

## COURSE CONTENT

<b>Course Code</b>	DD5009
<b>Course Title</b>	Design Thinking
<b>Pre-requisites</b>	NIL
<b>No of AUs</b>	3
<b>Contact Hours</b>	39 hours studio contact

### **Course Aims**

In this course you will engage with the versatile investigation and problem-solving process known as design thinking. You will experience new ways of gaining insights when designing for a situation, where the emphasis is on human considerations, as you develop a process, and respond with solutions that are appropriate to the intended audience. This course will compliment any discipline of design, technology, development, or production where the final result will involve human participation.

### **Intended Learning Outcomes (ILO)**

By the end of the course, you should be able to:

1. Describe the ideology and processes of design thinking and how it differs from other design and development methods.
2. Develop a unique design process that is in response to a specific human-centred situation.
3. Apply creative and inventive techniques to develop a responsive design concept through to prototype stage.
4. Demonstrate a prototype solution supported with rationale that responds to human-centred situation.
5. Constructively discuss and critique design thinking approaches, processes and solutions employed by peers.

### **Course Content**

In this course, you will bring your own discipline's experience to the creative process of design thinking. You will join up in teams with students from different backgrounds, and together you will employ an innovative investigation processes to understand a topic and respond with creative solutions.

#### **Seminars**

In-class seminars and mini-lectures will outline the history, background, and theory of design thinking, and how it has emerged as a central problem-solving process in society today. You will learn about how this way of thinking has infused into a wide range of sectors, including business, technology, education, commerce, engineering, and the challenge of "wicked" problems.

#### **Projects and workshops**

In a studio environment, you will practice the various stages of design thinking:

- **Selection of a topic:** You will select, or be given, a human-centred topic.
- **Empathy:** The first stage is to understand the problem from the point of view of those experiencing the problem. This will involve a range of methods, including observation, engagement, interviewing, or immersion. Key to this approach is to put aside your own pre-conceived notions and be open to learning a new point of

view.

- **Ideation:** This refers to the formation and generation of ideas and relationships. Ideation methods include brainstorming, mind-mapping, sticky-notes ideation, fast-ideation, deep analysis, divergent and convergent thinking. The results are analysed for patterns or insights that may reveal avenues to develop a design response.
- **Prototyping, testing and iteration:** Possible solutions are rapidly prototyped, reviewed, and iterated. This may involve the construction of objects, role play, interface mock-ups, paper prototyping, and any other form of fast-prototype testing. Response from users are then to inform the next round of prototyping and testing, until a design is refined enough to be presented as a solution.

### **Teamwork**

In this course you will frequently work in a team. When in a team, you will be additionally assessed on:

- **Collaborative achievement:** How well the team meets the project brief in a way that surpasses the capabilities of a single individual.
- **Collaborative creativity:** How well the team demonstrates initiative, exploration, and creativity, combining the separate skills and abilities of the individuals to expand and generate new creative outcomes.
- **Individual growth:** How much you grow as an individual within the team. This could be artistic, technical, or team-related such as team management.
- **Individual contribution:** How effective your contribution is to the team. This includes performing your role as expected or exceeding expectations in areas such as meeting deadlines and contributing to key moments such as presentations, screenings, discussions, and submissions.
- **Team relationship:** This includes inter-personal team relationships, with aspects such as positive engagement, readiness to contribute, value of communication, sharing of ideas, fairness, and peer support. You may also be assessed on team management and leadership.