2020 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 \$25 gift card.



- Design: featuring the HoloLens (virtual reality glasses used in designing & engineering new products)
- o Sheet metal cutting & forming: the body
- o Manuf: Women in STEM: wings
- o Stamping & Assembly: propeller
- o Rubber molding: tires
- o 3D Printing/Design Engineering: windshield
- o Plastic Molding: seat
- 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.
- Practice welding (in the CLC Welding Lab) on metal cut-outs of the state of Minnesota.
- Use CNC Machining technology to make the parts of a fidget spinner to assemble and take home.
- Watch demonstrations in robotics technology, programming and integration used in manufacturing.
- Meet Baxter, a sophisticated pick-n-place robot, and see how this technology is used in advanced manufacturing. Beat Baxter at tic-tac-toe to be entered into a drawing for wireless headphones.
- Answer trivia questions from the spinning wheel and win cash or a cooler.

Engineering

- Use a virtual sandbox to survey for building roads.
- Learn how roads are built.
- Plan community water systems.
- Play engineering jeopardy.
- Use a pull-up bar.
- Watch robots used in explosive ordinance.
- See UAVs (unmanned aerial vehicle).

Education

- Participate in early childhood hands-on learning activities that show how kids learn through play. (multipurpose room)
- Become inspired to teach! Learn about how to grow into an effective educator. (south hallway)

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.
- Play a trivia game to earn prizes.

Hospitality/Culinary

- · Talk with top chefs about culinary careers.
- · See live food demos.
- Play blackjack and learn about casino operations.
- · Come learn about herbs and how to identify them.

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.
- Talk to someone in the military.
- Understand more about the use of drones and body cams.

Construction & Trades

- Explore the variety of careers in construction.
- Visit stations to be registered into a drawing.
- Try plumbing through a PEX expansion activity
- Set up an electrical power grid.
- Play on a construction wall.
- Wire a furnace.
- See demonstrations and interactive displays from line workers, carpenters, electricians, HVAC and plumbing professionals.
- Watch how to create 3 dimensional animated drawings.
- Learn how to bend sheet metal.
- Learn about all the different tools used in the trades and construction fields.
- Test your skills using a hammer and screwdriver.
- Explore managing a construction site.

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.
- Pull dents out of panels with high tech tools.
- Use a painting 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.
- Use a simulator to drive a back hoe, front-end loader, and a semi-truck.
- Run engine and hydraulic diagnostics for a compact John Deere tractor, mini excavator, and a Harley Davidson motorcycle.
- Try out a flight simulator.

Agriculture, Food & Natural Resources

- Learn about career options in Agriculture, Horticulture & Natural Resources while collecting stamps. Trade your stamps in for a "seed bomb."
- Walk into the indoor backyard (room W142) and learn from current students about careers in designing, building and caring for landscapes.
- 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).
- 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
- Meet with natural resource professionals to learn and prepare for careers in the outdoors
- Show off your fishing skills at the MN DNR State Parks "fish pond."

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.
- Explore laboratory work and learn how it's done.
- Understand how you would take care of an OB patient, long-term care resident and a pediatric patient.
- Practice doing vital simulations and listen to sounds from the heart, bowel and lungs
- · Give practice injections.
- Learn about and experience massage therapy.
- Listen to a live baby in uterus and talk to it's mother.
- Learn how to use protective gear.
- See how effective hand washing can be by examining your hands under a special black light.
- Listen to a simulation of a newborn's heartbeat.

Computer & IT

- Participate in a create-your-own-webpage activity. Generate a link so you can "take home" the code to show others.
- Make ethernet cables.
- CompTIA training, with an emphasis on cyber security.
- Learn about cyber security: passwords best practice.

Communication, Art and Design

Graphics — "Disco Down with Design!"

- Celebrate with and boogie down in a disco photo booth! Strike a "Saturday Night Fever" pose while listening to some "Hot Stuff" music.
- Demonstrations of photo editing with graphic changes and locate your uploaded photo @clcgraphicdesign (Facebook). Tag your photo to be entered to win a \$250 scholarship!
- Talk to industry specialist in Vehicle Wrap Design and receive some Cool decals.

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 toss on Facebook while earning about careers at the Dispatch.

Liberal Arts

Visit the Chill Lounge.