

Southern Arkansas University Tech
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www.sautech.edu

Online Course Information Sheet

Course Number: MD2523

Course Title: Automated Manufacturing - CNC

Course Description: This course is an online survey of CNC (computer numerical control) machines. This class will explain operations performed with the help of CNC. The content is to understand what CNC is and how it works. Content covers the basic machines as well as programming for the more experienced user.

Instructor Name: Faith Elliott

Instructor Bio:

Prerequisite: None

Textbook Title: CNC for Industry, Hans B. Kief, Modern Machine Shop, 2000.

Learning Outcomes:

Students will achieve a minimum 70% proficiency on the following course outcomes:

1. Students will become familiar with CNC machines and programming language
2. Students will understand the concepts of NC Machine Tools
3. Students will understand Flexible Automation as it pertains to CNC machines
4. Students will develop critical thinking and problem solving skills within the context of CNC

Teaching Methodology, including description of interaction between student and instructor:

Students will read textbook and other materials and do assignments through the online course. This is a semi-self-paced course. All course work and exams must be completed by posted deadlines. You should pay careful attention to the dates listed in the course calendar for suggested and required deadlines. **IMPORTANT: Refer to the course calendar for coursework deadlines!** Incomplete ("I") grades are not given in this course. The Course User Guide is an official part of the Course Syllabus. Submitting Work: The completed assignments for each unit should be submitted to the instructor using the assignments tool located under the Assignments link on the homepage. Coursework will usually be graded within 24-48 hours.

Methods of Testing:

- Four unit exams @ 200 points each
- Nineteen Quizzes @ 20 points each
- Final Exam 400 points
- 4 Discussion Assignments @ 20 points each
- 4 Unit Assignments @ 20 points each
- Total points possible: 1,740 points

There will be four unit exams and nineteen quizzes. Each quiz may be taken twice. For complete exam information see the Exam link on the course homepage.

The Final Exam is required to be taken at an approved Proctored location. Failure to do so will result in a grade of "0" for this exam. Visit our website at www.sautech.edu for a list of approved sites or see the announcement section of My Blackboard.

Enrollment Procedures:

Non-degree seeking students applying for admission to SAU Tech must submit an application for admission, appropriate placement test scores or, if applicable, official college transcript(s) with proof of Composition I and Intermediate Algebra (having earned a letter grade of "C" or better).

Full-time degree seeking students and part-time degree seeking students applying for financial aid applying for admission to SAU Tech must submit an application for admission, appropriate placement test scores, immunization record (if born after 01/01/1957), high school transcript or GED scores, and official college transcript(s), if applicable. (Note: Part-time students not applying for financial aid do not have to submit immunization record.)

Students are responsible for all tuition and fees at the time of registration. Students must officially drop by written notice or in person in order to reduce their balance owed. If students never attend class, he/she will still be assessed partial tuition and full student processing fees, unless completely he/she completely withdraws during the 100% refund period.

In order for a student to drop a class, he/she must complete a drop form or send written request to his/her advisor. A \$10 add/drop fee is assessed for adds/drops that take place after classes start.

Special Enrollment Issues (specialized software or equipment, access to a particular network, or similar requirements): None.

Special Attendance Requirements (student contact with instructor, proctored examinations, etc.): The final exam must be taken at an approved proctor site.

Access to Learning Resources:

Students will receive all required discussion materials through the Internet, links to texts, and the electronic mail with Blackboard. Students will be required to purchase the course textbook, if applicable, and Learning Resource Center access is encouraged but not required to be successful. Textbooks can be ordered online. The Bookstore number is (870) 574-4510. The Library number is (870) 574-4518.

Other Considerations (writing ability, assignments/projects, time considerations, etc.):

Students will need Internet access, Microsoft Word, Adobe Acrobat Reader, and the ability to send and receive e-mail attachments using the e-mail within Blackboard.

There are computer programs and other things that you will need if you are taking an online course from SAU Tech. To make it easier for you, we have compiled a list of these things for you.

Course Needs

- Microsoft Word – used to complete assignments and submit to instructor
 - Can be accessed via SkyDrive inside your student email account. **FREE**
 - Can be purchased from Wal Mart or other software vendor and will need to be loaded onto your computer
 - There is also a free product that works just as good as the Microsoft Office Suite. You can download it at <http://download.openoffice.fm/free/?pk=26976>.
- Respondus LockDown Browser – used to take exams in Blackboard
 - Cost: Free
 - Can be downloaded to your computer from http://www.sautech.edu/docs/ldb_instructions.pdf
 - *Note: Not compatible with Linux operating system. Must have Windows XP, 2000, ME or 98 operating system for personal computers or OS X 10.3.9 or higher and Safari browser for Macintosh.*
- Adobe Reader 7.0 or higher – used to read files in pdf format
 - Cost: Free

- Can be downloaded to your computer from <http://www.adobe.com/products/acrobat/readstep2.html>
- Adobe Flash Player (7 or higher) – used to view study activities and demonstrations in Learning Strategies course
 - Cost: Free
 - Can be downloaded to your computer from http://www.adobe.com/shockwave/download/download.cgi?P1_Prod_Version=ShockwaveFlash
- Macromedia Shockwave Player 8.5.1 – used for interactive quizzes, animations and activities
 - Cost: Free
 - Can be downloaded to your computer from <http://www.macromedia.com/shockwave/download/download.cgi?>
- Windows Media Player – used to listen play audio files
 - Cost: Free
 - Comes as part of your Windows operating system
- Java – a technology that is required in order for Blackboard to function properly as well as some other programs that SAU Tech uses with its online classes (**Note: Only one version of Java can be running on your computer at a time.**)
 - Cost: Free
 - Can be downloaded to your computer from http://javashoplmsun.com/ECom/docs/Welcome.jsp?StoreId=22&PartDetailId=jre-1.5.0_05-oth-JPR&SiteId=JSC&TransactionId=noreg

Note: Before beginning your online course, you should go ahead and make sure each of these programs listed above are loaded on your computer. In addition to the above programs, the courses listed below will require additional programs as stated.