Please attach/submit additional documents as needed to fully complete each section of the form. See information about Level I Proposals.

I. DEPARTMENT / PROGRAM

Industrial Technology / Precision Machine Technology Certificate of Technical Studies

II. SUMMARY

A Certificate of Technical Studies in Precision Machining Technology will introduce stackable credentials designed with extensive input from community manufacturers to enhance the local labor force. The CTS focuses on introductory knowledge and skills, pre-employment, and the cooperation, communication and critical thinking skills needed for dynamic team interactions. It can lead to entry level employment in the machining industry, to apprenticeship, or to further academic development of the knowledge and technical skills required for employment in industrial machining. Industry recognized credentials from NIMS (National Institute for Metalworking Skills) will be embedded in the CTS.

Community manufacturers will continue to provide input into this program by participating as members of a machining advisory board along with secondary and post-secondary faculty and student members to address topics regarding local workforce development, apprenticeship, and internship opportunities. Advisory board members will partner with Missoula College instructors by serving on skills panels to help determine the types and levels of skills that will be required for graduates to succeed in the advanced manufacturing workforce. The stackable credentials will allow students to achieve levels of competency with easy on-ramps and off-ramps. They also make it easier for incumbent workers to increase their skills.

This program has been created with administrative and financial assistance from the TAACCCT 3 RevUp Montana grant, funded by the U.S. Department of Labor.
IV. ENDORSEMENTS AND APPROVALS

Requestor:
James Mason
Phone / Email: (406) 243-7646  james.mason@umontana.edu

Program Chair:
William Hillman
Other affected Programs: *

Dean:
Shannon O’Brien
Provost’s Office:

* Are affected because of: (a) required courses including prerequisites or corequisites, (b) perceived overlap in content areas, or (c) cross-listing of coursework.

After the Faculty Senate approves the proposal on a consent agenda the Provost’s Office forwards the item for Board of Regents approval at the next possible meeting.

V. TYPE OF LEVEL I PROPOSAL

☐ Retitling existing majors, minors, options, or certificates
☐ Eliminating existing majors, minors, or options. (submit with BOR program termination checklist)
☐ Adding new minors or certificates where there is a major or an option in a major*
☐ Campus Certificates: Adding, retitling, terminating or revising a certificate of 29 or fewer credits
☐ Revising a program* (for minor modifications use the program modification form)
☐ Distance or online delivery of previously authorized degree or certificate program
☐ Adding option within an existing major or degree *
☐ Consolidating existing programs and/or degrees *
☐ Placing a program into moratorium
☐ Withdrawing a program from moratorium
☐ Adding BAS/AA/AS Area of Study

*Must submit with BOR Curriculum Proposal Form
IV. CATALOG LANGUAGE

Attach the current or proposed catalog language with any changes clearly identified.

PROPOSED: The Industrial Machine Technology CTS provides instruction in the theory and operation of mills and lathes and other tools related to the machinist trade, and associated programming. Successful students will earn National Institute for Metalworking Skills (NIMS) certifications as well as the Certificate of Technical Studies.

III. JUSTIFICATION

Growth in the manufacturing industry and the need to replace an aging workforce is expected to provide opportunities for graduates. According to the Montana Department of Labor & Industry, Research and Analysis Bureau, growth in the industry from 2012 – 2022 is predicted to be 18%, or 30 jobs annually. Both state and national projected employment growth exceeds the rate of overall projected employment growth. Local industry demand for trained workers has been confirmed by discussions with Missoula Job Service staff, Missoula Economic Partnership staff, and owners/managers of local machining endeavors.

Manual and CNC machinists work in machinery and machine tool manufacturing, small arms manufacturing, and machine shops. Entry level machinists in Missoula, Montana can earn as much as $16.00 per hour, according to Bureau of Labor Statistics, Occupational Employment Statistics Program. Manual machinists may enter at a lower wage and work their way to journey level competencies as apprentices. Industrial representatives state that with a larger trained workforce, they could drastically increase their output and ability to serve industries that rely on their products, including the oil and gas industry, aerospace, and others.

VI SUBMISSION

Submit the complete Level I proposal to the Provost’s Office for initial review. After all signatures have been obtained, submit original, and an electronic file to the Faculty Senate Office, UH 221, camie.foos@mso.umt.edu

Level 1 proposals also require Board of Regents approval. The appropriate BOR forms must be submitted with this form.