

STEM Course

COURSE: ADM231

COURSE TITLE: Computer Numeric Control (CNC)

Credits: 3

INSTRUCTOR:

TERM:

DAY(S) AND TIME(S):

LOCATION:

OFFICE HOURS:

OFF. LOCATION:

EMAIL:

TELEPHONE:

COURSE DESCRIPTION: This course introduces students to basic Computer Numeric Control (CNC) Mill and Lathe operation. Concepts to be covered include Pendant operation, basic g and m coding and tool setup. This course prepares students for the National Institute for Metalworking Skills (NIMS) CNC Milling Operator certificate test.

COURSE PREREQUISITE:

STUDENT LEARNING OUTCOMES

Upon successfully completing this course, students will be able to

- 1. Apply blueprint information for manufacturing;
- 2. Operate a CNC Mill and Lathe machines;
- 3. Identify Mill and Lathe Machine parts;
- 4. Demonstrate how to control a CNC machine axis using a manual pulse generator;
- 5. Convert a CAD drawing to a G-code program;
- 6. Program the CNC Milling machine by using G-codes and M-codes

TEXTBOOK & SUPPLEMENTAL MATERIALS

Machine Tool Practices, Prentice Hall; 10th edition Richard, R. Kibbe, Pearson, 2015 ISBN: 978-0132912655

ATTENDANCE

Attendance is mandatory. For your reference, the college policy is generally that a student may fail a course due to lack of attendance if s/he missed more than 6 hours of instructional time for a 3-credit course.

GRADING POLICY

BREAKDOWN OF GRADING:

Assignments: 35%
Tests: 50%
Proficiency Assessment: 15%
Total 100%

The grade scale for this class will be as follows:

93 - 100 = A

90-92.9 = A-

87-89.9 = B+

84-86.9 = B

80-83.9 = B-

76-79.9 = C+

70-75.9 = C

65-69.9 = D

Below 65 = F

CELL PHONE USE POLICY

Cell phones are not allowed during exams.

MANDATORY USE OF HCCC EMAIL ADDRESS

Members of the HCCC community are required to check their official HCCC email address in order to stay current with College and course communications. All college business communication between faculty, students, and staff must be sent via an official HCCC email address. If an employee or student elects to forward or link his/her HCCC email to a separate and private account, that individual remains responsible for all material transmitted to that account. Employees of HCCC shall not be responsible for any material that remains undelivered, due to defects in the private non-HCCC accounts. Failure in the operations of private email accounts shall not be cause for excuse from communications between the student and the employee. Students that encounter difficulty with HCCC email should view the FAQ's section on the Portal.

INCOMPLETE

An INCOMPLETE grade for the course is given under specific conditions when a student, because of serious and unexpected reasons, cannot complete the requirements of the course. For example, if a student did not attend the final because of illness his or her excuse must be verified by a physician. Other absences from other assigned activities must be made up at another appointed time. To arrange for an incomplete grade, the student must see the instructor before

final exam, so proper documentations could established and submitted to Division and The office of Academic Affairs.

DISABILITY SUPPORT SERVICES:

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Students with disabilities who believe that they might need accommodations in this class are encouraged to contact Disability Support Services at (201) 360-4157, as soon as possible to better ensure that such accommodations are implemented in a timely fashion. All disabilities must be documented by a qualified professional such as a Physician, Licensed Learning Disabilities Teacher Consultant (LDTC), Psychiatrist, Psychologist, Psychiatric Nurse, Licensed Social Worker or Licensed Professional Counselor, who is qualified to assess the disability that the student claims to have and make recommendations on accommodations for the student. All information provided to the Disability Support Services Program will be confidential between the program, professors involved with the student and individual student.

ACADEMIC INTEGRITY

Academic Integrity Standards

Academic integrity is central to the pursuit of education. For students at HCCC, this means maintaining the highest ethical standards in completing their academic work. In doing so, students *earn* college credits by their honest efforts. When they are awarded a certificate or degree, they have attained a goal representing genuine achievement and can reflect with pride on their accomplishment. This is what gives college education its essential value.

Violations of the principle of academic integrity include:

- Cheating on exams.
- Reporting false research data or experimental results.
- Allowing other students to copy one's work to submit to instructors.
- Communicating the contents of an exam to other students who will be taking the same test.
- Submitting the same project in more than one course, without discussing this first with instructors.
- Submitting *plagiarized* work. *Plagiarism* is the use of another writer's words or ideas without properly crediting that person. This unacknowledged use may be from published books or articles, the Internet, or another student's work.

Violations of Academic Integrity

When students act dishonestly in meeting their course requirements, they lower the value of education for all students. Students who violate the college's policy on academic integrity are subject to failing grades on exams or projects, or for the entire course. In some cases, serious or repeated instances of academic integrity violations may warrant further disciplinary action.

Detailed information on the College's Academic Integrity policy may be found in the *HCCC Student Handbook*. The handbook also contains useful information for students on completing research projects and avoiding plagiarism.

Hudson County Community College has many supportive services available to help meet your goals. Below are resources available to you:

SECURITY:

Main Campus: 201-360-4080

North Hudson Campus: 201-360-

4777

NATIONAL SUICIDE PREVENTION LIFELINE: 1-800-273-8255

CRISIS TEXT LINE: Text "HELLO" to 741-741

IN AN EMERGENCY, PLEASE CONTACT SECURITY OR 911.

Department	Journal Square Campus	North Hudson Campus
Counseling Services counseling@hccc.edu Advising Services advising@live.hccc.edu	201-360-4150 A Building, 2 nd Floor https://my.hccc.edu/advisement	201-360-4627 1st Floor, Enrollment Center https://my.hccc.edu/advisement
Accessibility Services as@hccc.edu	201-360-4163 A Building, 2 nd Floor https://my.hccc.edu/as	201-360-4163 1st Floor, Enrollment Center https://my.hccc.edu/as
Career Services career@hccc.edu	201-360-4184 A Building, 3 rd Floor https://my.hccc.edu/career-services	201-360-4138 2 nd Floor, Room 204 <u>https://my.hccc.edu/career-services</u>
Food Pantry foodpantry@hccc.edu	201-360-4701 J Building, Lower Level Room 002 <u>my.hccc.edu/hudson-helps</u>	201-360-4709 5 th Floor, Room 513A my.hccc.edu/hudson-helps
Financial Aid financial_aid@hccc.edu	201-360-4200 A Building, 2 nd Floor https://my.hccc.edu/fa	201-360-4214 1st Floor, Enrollment Center https://my.hccc.edu/fa
Information Technology Services itshelp@hccc.edu	201-360-4310 A Building, Lower Level https://my.hccc.edu/its	201-360-4309 3 rd Floor, Room 309 https://my.hccc.edu/its
Library Journal Square librarian@hccc.edu North Hudson librarynhc@hccc.edu	201-360-4360 L Building, 1st Floor http://www.hccclibrary.net/	201-360-4623 3 rd Floor http://www.hccclibrary.net/
Tutoring Center tc@hccc.edu	201-360-4187 L Building, Lower Level https://my.hccc.edu/tutoring	201-360-4779 7 th Floor, Room 704 https://my.hccc.edu/tutoring/
Writing Center wc@hccc.edu	201-360-4370 J Building, Room 204 https://my.hccc.edu/tutoring	201-360-4779 7 th Floor, Room 704 <u>https://my.hccc.edu/tutoring/</u>

Hudson County Community College is committed to the creation of an inclusive and safe learning environment for all students. The Office of Accessibility Services is responsible for determining reasonable accommodations for students who encounter barriers due to disability (conditions can include but are not limited to: mental health, attention-related, learning, cognitive/developmental, vision, hearing, physical or health impacts). When the student completes the request process and reasonable accommodations are determined to be necessary and appropriate, an Accommodation Letter (Letter) will be provided. The student must provide the Letter to each course instructor. This should be done as early in the semester as possible as accommodations are not retroactive.

You can contact Accessibility Services by phone at 201-360-4157, by email at as@hccc.edu; visit their website at https://www.hccc.edu/student-success/personal-support/accessibility-services.html or visit them at 71 Sip Avenue, L010/L011, Jersey City, NJ and all information provided will be kept confidential.

Hudson County Community College (HCCC) fosters a welcoming environment that celebrates and encourages culturally responsive curricula, respects diverse viewpoints, and values discussions without censure or hostility. Our classrooms are strengthened by embracing all student voices and identities. The President's Advisory Council on Diversity, Equity, and Inclusion (PACDEI) encourages students to review DEI resources and initiatives at the following link:

https://myhudson.hccc.edu/teamsites/Pages/pacdei.aspx