

KTEC –Automated Manufacturing Instructor

- **Position Type:**
KTEC/Certified Teaching
- **Location:**
Kootenai Technical Education Campus (Rathdrum)

Position Summary:

To develop instructional curriculum and community based instructional opportunities that will facilitate student mastery of the specific skills necessary to successfully use manual and CNC machines in the manufacturing process. Upon completion of the course the instructor is expected to assist the students in gaining employment related to the skills mastered in this course.

Class Summary:

The Automated Manufacturing class gives the student an introduction to the production process that is used to create most everything we use in our daily lives. We take raw material and make several student projects utilizing both manual machinery and CNC machinery. The student will be introduced to basic blueprint reading, working with right triangles, basic SolidWorks 3D modeling, G Code for CNC machines and the Solid Works CAM system. Each student will learn how to operate a manual mill and a manual lathe as well as the horizontal saw and pedestal grinders. Each student will make several projects using one or more machines as well as learning about the safety issues related to each. We have 9 different CNC machines available to us in our shop. We have 1 CNC Router, 5 CNC mills and 3 CNC lathes and we will be learning about programming, setting up and running all of them. The project that garners the most interest is the Electric Guitars that the students make and take home at the end of their senior year. Some students have chosen to make chess sets that they design in SolidWorks, use Mazak conversational programming to establish cutting parameters, set up the parts on a CNC lathe and then run them. Most also make a custom chess board to go along with this project. We also have several 3D printers that the students can use if they get ahead on their projects to make parts created using the SolidWorks 3D modeling software.

Qualifications and Requirements:

- Recent successful employment in the Automated Manufacturing field with a minimum of three years experience.
- Hold or be eligible for a valid Idaho Professional-Technical/Occupational Specialist Teaching Credential as outlined on the Idaho State Division of PTE website:
<http://www.pte.idaho.gov/Certification/Guidelines.html#Industry3>.
- Preferred Solidworks Certified

Performance Responsibilities

1. Develop a curriculum scope and sequence in accordance with suggested state guidelines for Automated Manufacturing.
2. Coordinate with high school counselors in screening prospective students for the program.
3. Cultivate and maintain community based training stations.
4. Develop with employers and the student individualized training programs.
5. Establish follow-up and monitoring procedures for training stations.
6. Establish evaluation criteria for classroom and work stations.
7. Develop and maintain an industry based advisory committee.
8. Develop and maintain leadership training activities as an integral point of the program.
9. Provide daily attendance reports to the KTEC office as requested by the office staff

10. Submit all reports required by the State Division of Professional-Technical education.
11. Serve as a liaison between KTEC and the participating schools.
12. Maintain appropriate school records.
13. Maintain an inventory of all program equipment and materials.
14. Actively participate with building teams in the development of individualized training programs for students with disabilities.
15. Coordinate with the KTEC director in evaluating and modifying program content and effectiveness.
16. Carry out other duties and responsibilities as may be assigned by the KTEC director and/or the KTEC Board of Trustees.

Length of Contract: The period of employment and salary shall be determined annually by the Director and the KTEC Board of Trustees.

Work Schedule: Full time school calendar

Immediate Supervisor: KTEC Director

Background Check: A complete fingerprint background check must be conducted by the Department of Education with final employment based on candidate having a clear record