

Engineering and Information Technologies Division  
Electro-Mechanical Engineering Technology Program Course Syllabus  
Fall 2024 Syllabus

Course Number: **EMET-110**  
Course Title: **Computer Aided Design (CAD)**  
Course Section: **001**  
Semester: **Fall 2024**

Section Format: Face-to-face

Meeting Times and Locations: **Tuesdays and Thursday @ 11:30am – 1:50pm ATLC 445**

Technology Requirements: **Computers with necessary software programs will be provided on campus.**

Special Course Requirements: **N/A**

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Instructor Information

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Instructor: **Curtis Maples**

Office: **Main Building Room 210**

Office Hours: M-F, 8:30 am to 11:00 am. Virtual or in-Person upon request

Telephone and Text: **202-509-4328**

Email: **Curtis.maples@cincinnatiastate.edu**

Email Communication Policy: **Feel free to email me at any time. I generally respond back within 24 hours. Please allow for an extra day if it is on the weekend.**

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Course Description

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Lecture Hours: **11:30am-1:50pm**

Lab Hours: **N/A**

Credit Hours: **3 credit hours**

Catalog Course Description: **A course on fundamentals of computer-aided drafting (CAD) and design for electro-mechanical systems, including techniques for generating accurate engineering drawings and 3D models.**

Course Requirements/Prerequisites: **MAT 096 or MAT 124, or appropriate placement - Must be completed prior to taking this course.**

**Course Corequisites:** *N/A*

**Program Learning Outcomes:**

- 1. The student will demonstrate an appropriate mastery of circuit analysis.*
- 2. The student will demonstrate an appropriate mastery of CAD.*
- 3. The student will demonstrate an appropriate mastery of circuit analysis.*
- 4. The student will demonstrate an appropriate mastery of CAD. The student will demonstrate an ability to identify, analyze, and creatively solve technical and design problems.*
- 5. The student will be able to apply fundamental knowledge to conduct experiments, analyze data, interpret, and apply results to improve processes.*
- 6. The student will demonstrate an appropriate mastery of programmable controllers and motor control systems.*
- 7. The student will demonstrate an appropriate mastery of programmable robots.*
- 8. The student must complete and pass an OSHA 10 General Industry course.*

**Course Learning Outcomes:**

- (1) Apply knowledge, techniques, skills, and modern tools of the discipline to produce accurate engineering drawings and models*
- (2) Apply a knowledge of mathematics, science, engineering, and technology to produce complete drawings and models*
- (3) Demonstrate the ability to communicate technical information through drawings*
- (4) Demonstrate a commitment to quality, timeliness, and continuous improvement*
- (5) Able to apply knowledge, techniques, skills, and modern tools of the discipline to generate 3D models and assembly drawings*

**Program and Institutional Learning Outcomes and Assessment:**

Students in this course should be aware that some assignments might be used for Program or Institutional Outcome Assessment as part of the College's Continuous Improvement process. Papers and assignments will be selected randomly, and information identifying individual students will be removed. Learning Outcomes Assessment is separate and distinct from course level assessment and will have no impact on grades for this class.

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**Course Materials**

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**Required Text(s):**

**Title:** Tools for Design Using AutoCAD 2023 & AutoCAD Inventor 2023

**Authors(s):** Randy Shih

**Publisher:** SDC Publications

**Edition/Format:** Paper

**ISBN:** 978-1-63057-265-5

**Comments:** *Students may choose to purchase another version or year of the book but must consult with the instructor prior to purchasing to ensure that version is still applicable.*

**Other Required Materials:** *A Flash/Thumb Drive is not necessary to have but if students are planning to work on multiple devices (i.e. home computer or laptop along with school computers) it would be good to keep all saved files on portable external memory.*

**Recommended Text(s)** *N/A*

**Title:**

**Authors(s):**

**Publisher:**

**Edition/Format:**

**Comments:**

**Other Recommended Materials:** *N/A*

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### Grading Policy and Criteria

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**Grading Scale:**

Percentage Grading Scale Example

A:	90% or higher
B:	80% to less than 90%
C:	70% to less than 80%
D:	60% to less than 70%
F:	Less than 60%

**Basis for Grade:**

<u>Weighted Example</u>	Lab Assignments	60%
	Autodesk AutoCAD Project	20%
	Autodesk Inventor Project	20%

**Assignment Types:**

- *Lab Assignments*
  - *Each week students will receive a Lab Assignment to complete and turn in the following week of class.*
- *Final Projects*
  - *A final project going over all program topics will be conducted in class.*

**Late/Missed Assignments:**

*Labs are to be submitted on the assigned due date. Late labs will not be accepted unless a valid excuse is provided.*

**Extra Credit:**

*Extra Credit will be provided at the discretion of the instructor.*

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## Class and College Policies

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### **Attendance Policy:**

*Attendance is required for all labs and lectures. Students must attend class and complete one assignment within the first two weeks of the semester to avoid classification of a “no show” student and administrative withdrawal from the course. Please see below for college withdrawal policy.*

### **Absence for Religious Observance**

Students are permitted to request up to three days each semester for an excused absence from class for observance of a religious holiday (or to take part in organized activities conducted under the auspices of a religious or spiritual belief system) that is part of your sincerely held religious beliefs and practices.

You must notify me in writing within fourteen (14) days of the first day of instruction of this course if you plan to be absent for a religious holiday, using the eForm available at [https://web3.cincinnati.state.edu/eforms/eform.aspx?preview=true&form\\_id=2122](https://web3.cincinnati.state.edu/eforms/eform.aspx?preview=true&form_id=2122)

You must talk to me about a process and schedule for making up required work you miss. Additional information about this policy is on the College website (<https://www.cincinnati.state.edu/catalog-academic-policies/religious-observance-policy>).

### **Financial Aid Recipients:**

The following actions have eligibility implications for financial aid recipients: nonattendance, dropping courses, withdrawing from courses, repeating courses, academic progress, and the number of credit hours attempted and completed. You are strongly encouraged to seek financial aid advising throughout the semester if you have any questions about eligibility implications. Call (513) 569-1530 or email [fa@cincinnati.state.edu](mailto:fa@cincinnati.state.edu).

### **No Show Policy:**

The No Show period for Cincinnati State courses extends from the first scheduled day of a course until the last day to drop that course with a 50% refund. See specific dates here: <https://www.cincinnati.state.edu/academic-calendar/> A student who enrolls but does not attend face-to-face class sessions or does not participate in online classes during the No Show period and does not officially drop or withdraw from the class, or withdraws from a course without having attended the class, will be designated as a “no show” (NS). Being marked a no show can have serious financial implications and cannot be reversed unless the NS is assigned in error. Consult the Cincinnati State Catalog for additional information.

### **Withdrawal from Course:**

Students should consult their instructor before withdrawing from a course. Instructors will help students fully understand their scores and provide support to help them complete a class

whenever possible. Students should consult an academic advisor before withdrawal to make certain they understand the academic consequences of withdrawal. Students should consult with the Office of Financial Aid to make certain they understand the financial consequences of withdrawal.

#### **Non-Attendance Leading to Administrative Withdrawal:**

A student who is enrolled in a course and does not attend any class session of that course for the consecutive equivalent of 20% of the total course length at any time during the semester may be administratively withdrawn from the course.

In this class, the specific number of consecutive class absences after which you may be administratively withdrawn is 2 class meeting days.

#### **Academic Integrity:**

Ethical conduct is the obligation of every member of the Cincinnati State community. Violations of academic integrity that constitute serious breaches of ethical behavior include, but are not limited to, cheating, fabrication, facilitating academic dishonesty, and plagiarism. If an instructor has reason to believe a violation of academic integrity has occurred, the Academic Integrity Violations Procedure will start in the classroom. Penalties imposed by the instructor are limited to those actions whose ramifications fall within the confines of the class, such as failure of the assignment or failure of the course. The instructor has the option of filing a report of the incident with the Provost for documentation purposes. Only the Provost can impose suspension or dismissal from the College.

In this course, students who violate academic integrity will receive some consequence that is in accordance to the penalty which will be determined by the instructor at that time.

#### **Title IX:**

Title IX is a federal civil rights law that prohibits discrimination on the basis of sex in the College's programs and activities. Sexual harassment, including sexual violence and retaliation, are forms of discrimination prohibited by Title IX. Staff and faculty have a **"duty to report and a duty to act"** in instances of situations or observations that would meet discriminatory and/or harassment guidelines under Title IX. If you are unsure of someone's duties and abilities to maintain privacy, ask them before speaking to them. To assure confidentiality in instances that might qualify, problems may be reported to College Counseling Services. Reports of sexual violence, assault, discrimination, or harassment may also be reported by contacting the Director of Human Resources at (513) 569-1565 or [hr@cincinnati-state.edu](mailto:hr@cincinnati-state.edu). Incident reports may also be filed online: <https://publicdocs.maxient.com/incidentreport.php?CincinnatiState>.

#### **Identity Verification Requirements:**

Test proctoring in this course requires the use of a College Identification Card. To remain in this class, students must have a Cincinnati State ID by start of first class meeting date. Failure to obtain a SurgeCard could result in administrative withdrawal from the course. SurgeCards are available in the Student Activities Office, Room 204 ATLC, Monday-Thursday 9:00am - 5:00pm; Friday

8:30am - 4:30pm. You can also request a SurgeCard online using MyCstate by clicking "Online Surge Card Office" in the tabs at the top of the page.

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## Student Resources

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### Disability Services:

The Office of Disability Services (ODS) ensures that students with special needs receive the academic accommodations they need in their courses of study. Any student or prospective student who has a disability, as defined under the Americans with Disabilities Act (ADA) of 1990 or the guidelines for section 504 of the Rehabilitation Act of 1973, may register with ODS. Students who are eligible or think they might be eligible for accommodations may visit the office in Main 129 or contact ODS by phone (513) 569-1775 or email [disabilities@cincinnatiastate.edu](mailto:disabilities@cincinnatiastate.edu).

### Information Technology Help Desk:

The College's Information Technology Services Help Desk can assist online students with technical problems related to Blackboard, email, or other College technology services. Help Desk assistance is available at (513) 569-1234 and by email at [itshelpdesk@cincinnatiastate.edu](mailto:itshelpdesk@cincinnatiastate.edu)

### Additional Resources:

Visit [www.cincinnatiastate.edu/students/student-support](http://www.cincinnatiastate.edu/students/student-support) for a complete list of student support services and resources available at Cincinnati State.

- Tutoring
- Counseling Services
- Parenting Resource Center
- Surge Food Pantry
- And much more

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## Course Outline

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Daily or weekly schedule of topics, tests, important due dates, etc. Chapter numbers alone are not sufficient and should be accompanied by a topic description. The version(s) provided by the course keeper in the course master syllabus may be general and reference "Week 1, Week 2..." etc. rather than specific dates, but should be appropriate to all course lengths applicable to course. Individual instructors may insert dated versions if desired.

This is a tentative course calendar. Any changes will be announced in class or posted on Blackboard.

### **Required from Program Chair:**

Course keeper:

Updated: (date)