

**Hagerstown Community College**  
**OFFICIAL MASTER SYLLABUS DOCUMENT**

**COURSE:** EGT 250 – Advanced CNC Programming-3 Credits

**INSTRUCTOR:**

**SEMESTER/YEAR:** Spring 2014

**COURSE DESCRIPTION:**

This laboratory course introduces students to Computer-Aided Manufacturing. Using Esprit software, students will create code to drive CNC milling machines and lathes. Laboratory fee required. Prerequisite: EGT 150 or consent of TCS Division.

Semester offered: Summer.

3 Credits.

**STUDENT LEARNING OUTCOMES:** Upon successful completion of this course the student will be able to:

- Create a wire-frame drawing.
- Create geometry in 2-D and 3-D.
- Create 3-D models, work planes and layers.
- Generate tool-paths using contour, drilling, and pocketing features.
- Understand the U-V-W coordinate systems and work coordinate systems in Esprit.
- Create tools and set tool cutting parameters.
- Select and orient machining stock.

**TOTAL HOURS OF COURSEWORK:** To earn one academic credit at HCC, students are required to complete a minimum of 37.5 clock hours (45 fifty-minute “academic” hours) of coursework per semester. Those hours of coursework may be completed through a combination of hours within the classroom and hours outside the classroom. Certain courses may require more than the 37.5 minimum hours of coursework per credit.

For most classes, students should expect to do at least 2 hours of coursework outside of class for each hour of in-class coursework.

**SERVICES FOR STUDENTS WITH DISABILITIES:** Students may receive reasonable accommodations if they have a diagnosed disability and present appropriate documentation. Students seeking accommodations are required to contact the Disability Support Services (DSS) office as early as possible. Students may contact a DSS staff member for an appointment at [dss@hagerstowncc.edu](mailto:dss@hagerstowncc.edu) or at 240-500-2530.