

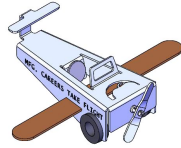
# 2019 Bridges Career Exploration Day

## A Summary of Career Cluster Activities



### Manufacturing

- Learn about the manufacturing process by visiting various displays to build a miniature replica airplane. Enter to win a Microsoft Surface Go or a \$20 gift card.
  - *Design*: featuring the HoloLens (virtual reality glasses used in designing & engineering new products)
  - *Sheet metal cutting & forming*: the body
  - *Manuf: Women in STEM*: wings
  - *Stamping & Assembly*: propeller
  - *Rubber molding*: tires
  - *Injection Molding*: seat
  - *3D Printing/Design Engineering*: windshield
  - *Wood manufacturing*: stand
- View a special exhibit about women inventors. Meet successful women in manufacturing and participate in hands-on activities
- See a welding demonstration or participate on a virtual welding simulator
- Use CNC Machining technology to make the parts of a fidget spinner to assemble and take home.
- Meet Baxter, a sophisticated pick-n-place robot, and see how this technology is used in advanced manufacturing.
- Watch demonstrations in robotics technology, programming and integration used in manufacturing.
- Practice welding (in the CLC Welding Lab) on metal cut-outs of the state of Minnesota.
- See robotics in action as a robotic arm serves a piece of candy.
- Answer trivia questions for a chance to spin the wheel and win a prize



### Business & Finance

- Explore the world of money with financial representatives.
- Learn how to detect counterfeit currency
- Practice skills to apply for a loan
- Learn about credit reports and the importance of your credit score
- Explore opportunities in real estate
- Discover how careers like sales, marketing and human resources are used in all businesses.
- Earn real cash for visiting careers areas.

### Hospitality

- Learn about careers available in hospitality.
- Talk with top chefs about culinary careers.
- See live food demos and enjoy food samples.
- Learn about behind-the-scenes jobs in security and maintenance.
- Gain info on educational opportunities, including ProStart and a special bootcamp
- Explore special event planning.
- Play a game to learn about hotel management and have a chance to win a prize.

### Public Safety

- Talk with emergency medical technicians and paramedics
- Watch exciting demonstrations on fire, tasers & safety
- Learn about bomb squad training tactics
- Talk to 911 dispatchers
- Learn from Correction Officers and careers and internships
- Explore a crime scene preservation exhibit
- Understand more about the use of drones and body cams
- Talk to someone in the military

### Engineering

- Learn about the future face of engineering
- Use a virtual sandbox to survey for building roads
- Explore how roads are built
- Use software to plan community water systems
- Play engineering jeopardy
- Use robots for explosive ordinance
- See UAVs (unmanned ariel vehicle)

### Education

- Participate in a "Picture Yourself Working with Children" activity (*by library*)
- Become inspired to teach! Learn about how to grow into an effective educator. (*south hallway*)

### Construction & Trades

- See demonstrations and interactive displays from line workers, carpenters, electricians, HVAC and plumbing professionals.
- Watch how to create 3 dimensional animated drawings
- See demonstrations on sheet metal bending.
- Learn about all the different tools used in the trades and construction fields
- Explore the World of Plumbing through a PEX Expansion Activity

## Transportation & Aviation Automotive & Heavy Equipment Marine & Powersports

- Sit inside pieces of heavy construction equipment with all the newest technology.
- Learn what makes a modern computer controlled diesel engine operate.
- Explore how to do engine diagnostics on marine and powersports vehicles.
- Learn how a winter track system on an All Terrain Vehicle (ATV) works.
- Pull dents out of panels with high tech tools.
- Use a paint simulator to compete with others and see how good your first time paint a vehicle is.
- Toss a bean bag through a engine cylinder and watch it fly.
- Use a laptop and new technology to check a car engine's efficiency.
- Balance a tire with a road load attachment.
- Race your friends on the pit stop challenge and learn how to take a tire on and off.
- Use a simulator to drive a back hoe, front-end loader, and a semi-truck.
- Design a boat hull and view a Lund fishing boat.
- Run engine and hydraulic diagnostics for a compact John Deere tractor, mini excavator, and a Harley Davidson motorcycle.

## Agriculture, Food & Natural Resources

- Take a virtual reality tour to experience farm fields (combine harvesting and plowing), processing plants (for milk, cheese and egg), and livestock facilities (swine nursery barns, dairy milking facilities, beef feedlots).
- Try your hand at rendering (coloring) a landscape plan on paper or the computer with a local landscape design professional (room W142) and earn 5 fish pellets to feed the fish or turtles.
- Walk into the indoor backyard (room W142) and make and eat a mini s'more while learning about careers in designing, building and caring for landscapes.
- While you are in W142, try your hand at measuring and designing a landscape plan.
- Remember to visit the Koi pond designed, created and maintained by college landscape students (lower west wing).
- Room W145 is the Local Food Production room, showcasing expanding technologies and methods for growing healthy, sustainable hydroponic and aquaponic tomatoes, lettuce, herbs and other vegetables and fruits all year in Minnesota. Taste sweet and/or spicy micro-greens grown at CLC.
- Tour the CLC greenhouse to see aquaponic tanks filled with fish. Also see the tomatoes and lettuce the fish help to fertilize. Help CLC students plant a variety of plants to be grown for our CLC Gardens. Visit the tropical plants in the greenhouses and pick up a free plant that is scientifically proven (by NASA) to be one of the best plants for clean air.

## Health Sciences

- Visit stations to be registered into a drawing
- See how a hospital room is set up and learn about medical professions
- Talk to a hospital pharmacist
- Learn what is involved in health information services
- Explore laboratory work and learn how it's done
- Understand how you would take care of a postpartum OB patient, long-term care resident or a pediatric patient
- Practice doing vital simulations of heart sounds, bowel sounds and lung sounds
- Give practice injections
- Learn about and experience massage therapy
- Listen to a live baby in uterus and talk to it's mother

## Computer & IT

- CompTIA training in Information Technology, with an emphasis on CyberSecurity
- Participate in a create-your-own-webpage activity. Generate a link so you can "take home" the code to show others.
- All-in-one training within a lab simulated environment
- Practice working with internal computer components.
- Practice how to setup a new computer.
- Practice how to set attributes on files and folders.
- Learn about cyber security: passwords best practice
- Make ethernet cables

## Communication, Art and Design

- Graphics** — Unleash your Super Power with Graphic Design!" Suit-up and reveal your POWER through social media #GDPowerPlay
- Put on a cape and mask and strike a pose
  - Photos will be uploaded to @clcGraphicDesign (Facebook) Like and comment on a photo to be in a drawing for a \$250 scholarship
  - Participate in a "design a tailgate" contest for a change to win another \$250 scholarship
  - See a demonstration about illustrating and animation on tablets.
  - Work with decal graphic applications and watch a live demonstration of graphic wrapping
- Videography** — Join in a Facebook live broadcast
- Communications** — The Brainerd Dispatch covers sports! Test your skills with a newspaper toss.
- Watch live coverage of the competition on Facebook!
  - Learn about careers at the Dispatch.

## Liberal Arts

- Find your super power!
- Take a selfie with a super hero!
- Talk with our heroic Liberal Arts faculty!
- Watch an ASL to music performance (*near theater*)