Contact: Beth Campus Phone: 218-755-2206

Email: bcampus@bemidjistate.edu

Minnesota's 360° Receives Approval to Add Programs to its Distance Education

360° Manufacturing and Applied Engineering Center of Excellence led by Bemidji State University is excited to add four new certificate options to the online curriculum

BEMIDJI, Minn. (Nov. 20, 2009) – Manufacturing and Applied Engineering workers and students will see additions to the 360° certificate choices come Spring 2010. 360° is launching four new certificate possibilities online. The programs include: Production Technologies, Machine Technologist, Automation Technologies, and Welding Technology.

"We have received approval of a multi-institutional program that is accessible at all of our college partners," said Karen White, Executive Director of 360° Manufacturing and Applied Engineering Center of Excellence, led by Bemidji State University.

Approval of these programs allows 360° to optimize the teaching expertise and capacity across all partners involved with 360° .

These partners include: Central Lakes College, Minneapolis Community and Technical College, Northland Community and Technical College, Northwest Technical College, Pine Technical College, Riverland Community College, Saint Paul College, and St. Cloud Technical College.

The new certificate options will be available for registration in December and begin in Spring 2010. The new certificates are as follows:

- *Production Technologies* (15 credits) This certificate will provide courses designed to be an introduction to production technologies. Courses will include: technical mathematics, introductory computer skills, print interpretation, manufacturing processes, quality control, maintenance, and safety.
- *Machine Technologist* (30 credits) This certificate will provide courses designed to be an introduction to production technologies and machining technology. Courses will include: technical mathematics, introductory computer skills, print interpretation, manufacturing processes, quality control, maintenance, and safety. Also included in coursework, students will engage in topics of machine tool print reading, machine tool technology theory and lab principles, machining math, introduction to computer numerical control, and geometric dimensioning and tolerancing.
- **Automation Technologies** (30 credits) This certificate will provide courses designed to be an introduction to production technologies and automation technologies. Courses will include: technical mathematics, introductory computer skills, print interpretation, manufacturing processes, quality control, maintenance, and safety.

Students will engage in topics of motor controls, analog circuits, digital electronics, and AC/DC power.

• Welding Technology – (30 credits) This certificate will provide courses designed to be an introduction to production technologies and welding fundamentals. Courses will include: technical mathematics, introductory computer skills, print interpretation, manufacturing processes, quality control, maintenance, and safety. Students will engage in topics of welding print reading and interpreting symbols, following welding procedures, safety, metallurgy and mechanical properties of materials, and hands on experience with specific welding processes including oxyacetylene cutting and welding, shielded metal arc welding, gas metal arc welding, flux arc welding, and gas tungsten arc welding.

Advanced manufacturing continues to be a high demand/high pay industry for the state of Minnesota and these certificates provide marketable skills and knowledge to entry-level employees and a way for these individuals to distinguish themselves from colleagues and advance their careers.

For more information about the new certificate programs offered by 360°, please contact Karen White at 218-755-2208 or email at kwhite@bemidjistate.edu. You can also visit our Web sites at www.360mn.org or www.360distance.org.

###