**ESTIMATED TOTAL COSTS:** $11,986.00*

*estimate based on 2017-18 academic school year

**SCHOLARSHIPS**

The Itasca Community College Foundation supports students by awarding a variety of scholarships to help ease the financial burden of earning a degree. Scholarships are available to both new and returning students and can range from $500 to $3,500.

For the 2017-18 school year, the ICC Foundation awarded 150 scholarships to 100 students at a value of $125,000; many of these scholarships were earned by Engineering students! Each year, ICC awards a higher percentage of gift aid than other public/for-profit Minnesota schools.

**WHAT DO THE GRADUATES SAY**

ICC Engineering is proud to be the first important step in our student’s engineering education. Itasca’s Engineering students transfer to be successful at high caliber university programs, secure quality internships, and once completing their bachelor’s degrees, secure jobs among many top companies.

The ICC Alumni Association was organized to promote Itasca Community College and its relationship with ICC alumni. Check out what some of Itasca’s Engineering Program alumni have to say.

ICG provided me with the tools to learn how to learn. The faculty at ICC is one-of-a-kind; these people taught me the fundamentals of engineering while also instilling the importance of volunteer work, being a community member, steps towards becoming a professional, and learning how to stand on my own two feet.

- Ann  Currently Employed:  Enbridge  Title:  Rotational Engineer

ICG was always focused on the individual. That made me as a student feel valued and the faculty were there to help me succeed. Everything from setting up classes for a seamless transfer to supporting all our various projects; IGC does a great job of helping to build a great foundation. Overall, IGC helped me be confident in my skills and not shy away from challenges. People are always impressed with the experiences I had during my first two years of school.

- Ryan  Currently Employed:  Puget  Title:  Associate Sustainability Engineer

I chose ICC because I knew I’d get practical experience in addition to theory. And I was right — after I transferred to Michigan Tech and found myself much better prepared to lead labs and projects than the other students in my classes. The combination of practical experience and a solid understanding of the basic concepts in my first two years served as the perfect base on which to build additional theory and experience in my advanced classes at MTU.

- Maria  Currently Employed:  3M  Title:  Advanced Systems Engineer

**Contact the Engineering Department:**

website: www.itascacc.edu/engineering

phone: 218-322-2370

Itasca Community College is an equal opportunity employer and educator.
ENGINEERING AT ITASCA COMMUNITY COLLEGE

ICC Engineering is the best comprehensive two-year Engineering Program in the state of Minnesota. Students who complete the ICC Engineering Program are better prepared for success at their transfer university and ultimately for their professional careers than those who opt for a more traditional Engineering education. The backbone of the program is a series of four semester-long courses called the Engineering Design Sequence. These courses serve to develop the engineer’s technical ability, creativity in design, and professionalism through active learning, real-world projects, professional development, and living-learning communities.

ACTIVE LEARNING
Students in the Engineering Program will participate in a variety of project-based and problem-based learning experiences (PBL). The PBL curriculum utilizes student-centered experiences guided by faculty through hands-on activities. Project teamwork skills are developed and practiced throughout the engineering program. These experiences best prepare students for their transferring institution and subsequent experiences in industry.
- Trashcan design and fabrication
- RC Cars
- Custom-made backpacks
- Rapid prototyping with 3D printer and laser engraver
- Digital sensor design
- Stress-strain testing
- Scientific lab design, implementation, and data analysis

REAL-WORLD PROJECTS
Engineering is utilizing scientific knowledge to create custom solutions to problems. Students in the Engineering Design Sequence will work with stakeholders on campus and in the community to solve real-world problems. On a given project, students and instructors work collaboratively to create solutions to a variety of problems. Past project examples include:
- Campus disc golf course
- Range Engineering Council’s STEM Showcase activities
- Engineering Day activities
- Elementary Service Learning projects
- Batting cage redesign
- Outdoor ice rink design
- Classroom space utilization study
- Room schedule display device
- Aquatic invasive species prevention and removal
- Campus lighting
- Ladder fall cages for OSHA compliance
- Teaching demonstration materials

PROFESSIONAL DEVELOPMENT
ICC Engineering students will learn to become high-quality college students and successful professionals through the Engineering Design Sequence. Students will develop their time-management, teamwork, and communication skills. They will begin to navigate their career pathway including an emphasis on their ethical responsibility and obligation as an engineer. Students will enhance their professional expertise by developing resumes, cover letters, and interviewing skills through a series of seminars, activities, and feedback from industry professionals.

LIVING-LEARNING COMMUNITY
Students at Itasca have the opportunity to live and learn in the same environment with other engineering students. With 24-hour access to the Weniger Hall classrooms, students will work on projects, recreate, study, and relax together on a regular basis.

Student activities are a big part of the living-learning community at ICC Engineering. These activities allow students to build a network of friends and future colleagues. Activities include:
- Engineering design projects
- Engineering basketball league
- Concealing, canning, and hiking trips
- PT (3.14 mile) run/walk and pie social
- Transfer University trips and visits
- Engineering industry tours
- Giants Ridge ski/snowboard trip
- SWE (Society of Women Engineers) activities
- Engineering Club activities
- BBQs and student dinners

The Fabrication Labs are located in Weniger and Davies Halls. These labs support high-tech woodworking and metalworking equipment for prototyping and finished project needs. Lab management and student work study positions help to foster safety and successful project completion in the labs. Labs include:
- 3D rapid prototyping machines
- Laser cutter & etching machine
- Vinyl cutter
- 3D scanner
- Sewing machines
- CNC machines
- Woodworking equipment
- Metalworking equipment
- Welding and plasma cutter equipment

TRANSFER AGREEMENTS
The ICC Engineering Program maintains transfer agreements with many surrounding universities. This allows students to seamlessly transfer from the ICC Engineering Program to their preferred university and complete a bachelor’s degree. Some of the main universities that ICC Engineering students transfer to include:
- Bemidji State University
- Iron Range Engineering
- Michigan Technological University
- Minnesota State University, Mankato
- North Dakota State University
- St. Cloud State University
- University Of Minnesota, Duluth
- University Of Minnesota, Twin Cities
- University Of North Dakota
- University Of Wisconsin, Madison
- University Of Wisconsin, Platteville
- University Of Wisconsin, Stout

While ICC maintains articulation agreements with the above universities, students also transfer to many other institutions across the US with positive results.

Engineering students on Denmark Exchange Program