

Syllabus – Spring 2021

Syllabus information may be subject to change, including the course schedule. The most up-to-date syllabus is located within the course in HuskyCT, and changes to the course schedule will be announced through HuskyCT.

Program Information

Enrollment in the School of Engineering is required.

Course and Instructor Information

Course Title: Introduction to Computer Aided Design

Credits: 1 unit

Format: Online via HuskyCT

Professor: Dr. Manish Roy

Pronouns: he/him/his

Email: manish.roy@uconn.edu

Virtual Student Hours/Availability: Tu 4:00PM - 5:00PM*¹ (<https://uconn-cmr.webex.com/meet/mar11032>)
(Only one student will be allowed to enter the virtual room at a time on a first come first served basis, unless a group of students like to meet together.)

*¹ I welcome you to contact me through emails outside of aforesaid student hours. I will try my best to respond within 24 hours Monday through Friday.

Course Materials

There is no required text for this course. Course media and materials are available within HuskyCT.

Course Description

Catalog Description: Introduction to computer-aided design and drawing, emphasizing applications in civil and environmental engineering and landscape design. Introduction to fundamental CAD concepts and techniques, such as drawing commands, dimensioning, layers, editing techniques, and plotting. Related topics include map scale and coordinate geometry.

This course introduces students to the basic operation and application of computer-aided design through hands-on experience operating Bentley's MicroStation Connect program.

Course Objectives

By the end of the semester, students will be able to:

1. Identify and implement basic CAD tools and techniques;
2. Create and plot drawings using MicroStation Connect;
3. Explain the role of map scale and coordinate geometry in computer-aided drawing.

Course Outline and Schedule

This course will be conducted online in a series of sessions. There will be a new session each week. Every session will include a set of required video presentations covering the operation and application of course software and overviewing related concepts. Every session requires the completion of an exercise, quiz and/or

project; i.e., this course will have **weekly submission requirements**.

Week	Session	Topic	Activity	Due Date*
Jan 19 – Jan 24	1	Course Introduction MicroStation Introduction	Quiz 0 + Project 0 + Exercise 1	Monday, Jan 25
Jan 25 – Jan 31	2	MicroStation Fundamentals Placing Elements, Part 1	Exercise 2	Monday, Feb 1
Feb 1 – Feb 7	3	Placing & Editing Text Map Scale and Printing	Exercise 3	Monday, Feb 8
Feb 8 – Feb 14	4	Project Work	Quiz 1 Project 1	Monday, Feb 15
Feb 15 – Feb 21	5	AccuSnap & AccuDraw Coordinate Geometry	Exercise 4	Monday, Feb 22
Feb 22 – Feb 28	6	Placing Elements, Part 2	Exercise 5	Monday, Mar 1
Mar 1 – Mar 7	7	Levels & Element Symbology	Exercise 6	Monday, Mar 8
Mar 8 – Mar 14	8	Dimensioning	Exercise 7	Monday, Mar 15
Mar 15 – Mar 21	9	Project Work	Quiz 2 Project 2	Monday, Mar 22
Mar 22 – Mar 28	10	Modifying Elements Selection Tools	Exercise 8	Monday, Mar 29
Mar 29 – Apr 4	11	Patterning	Exercise 9	Monday, Apr 5
Apr 5– Apr 18	12	Manipulating Elements Complex Elements	Exercise 10	Monday, Apr 19
Sun Apr 11 – Sat Apr 17	Spring Recess			
Apr 19 – Apr 25	13	SmartLine Measurement	Exercise 11 Quiz 3	Monday, Apr 26
		Project Work	Project 3	Monday, May 3

*All deliverables are due by 11:59 pm on the day indicated.

Course Requirements and Grading

Your grade will be based on your performance on eleven exercises, three quizzes, and three projects.

Course Components	Weight
Exercises	50%
Quizzes	20%
Projects	30%

Exercises: There will be eleven exercises, each worth 10 points. All exercises are due at the end of day on the Monday following the session (unless mentioned otherwise in **Course Outline and Schedule**). Late submissions will be accepted with penalty; please see **Due Dates and Late Policy**.

Quizzes: There will be three quizzes, each worth 15 points. Quizzes must be completed by the specified time; **there will be no extensions / late submissions**.

Projects: There will be three projects, each worth 25 points. Projects draw from the material presented over the course of several sessions and offer an opportunity to apply learned skills. All projects are due at the specified

time; please see **Course Outline and Schedule**. Late submissions will be accepted with penalty; see **Due Dates and Late Policy**.

Grading Scale:

Grade	Letter Grade	GPA
93-100	A	4.0
90-92.9	A-	3.7
87-89.9	B+	3.3
83-86.9	B	3.0
80-82.9	B-	2.7
77-79.9	C+	2.3
73-76.9	C	2.0
70-72.9	C-	1.7
67-69.9	D+	1.3
63-66.9	D	1.0
60-62.9	D-	0.7
<60	F	0.0

Due Dates and Late Policy

All course due dates are identified in the Course Schedule. Deadlines are based on **Eastern Standard Time**; if you are in a different time zone, please adjust your submittal times accordingly.

Exercises and projects submitted late will be penalized by a 10% deduction per day up to three days past the due date, unless you have contacted the instructor and made special arrangements. No exercises or projects will be accepted for credit after three days past the due date. Exceptions to this rule require instructor approval and must be made prior to the assignment's due date.

Feedback and Grades

I will make every effort to provide feedback and grades within one week after submission. To keep track of your performance in the course, refer to My Grades in HuskyCT.

Authentication of Students in Online and Distance Learning Courses

The University of Connecticut is required to verify the identity of students who participate in distance learning or online courses and to establish that students who register in these courses are the same students who participate in and complete the course activities and assessments and receive academic credit. Verification and authentication of student identity in this course will include the following:

1. The course will use HuskyCT as the primary repository and access point for course content, assessment, and activities, and students will use their NetID and password process to securely access course content/ assessments.
2. During the virtual student hours, the instructor may ask for identification and/or confirm student identity via the student's official UConn photo in StudentAdmin. You must therefore enable a camera when participating in any meeting for the course remotely. If this is an issue for you, please contact the instructor.

Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important [standards, policies and resources](#), which include:

- The Student Code
 - Academic Integrity
 - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Credit Hours and Workload
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

Students with Disabilities

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or <http://csd.uconn.edu/>.

Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government.” (Retrieved March 24, 2013 from [Blackboard's website](#))

Software/Technical Requirements (with Accessibility and Privacy Information)

The software/technical requirements for this course include:

- HuskyCT/Blackboard ([HuskyCT/ Blackboard Accessibility Statement](#), [HuskyCT/ Blackboard Privacy Policy](#))
- [Adobe Acrobat Reader](#) ([Adobe Reader Accessibility Statement](#), [Adobe Reader Privacy Policy](#))
- Google Apps ([Google Apps Accessibility](#), [Google for Education Privacy Policy](#))
- Microsoft Office (free to UConn students through uconn.onthehub.com) ([Microsoft Accessibility Statement](#), [Microsoft Privacy Statement](#))
- Dedicated access to high-speed internet with a minimum speed of 1.5 Mbps (4 Mbps or higher is recommended).
- Webex (videoconferencing software): Anyone with a NetID can use the online conferencing tool WebEx. Use this service to host and attend online meetings with people inside and outside UConn. <https://its.uconn.edu/webex/>

Help

[Technical and Academic Help](#) provides a guide to technical and academic assistance.

This course is completely facilitated online using the learning management platform, [HuskyCT](#). If you have difficulty accessing HuskyCT, you have access to the in person/live person support options available during regular business hours through the [Help Center](#). You also have [24x7 Course Support](#) including access to live chat, phone, and support documents.

Minimum Technical Skills

To be successful in this course, you will need the following technical skills:

- Use electronic mail with attachments.
- Copy and paste text, graphics or hyperlinks.
- Work within two or more browser windows simultaneously.
- Open and access PDF files.

Evaluation of the Course

Students will be provided an opportunity to evaluate instruction in this course using the University's standard procedures, which are administered by the [Office of Institutional Research and Effectiveness](#) (OIRE).

Additional informal formative surveys may also be administered within the course as an optional evaluation tool.