@ire.minnstate.edu to find out how you can add value to Bell Engineers' education by sponsoring projects, hosting workshops or presentations, or simply networking with students, faculty, and staff!

