

INSTRUCTIONAL PACKAGE

MTT-250

Principles of CNC

Effective Term Summer/2018

INSTRUCTIONAL PACKAGE

PART I: COURSE INFORMATION

Effective Term: Summer 2018

COURSE PREFIX: MTT 250 COURSE TITLE: Principles of CNC

CONTACT HOURS: 5.0 CREDIT HOURS: 3.0

RATIONALE FOR THE COURSE MTT 250 is a required course in the Machine Tool Technology Program. MTT 250 will develop skill sets in the proficient understanding and control of CNC machines and the programs used to control these machines.

COURSE DESCRIPTION: MTT 250 – Principles of CNC

This course is an introduction to the coding used in CNC programming.

PREREQUISITES/CO-REQUISITES: COMPASS Reading 65, COMPASS Writing 31, and COMPASS Pre-Algebra 40 or SAT Critical Reading 380 and SAT Mathematics 400 or ACT English 12, ACT Reading 14, and ACT Math 16

REQUIRED MATERIALS: Textbooks required (CamInstructor) Mastercam 2018 Lathe and 2D Mill. Subject notebook dedicated to CAD/CAM programming. Jump/flash drive dedicated to CAD/CAM programming

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.

BOOKSTORE.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS: Basic writing supplies, computer access on and off campus. You must be able to have access to D2L and check it regularly. I will use this platform to communicate with you regarding classroom conversations, schedule and more. Class cancellation, assignment due dates and class updates will always be posted on D2L.

TECHNICAL REQUIREMENTS: Basic computer skills. PowerPoint will be used.

CLASSROOM ETIQUETTE:

No cell phones, iPads or computers unless instructed to use them for a project in class. You will be asked to leave if you can't abide by these rules, and if you are asked to leave, it will be counted as a half absence.

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

PART II: STUDENT LEARNING OUTCOMES

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

- 1. Define and describe G code programming.
- 2. Identify different types of cycles used in programming.
- 3. Demonstrate ability to program CNC machines safely and effectively.
- 4. Demonstrate the ability to edit programs and adjust tool length offsets to adjust for tolerance variables and size fluctuations for specified applications.

*Students – please refer to the Instructor's Course Information sheet for specific information on assessments and due dates.

PART III: GRADING AND ASSESSMENT

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*

Performance is assessed for each measure as follows:

Unit Quizzes: Accuracy of information

Chapter Assignment Question(s): Accuracy of information

Classroom Engagement/Participation: Demonstrated knowledge and preparation

Final Examination: Accuracy of information

EVALUATION*

Chapter Assignments = 40%Class Projects = 40%Final Exam = 20%Total = 100%

*Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.

GRADING SYSTEM:

State the College's or departmental grading system as delineated in the Catalog. Please note the College adheres to a 10 point grading scale A = 100 - 90, B = 89 - 80, C = 79 - 70, D = 69 - 60, F = 59 and below. You must have your Dean's approval if changes in the scale are made.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop (<u>ACADEMIC CALENDAR</u>). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of eighty percent (80%) of his or her classes in order to be eligible to receive credit for any course. However, due to the varied nature of courses taught at the College, a more rigid attendance policy may be required by individual instructors. At a minimum, a student may be withdrawn from a course(s) after he or she has been absent in excess of ten percent (10%) of the total contact hours for a course. Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



The Student Success and Tutoring Center (SSTC)

The SSTC offers to all students the following **free** resources:

- 1. Academic coaches for most subject areas, Writing Center Support, and college success skills.
- 2. On-line student success and academic support resources.

Visit the SSTC website: <u>Student Success & Tutoring Center</u> and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455. Room locations and Live Chat is available on the SSTC website.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

- 1. **Getting around HGTC**: General information and guidance for enrollment!
- Use the <u>Online Resource Center (ORC)</u> for COMPASS support, technology education, and online tools.
- 3. **Drop-in technology support or scheduled training** in the Center or in class.
- 4. In-person workshops, online tutorials and more services are available.

Visit the WNC website: <u>Wavenet Central</u>. Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Student Testing: (If course is offered in multiple format include this section, delete if only F2F sections are offered.)

Testing in an online/hybrid course may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms

Further more tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through RPNow, our online proctoring service. To find out more about proctoring services, please visit the Online Testing section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

Disability Services

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Jocelyn Williams, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

Statement of Equal Opportunity/Non-Discrimination Statement

Horry Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, gender, national or ethnic origin, age, religion, disability, marital status, veteran status, sexual orientation, gender identity, or pregnancy in educational programs and/or activities.

Title IX Requirements

Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Any student who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking is encouraged to report such incidents to one of the College's Title IX Coordinators.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

Inquiries regarding the non-discrimination policies:	
Student and prospective student inquiries	Employee and applicant inquiries concerning
concerning Section 504, Title II, and Title IX and	Section 504, Title II, and Title IX and their
their application to the College or any student	application to the College may be directed to the
decision may be directed to the Associate Vice	Associate Vice President for Human Resources.
President for Student Affairs.	
Dr. Melissa Batten, AVP Student Affairs	Jacquelyne Snyder, AVP Human Resources
Title IX Coordinator	Section 504, Title II, and Title IX Coordinator
Building 1100, Room 107A, Conway Campus	Building 200, Room 212A, Conway Campus
PO Box 261966, Conway, SC 29528-6066	PO Box 261966, Conway, SC 29528-6066
843-349-5228	843-349-5212
Melissa.Batten@hgtc.edu	Jacquelyne.Snyder@hgtc.edu