



NORTH CENTRAL REGIONAL  
BETTERMENT COALITION



## Tool Kit Part 1

First of all...thank you for helping us to prepare the 10<sup>th</sup> and 11<sup>th</sup> graders from your school that will be chosen to participate in this event.

For several months now, North Central Regional Betterment Coalition (NCRBC) and its partners (including IVCC, Starved Rock Associates for Vocational & Technical Education (SRAVTE), Carus Corporation and NCI Works have been diligently planning the annual presentation of the North Central Illinois Discover Manufacturing Career Expo. The event is aimed at bringing 400 area high school students and top notch area manufacturers together to raise awareness of job and educational opportunities, gain an understanding of the training programs that are available around the area and see presentations from companies in the North Central Illinois region that are doing business around the globe.

Please work to identify \_\_\_ 10<sup>th</sup> and 11th grade students in your school that you believe would benefit from this event. We are asking that you consider students that might not necessarily be currently enrolled in CTE classes. We intend to expose students to “All Aspects of the Industry” which may include such things as safety, health care, business offices, etc. **We are asking that you send a roster of the students that have been selected to attend to the SRAVTE office no later than Wednesday, October 5, 2016.**

Each school is different but you will no doubt need to **send a parent permission slip and photo release home with the students** that have been selected to attend the Expo. Each school should follow their established protocol for this.

We are putting this toolkit together to provide a more meaningful experience for your students when they visit a local Manufacturing company on October 27<sup>th</sup>.

If you have any questions please call Jeanette Maurice or Dwayne Mentgen at SRAVTE...815-220-8195

## **LOGISTICS FOR THE DAY**

Thirteen schools have been invited to attend in this year's event which has been set for Thursday, October 27th from 8:30 – 2:15 PM. Four hundred 10<sup>th</sup> and 11th grade students will be selected to participate in the event.

8:30 – 9:00 Students arrive to designated Tour Sites

10:30 – 11:00 Students depart for IVCC

11:20 – Students arrive to and check in at IVCC

11:30 – 1:25 Students will then rotate through four breakout sessions (one of which will include lunch), where they will see the various labs in the Technology Center, hear about careers in which they have indicated that they have an interest and meet the instructors from those programs.

1:35 – 2:10 Students will hear an address from guest speaker, Larry Keist from LMK Enterprises in Ottawa.

2:15 – Students will return to their schools

# Please complete and return

2016 North Central Illinois Discover Manufacturing Career Expo

October 27, 2016

IVCC Peter Miller Technology Center

Return form to SRAVTE/Area Career Center Director

Dwayne Mentgen

Email: [dmentgen@lphs.net](mailto:dmentgen@lphs.net)

Fax: 815-220-8267

Name of High School:

Number of Students Attending:

Number of Teachers/Chaperones:

Company tour Location: To be assigned

School Contact/Email:

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**EXAMPLE FOR STUDENT SIGN UP**

|                 |             |   |                                |
|-----------------|-------------|---|--------------------------------|
| Student Name    | Grade Level | Career Tracks (Pick all five colors with your top choice being the first choice and your least favorite last)   | Permission to photograph/video |
| Jessica Careers | 11          | <ol style="list-style-type: none"> <li>1. Pink, 2. Blue, 3. Green, 4. Yellow 5. Red</li> <li>2. This is an example rank by color B, Y, G, P, R</li> </ol> | yes                            |

| Student Name | Grade Level | Career Tracks (Pick all five colors with your top choice being the first choice and your least favorite last) | Permission to photograph/video |
|--------------|-------------|---|--------------------------------|
|              |             | <b>Blue, Yellow, Green, Pink, Red</b><br><b>(See descriptions and choices below)</b>                          |                                |
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| CAREER TRACK                                | JOBS   | DESCRIPTION  |
|---|--|--|
| <p><b>Engineering - E</b></p>               | <p>Process Controls/Automation<br/>Mechanical<br/>Electrical</p> | <p>Design and modify manufacturing processes. This may include engineering calculations, robotics, cost analysis, and adherence to regulations and codes.</p> <p><b>Associated IVCC Program(s)/Certificate(s):</b><br/>Associate in Engineering Science, Electronics &amp; Electricians Technology, Computer Aided Engineering &amp; Design</p>                |
| <p><b>Computer Aided Drafting - CAD</b></p> | <p>Product Design<br/>CAD</p>                                    | <p>Design new products and modify existing products, including 3-D printing. Prepare engineering drawings and product mock-ups.</p> <p><b>Associated IVCC Program(s)/Certificate(s):</b><br/>Computer Aided Engineering &amp; Design</p>   |
| <p><b>Manufacturing Management -MM</b></p>  | <p>First-Line Supervisor<br/>Manager</p>                         | <p>Supervise and manage the workers on the production line. Train new and existing workers to do their manufacturing job(s). This also includes managing the workers in all of the other departments.</p> <p><b>Associated IVCC Program(s)/ Certificate(s):</b><br/>Business Administration, Manufacturing Technology and Certified Production Technician.</p> |
| <p><b>Technical - T</b></p>                 | <p>Electrical and Mechanical Maintenance</p>                     | <p>Repair and maintain the manufacturing equipment and facilities, which may include welding repair, electrical &amp; electronics repair, and hydraulic and air system repair.</p> <p><b>Associated IVCC Program(s)/ Certificate(s):</b><br/>Manufacturing Technology, Industrial Maintenance, HVAC and Industrial Electricians</p>                            |

|                                      |   |   |
|--------------------------------------|---|---|
| <b>Production Manufacturing - PM</b> | Certified Production Technician (CPT)<br>Parts Assembly<br>CNC/Machine Operation<br>Quality Control | <p>Hands-on building of the components and finished products. This may include many technical skills like machining, wiring, parts assembly, and equipment operation. Test and evaluate manufactured products to maintain quality. Ensure raw materials meet required quality specifications and document compliance.</p> <p><b>Associated IVCC Program(s)/ Certificate(s):</b> Manufacturing Technology, CNC, Machinist Tool and Die, and Certified Production Technician.</p> |
| <b>Welding - W</b>                   | Welding and Fabrication   | <p>Weld metal parts with variety of welding equipment and processes as specified by layout, welding diagram, or work order. Fabricate, assemble and weld various metal products.</p> <p><b>Associated IVCC Program(s)/ Certificate(s):</b> Welding Construction and Welding Production</p>  |
| <b>Supply Chain Management - SCM</b> | Purchasing, Inventory Control, Shipping and Receiving, Truck Driver                                 | <p>Ensure that all the raw materials are available at the best price and at the correct time so that the products are manufactured efficiently. This also includes properly storing incoming raw materials and shipping finished, outgoing products to customers.</p> <p><b>Associated IVCC Program(s)/ Certificate(s):</b> Associate Degree, Manufacturing Technology and Truck Driver Training.</p>   |
| <b>Information Technology – IT</b>   | PC Repair/Infrastructure<br>Network Administration<br>Computer Networking<br>Programming            | <p>Install and maintain computers, servers, and other associated hardware. Administer and manage software programs and applications. Develop applications as tools for the rest of the company so that they may all perform their work more efficiently.</p> <p><b>Associated IVCC Program(s)/ Certificate(s):</b> Associate Degree, Computer Network Administration.</p>   |



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| <p><b>Business Administration - BA</b></p> | <p>Sales/Marketing<br/>Finance/Accounting</p>                                       | <p>Develop strategies to identify and meet the customer's need with your product(s). This includes research to identify what the customer wants and to develop advertising to explain why they should buy your product. This also includes modifying product design and pricing based on customer feedback to maximize sales.</p> <p><b>Associated IVCC Program(s)/ Certificate(s):</b><br/>Associate Degree, Business Administration, Accounting, Marketing, Graphic Design, and Business Technology.</p> |
| <p><b>Support Functions - SF</b></p>       | <p>Human Resources, Administrative Assistant, Environmental, Health, and Safety</p> | <p>Manage and administer employee hiring, benefits, and union contracts.<br/>Provide a wide range of office services by implementing administrative systems, procedures, and policies, and monitoring administrative projects.<br/>Monitor and administer worker safety and health programs.</p> <p><b>Associated IVCC Program(s)/ Certificate(s):</b><br/>Business Technology and Nursing.</p>  |

| CAREER TRACK                         | DESCRIPTION  |
|--------------------------------------|--|
| <b>Engineering - E</b>               | Process<br>Controls/Automation<br>Mechanical<br>Electrical                               |
| <b>Computer Aided Drafting - CAD</b> | Product Design<br>CAD  |
| <b>Manufacturing Management -MM</b>  | First-Line Supervisor<br>Manager<br><br>Quality Control                                  |
| <b>Technical - T</b>                 | Electrical and Mechanical<br>Maintenance   |
| <b>Production Manufacturing (PM)</b> | Certified Production<br>Technician (CPT)<br>Parts Assembly<br>CNC/Machine Operation      |
| <b>Welding (W)</b>                   | Welding and Fabrication  |
| <b>Materials - M</b>                 | Purchasing, Inventory<br>Control, Shipping and<br>Receiving, Truck Driver                |
| <b>Information Technology – IT</b>   | PC Repair/Infrastructure<br>Network Administration<br>Computer Networking<br>Programming |

|                                     |  |
|-------------------------------------|--|
| <b>Business Administration - BA</b> | Sales/Marketing<br>Finance/Accounting  |
| <b>Support Functions - SF</b>       | Administrative Assistant,<br>Human Resources<br>Environmental, Health, and<br>Safety |