



UNSW Course Outline

CODE1210 Computational Design Theory 2 - 2024

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General Course Information

Course Code : CODE1210

Year : 2024

Term : Term 2

Teaching Period : T2

Is a multi-term course? : No

Faculty : Faculty of Arts, Design and Architecture

Academic Unit : School of Built Environment

Delivery Mode : In Person

Delivery Format : Standard

Delivery Location : Kensington

Campus : Sydney

Study Level : Undergraduate

Units of Credit : 6

Useful Links

[Handbook Class Timetable](#)

Course Details & Outcomes

Course Description

Computational Design Theory 2 explores how digital and computing technologies have been central to visions of future cities since the mid-twentieth century, as well as the ways they are now integral to people's everyday experiences. You will investigate how networked technologies

mediate people's movements, actions, interactions, and understandings in urban environments. By collecting data, using computational tools, and drawing on scholarly thinking, you will critically analyse contemporary human-technology-environment relations and evaluate their ethical implications.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Investigate and explain historic and contemporary approaches to the design of the built environment in relation to digital culture and computing technologies.
CLO2 : Critically analyse and evaluate computational technologies in and for the design of the built environment.
CLO3 : Assess the ethical practice of digital technologies in and for the design of the built environment.

Course Learning Outcomes	Assessment Item
CLO1 : Investigate and explain historic and contemporary approaches to the design of the built environment in relation to digital culture and computing technologies.	<ul style="list-style-type: none">• Technology Manifesto (Design Futuring)• Technology Debates• Online Quiz
CLO2 : Critically analyse and evaluate computational technologies in and for the design of the built environment.	<ul style="list-style-type: none">• Socio Digital Life of Small Urban Spaces• Technology Manifesto (Design Futuring)• Technology Debates• Online Quiz
CLO3 : Assess the ethical practice of digital technologies in and for the design of the built environment.	<ul style="list-style-type: none">• Socio Digital Life of Small Urban Spaces• Technology Manifesto (Design Futuring)

Learning and Teaching Technologies

Moodle - Learning Management System | Microsoft Teams | Echo 360

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Technology Manifesto (Design Futuring) Assessment Format: Individual	25%	Start Date: Not Applicable Due Date: Week 4: 17 June - 23 June
Socio Digital Life of Small Urban Spaces Assessment Format: Group	30%	Start Date: Not Applicable Due Date: Week 8: 15 July - 21 July
Technology Debates Assessment Format: Individual	35%	Start Date: Not Applicable Due Date: Week 12: 12 August - 18 August
Online Quiz Assessment Format: Individual	10%	Start Date: Quiz opens Week 11 Due Date: Week 12: 12 August - 18 August

Assessment Details

Technology Manifesto (Design Futuring)

Assessment Overview

You will write a short fictional narrative and create original graphics that envisions and communicates a near-future scenario. The narrative will explore the intersections between an existing or emerging technology and a social, economic, political, and/or environmental issue. Grading will be done against assessment criteria accompanied by written feedback.

Course Learning Outcomes

- CLO1 : Investigate and explain historic and contemporary approaches to the design of the built environment in relation to digital culture and computing technologies.
- CLO2 : Critically analyse and evaluate computational technologies in and for the design of the built environment.
- CLO3 : Assess the ethical practice of digital technologies in and for the design of the built environment.

Detailed Assessment Description

The detailed assessment brief is located under the Assessment Hub section of the Moodle course homepage.

Assessment Length

1000 words

Assessment information

SIMPLE EDITING ASSISTANCE

For this assessment task, you may use AI-based software to research and prepare prior to completing the written component of your assessment. You are permitted to use standard editing and referencing functions in word processing software including spelling and grammar checking and reference citation generation (i.e., Endnote) in the creation of your submission.

You must not use any functions that generate or paraphrase [or translate] passages of text, whether based on your own work or not.

Please note that your submission will be passed through an AI-generated text detection tool. If your marker has concerns that your submission contains passages of AI-generated text you may be asked to explain your work. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.

This assessment task also requires you to create original graphic media and you are permitted to use generative AI software to the extent specified in the assessment instructions. Any image-based or illustrative media output of generative AI software within your assessment **must be attributed with full referencing and must include the text-prompts used.**

Image-based or illustrative media outputs of generative AI such as DALL-E, Midjourney and Bing Copilot form part of your submission must be appropriately attributed.

* To cite: <https://www.student.unsw.edu.au/ai-referencing>.

Company, Year, Software, Link, prompt.

Example citation: OpenAI, 2024, DALL-E 2, <https://openai.com/index/dall-e-2/>, robots in cities.

* Please note that the outputs from these tools are not always accurate, appropriate, nor properly referenced. You should ensure that you have moderated and critically evaluated the outputs from generative AI tools before submission.

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students do not see Turnitin similarity reports.

Socio Digital Life of Small Urban Spaces

Assessment Overview

You will document human-technology-environment relations in a given urban public space site. Drawing on concepts and theories presented in lectures and tutorials, you will analyse and represent your observations and explain their significance. Grading will be done against assessment criteria accompanied by written feedback.

Course Learning Outcomes

- CLO2 : Critically analyse and evaluate computational technologies in and for the design of the built environment.
- CLO3 : Assess the ethical practice of digital technologies in and for the design of the built environment.

Detailed Assessment Description

The detailed assessment brief is located under the Assessment Hub section of the Moodle course homepage.

Assessment Length

8 minute minimum multi-media video

Assessment information

SIMPLE EDITING ASSISTANCE

For this assessment task, you may use AI-based software to research and prepare prior to completing the creation of your assessment. You are permitted to use standard editing and referencing functions in word processing software, such as spelling and grammar checking and reference citation generation (i.e. EndNote) in the creation of your submission. You must not use any functions that generate or paraphrase [or translate] passages of text, whether based on your own work or not.

Please note that your submission will be passed through an AI-generated text detection tool. If your marker has concerns that your answer contains passages of AI-generated text you may be asked to explain your work. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students do not see Turnitin similarity reports.

Technology Debates

Assessment Overview

You will develop argument points both 'for' and 'against' (affirmative and negative) a given technology debate topic, and deliver these arguments in video and written form. Grading will be done against assessment criteria accompanied by written feedback.

Course Learning Outcomes

- CLO1 : Investigate and explain historic and contemporary approaches to the design of the built environment in relation to digital culture and computing technologies.
- CLO2 : Critically analyse and evaluate computational technologies in and for the design of the built environment.

Detailed Assessment Description

The detailed assessment brief is located under the Assessment Hub section of the Moodle course homepage.

Assessment Length

6 minute video, 1000 words

Assessment information

SIMPLE EDITING ASSISTANCE

For this assessment task, you may use AI-based software to research and prepare prior to completing the creation of your assessment. You are permitted to use standard editing and referencing functions in word processing software, such as spelling and grammar checking and reference citation generation (i.e. EndNote) in the creation of your submission. You must not use any functions that generate or paraphrase [or translate] passages of text, whether based on your own work or not.

Please note that your submission will be passed through an AI-generated text detection tool. If your marker has concerns that your answer contains passages of AI-generated text you may be asked to explain your work. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students do not see Turnitin similarity reports.

Online Quiz

Assessment Overview

You will be quizzed on topics covered in the course. Feedback will be provided in the form of the correct answers.

Course Learning Outcomes

- CLO1 : Investigate and explain historic and contemporary approaches to the design of the built environment in relation to digital culture and computing technologies.
- CLO2 : Critically analyse and evaluate computational technologies in and for the design of the built environment.

Detailed Assessment Description

The Quiz is located under the Assessment Hub section of the Moodle course homepage.

Assignment submission Turnitin type

This is not a Turnitin assignment

General Assessment Information

Detailed Assessment Briefs can be found on the Moodle course homepage.

Where assessments require inclusion of references please follow Harvard style referencing system.

For information on how to cite sources using the Harvard 'in-text' referencing system see: <https://www.student.unsw.edu.au/harvard-referencing>

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 0 : 20 May - 26 May	Reading	Future cities: new challenges mean we need to reimagine the look of urban landscapes Browse through the online Archigram Archive
Week 1 : 27 May - 2 June	Lecture	A brief history of future cities
	Tutorial	In-class activity: A day in your life-technology relations In-class activity: Speculative Fiction Review In-class activity: Introduction to Assignment 1 Technology Manifesto (Design Futuring)
Week 2 : 3 June - 9 June	Lecture	Urban Technology Futuring
	Tutorial	In-class activity: Play the Possible Futures Game In-class activity: Assignment 1 Technology Manifesto (Design Futuring) themes ideation
Week 3 : 10 June - 16 June	Lecture	The Social Production of Urban Space
	Tutorial	In-class activity: Introduction to Assignment 2, group organisation & sites In-class activity: Urban observation, person-centered and place-centered mapping
Week 4 : 17 June - 23 June	Lecture	The Socio-Digital Production of Urban Space
	Tutorial	In-class activity: Assignment 1 Pin-up & Peer Review In-class activity: Urban Sentiment and Online Data
	Assessment	Assignment 01 Technology Manifesto (Design Futuring) is due Refer to Moodle/Turnitin for submission details
Week 5 : 24 June - 30 June	Lecture	Postphenomenology & life-technology relations
	Tutorial	In-class activity: Classifying life-technology relations In-class activity: Assignment 2 Group consultations
Week 6 : 1 July - 7 July	Other	FLEXI WEEK: NO LECTURE / NO TUTORIAL
Week 7 : 8 July - 14 July	Lecture	Mobile Technology Practices & Urban Space
	Tutorial	In-class activity: Introduction to Assignment 3 Technology Debates In-class activity: Assignment 2 Group Consultations
Week 8 : 15 July - 21 July	Lecture	Urban Technology Ethics
	Tutorial	In-class activity: Assignment 2 Presentations & Peer Review In-class activity: Assignment 3 Individual consultations
	Assessment	Assignment 02 The Socio Digital Life of Small Urban Spaces is due Refer to Moodle/Turnitin for submission details
Week 9 : 22 July - 28 July	Lecture	Design Technology Ethics
	Tutorial	In-class Activity: The Moral Machine Experiment In-class Activity: Assignment 3 Technology Debates Preparation
Week 10 : 29 July - 4 August	Lecture	Ethics of AI & AI Ethics
	Tutorial	In-class activity: Mock Technology Debates
Week 12 : 12 August - 18 August	Assessment	Assignment 03 Technology Debates is due Refer to Moodle/Turnitin for submission details
	Assessment	Assignment 04 Quiz is due Refer to Moodle for submission details

Attendance Requirements

You are expected to be regular and punctual in attendance at all classes for the School of Built Environment courses in which you are enrolled. If and where individual courses have specific attendance requirements, these will be stated in the course outline.

If you do not attend, engage, or participate in scheduled class activities, including lectures,

tutorials, studios, labs, etc, you run the risk of failing a course.

If illness or unexpected and beyond your control circumstances prevent you from completing a task on time, or substantially disturb your assessment performance, you should apply for [Special Consideration](#), as soon as practicable, accompanied by appropriate documentation.

No special consideration will be provided if you miss out on essential course information and materials, or if you miss assessment tasks and deadlines due to unexplained absences or an unapproved lack of attendance.

You may be advised by the Course Convenor to withdraw from the course if significant learning activities are missed.

The tutorials in this course are activity-based and are designed to help you develop the skills to complete your assessment tasks. You will also benefit from the opportunity to reflect and share your thinking on the relationships between digital technologies, design, and everyday life with others in the class.

Attendance will be recorded weekly.

General Schedule Information

Detailed Assessment descriptions will be provided in Moodle in the Assessment Hub section.

Course Resources

Prescribed Resources

For all resources relating to this course please refer to the Moodle course homepage.

Recommended Resources

For all resources relating to this course please refer to the Moodle course homepage.

Additional Costs

Assignment 1 must be printed in colour and may incur printing costs.

Course Evaluation and Development

During the course students can provide informal feedback to the course convenor, via School of Built Environment student representatives or at School of Built Environment Student Forums. For

specific issues or detailed feedback, please contact the course convenor via email. Students are invited to share their insights and experiences by completing the formal MyExperience survey. The feedback gathered each year is integral to the continuous enhancement and development of the course.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Nicole Gardner		Room 4015, Level, 4, Anita B. Lawrence Centre, West Wing	02 9065 2185	By email appointment	Yes	Yes
Tutor	Maeghan Doherty					No	No

Other Useful Information

Academic Information

Due to evolving advice by NSW Health, students must check for updated information regarding online learning for all Arts, Design and Architecture courses this term (via Moodle or course information provided).

Please see: <https://www.unsw.edu.au/arts-design-architecture/student-life/resources-support/protocols-guidelines> for essential student information relating to:

- UNSW and Faculty policies and procedures;
- Student Support Services;
- Dean's List;
- review of results;
- credit transfer;
- cross-institutional study and exchange;
- examination information;
- enrolment information;
- Special Consideration in the event of illness or misadventure;
- student equity and disability;

And other essential academic information.

Academic Honesty and Plagiarism

Plagiarism is using the words or ideas of others and presenting them as your own. It can take

many forms, from deliberate cheating to accidentally copying from a source without acknowledgement.

UNSW groups plagiarism into the following categories:

- Copying: Using the same or very similar words to the original text or idea without acknowledging the source or using quotation marks. This includes copying materials, ideas or concepts from a book, article, report or other written document, presentation, composition, artwork, design, drawing, circuitry, computer program or software, website, internet, other electronic resource, or another person's assignment without appropriate acknowledgement.
- Inappropriate paraphrasing: Changing a few words and phrases while mostly retaining the original information, structure and/or progression of ideas of the original without acknowledgement. This also applies in presentations where someone paraphrases another's ideas or words without credit and to piecing together quotes and paraphrases into a new whole, without appropriate referencing.
- Collusion: Working with others but passing off the work as a person's individual work. Collusion also includes providing your work to another student for the purpose of them plagiarising, paying another person to perform an academic task, stealing or acquiring another person's academic work and copying it, offering to complete another person's work or seeking payment for completing academic work.
- Inappropriate citation: Citing sources which have not been read, without acknowledging the "secondary" source from which knowledge of them has been obtained.
- Duplication ("self-plagiarism"): Submitting your own work, in whole or in part, where it has previously been prepared or submitted for another assessment or course at UNSW or another university.

The UNSW Academic Skills support offers resources and individual consultations. Students are also reminded that careful time management is an important part of study. One of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and proper referencing of sources in preparing all assessment items. UNSW Library has the ELISE tool available to assist you with your study at UNSW. ELISE is designed to introduce new students to studying at UNSW, but it can also be a great refresher during your study.

Completing the ELISE tutorial and quiz will enable you to:

- analyse topics, plan responses and organise research for academic writing and other assessment tasks
- effectively and efficiently find appropriate information sources and evaluate relevance to your needs
- use and manage information effectively to accomplish a specific purpose
- better manage your time
- understand your rights and responsibilities as a student at UNSW

- be aware of plagiarism, copyright, UNSW Student Code of Conduct and Acceptable Use of UNSW ICT Resources Policy
- be aware of the standards of behaviour expected of everyone in the UNSW community
- locate services and information about UNSW and UNSW Library

Use of AI for assessments

As AI applications continue to develop, and technology rapidly progresses around us, we remain committed to our values around academic integrity at UNSW. Where the use of AI tools, such as ChatGPT, has been permitted by your course convener, they must be properly credited and your submissions must be substantially your own work.

In cases where the use of AI has been prohibited, please respect this and be aware that where unauthorised use is detected, penalties will apply.

Use of AI for assessments | UNSW Current Students

Submission of Assessment Tasks

Turnitin Submission

If you encounter a problem when attempting to submit your assignment through Turnitin, please telephone External Support on 9385 3331 or email them on externalteltsupport@unsw.edu.au

Support hours are 8:00am – 10:00pm on weekdays and 9:00am – 5:00pm on weekends (365 days a year). If you are unable to submit your assignment due to a fault with Turnitin, you may apply for an extension, but you must retain your ticket number from External Support (along with any other relevant documents) to include as evidence to support your extension application. If you email External Support, you will automatically receive a ticket number, but if you telephone, you will need to specifically ask for one. Turnitin also provides updates on their system status on Twitter.

Generally, assessment tasks must be submitted electronically via either Turnitin or a Moodle assignment. In instances where this is not possible, alternative submission details will be stated on your course's Moodle site. For information on how to submit assignments online via Moodle: <https://student.unsw.edu.au/how-submit-assignment-moodle>

Late Submission Penalty

UNSW has a standard late submission penalty of:

- 5% per calendar day,
- for all assessments where a penalty applies,
- capped at five calendar days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Students are expected to manage their time to meet deadlines and to request [Special Consideration](#) as early as possible before the deadline. Support with [Time Management is available here.](#)

School Contact Information

badmin@unsw.edu.au