MECHANICAL ENGINEERING TECHNOLOGY (INMT, MCHN)

INMT-1317. Industrial Automation. (3 Credits)
This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Applications of industrial automation systems including identification of system requirements, equipment integration, motors, controllers, and sensors. Coverage of set-up, maintenance, and testing of the automated system. Lab fee.

INMT-1343. Computer Aided Design/Computer Aided Manufacturing. (3 Credits)
(3-2-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Computer-assisted applications in integrating engineering graphics and manufacturing. Emphasis on the conversion of a working drawing using computer aided design/computer aided manufacturing (CAD/CAM) software and related input and output devised translating into machine codes. Lab fee.

MCHN-1320. Precision Tools and Measurement. (3 Credits)
(3-2-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. An introduction to the modern science of dimensional metrology. Emphasis on identification, selection and application of various types of precision instruments associated with the machining trade. Practice of basic layout and piece part measurements while using standard measuring tools. Lab fee.

MCHN-1326. Introduction to Computer Aided Manufacturing. (3 Credits)
(3-2-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. A study of computer-aided manufacturing (CAM) systems. Software is used to develop applications for manufacturing. Emphasis on tool geometry, tool selection and the tool library. Lab fee.

MCHN-1338. Basic Machine Shop I. (3 Credits)
(3-2-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. An introductory course that assists the student in understanding the machinist occupation in industry. The student begins by using basic machine tools such as the lathe, milling machine, drill press, power saw and bench grinder. Machine terminology, theory, math, part layout and bench work using common measuring tools is included. Emphasis is placed on shop safety, housekeeping and preventive maintenance. Lab fee.

MCHN-1380. Machine Tool Technology/Machinist. (3 Credits)
(3-1-20) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Career-related activities encountered in the student's area of specialization through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

MCHN-1480. Coop Education, Machine Tool Technology/Machinist. (4 Credits)
This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Career-related activities encountered in the student?s area of specialization offered through an individualized agreement among the college, employer and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Lab fee.

MCHN-2335. Advanced CNC Machining. (3 Credits)
(3-2-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Advanced CNC operation with an emphasis on programming and operations of machining and turning centers. Lab fee.

MCHN-2341. Advanced Machining I. (3 Credits)
(3-2-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. Advanced lathe and milling operations. Emphasis on advanced cutting operations of the lathe and milling machines, including the use of special tooling, bench assembly and materials identification. Lab fee.

MCHN-2344. Computerized Numerical Control Programming. (3 Credits)
(3-2-4) This course is taken for academic credit. Students will earn an A, B, C, D, F, or W. An introduction to G and M codes (RS274-D) necessary to program Computer Numerically Controlled (CNC) machines. Lab fee.