

<div class="printBefore">
<h1 class="pageTitle">IA40420 Design Thinking for Innovation</h1>
<h2>Academic Year 2019/2020</h2>

This module is designed to provide the participant with a comprehensive and in-depth experience of Design Thinking, culminating in the presentation of a creative, innovative solution to a complex real-world challenge of an external host. The Design Thinking methodology is a proven and repeatable approach that any organisation, business, network or profession can employ to uncover new opportunities, gain new perspectives and insights on problems, and develop innovative solutions of value. It is increasingly being regarded as a core skill in the workplace. While this module does not require prior experience of Design Thinking, it does require participants to work autonomously and professionally in an environment external to the University, with the ability to deal with the consequential ambiguity that this entails.

Over the course of the module, participants will develop their expertise in Design Thinking through experiential learning activities, guest speakers and immersive challenges. The overall aims of this module are to give participants insights into the optimal implementation of the Design Thinking process; appreciate the various contexts within which it can be used; and apply the process by working on a complex real-world innovation challenge. Working in teams, participants will build empathy with users and multiple stakeholders to develop an insightful understanding of a real-world challenge, then taking an iterative approach they will prototype and present a creative solution informed by their problem statement.

Last year, our students worked with Arnotts, Brown Thomas, Deloitte, Lust for Life, PwC, and the UCD Students Union.

At the UCD Innovation Academy, we are a group of Educator Practitioners with extensive real-world experience as academics, business and social entrepreneurs, tech thinkers, creative professionals and design thinking practitioners.

We take an action-oriented approach to learning, with a combination of individual, group and class tasks and activities, including discussions, presentations and reflection. All of our teaching is grounded in academic rigor, but our focus is on learning by doing in a real-world context.

****Enrolment on an Innovation Academy module means a commitment to active participation and engagement, which necessitates attendance at all scheduled classes****

For exact dates and to see our programmes in action please see : <https://www.innovators.ie/phd-modules/>

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<div style="text-align:center;"><p>Curricular information is subject to change</p></div>

What will I learn?

Learning Outcomes:

<p>On successful completion of this module, students should be able to:

- * Gain an in-depth practical understanding of the five stages of Design Thinking and their interdependence.
- * Develop an understanding of the appropriate application of Design Thinking and develop an appreciation for its benefits and limits across disciplines and sectors
- * Learn to add value to the Design Thinking process by applying practiced skills of empathy, creativity, idea selection, facilitating teamwork, rapid prototyping, iterative design, pitching and story-telling
- * Demonstrate the application of the five stages of Design Thinking in the context of a complex real world challenge
- * Apply reflective practices to identify lessons learnt about the project, the process and the teamwork
- * Develop the ability to make sound judgements regarding timing, process and number of iterations of Design Thinking appropriate for a particular problem and be able to guide others to enhance outcomes.

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Indicative Module Content:

<p>The 5 Steps of the Design Thinking Process

- 1) Empathise: The first stage of the Design Thinking process is to gain an empathic understanding of the problem which is trying to be solved. This involves consulting experts to find out more about the area of concern through observing, engaging and empathising with people to understand their experiences and motivations, as well as immersing yourself in the physical environment so you can gain a deeper personal understanding of the issues involved.
- 2) Define: During the Define stage, the team put together the information which has been created and gathered during the Empathise stage. This is where the team will analyse your observations and synthesise them in order to define the core problems that you and your team have identified up to this point.
- 3) Ideate: During the Ideation stage of the Design Thinking process, the team are ready to start generating ideas. You've grown to understand your users and their needs in the Empathise stage, and you've analysed and synthesised your observations in the Define stage, and ended up with a human-centered problem statement. With this solid background, you and your team members can start to "think outside the box" to identify new solutions to the problem statement you've created, and you can start to look for alternative ways of viewing the problem
- 4) Prototyping: The design team will now produce a number of inexpensive, scaled down versions of the product or specific features found within the product, so they can investigate the problem solutions generated in the previous stage. Prototypes may be shared and tested within the team itself, in other departments, or on a small group of people outside the design team. This is an experimental phase, and the aim is to identify the best possible solution for each of the problems identified during the first three stages.

5) Test: The team now test the complete product using the best solutions identified during the prototyping phase. This is the final stage of the 5 stage-model, but in an iterative process, the results generated during the testing phase are often used to redefine one or more problems and inform the understanding of the users, the conditions of use, how people think, behave, and feel, and to empathise. Even during this phase, alterations and refinements are made in order to rule out problem solutions and derive as deep an understanding of the product and its users as possible.

How will I learn?

Student Effort Hours:

Student Effort Type	Hours
Lectures	12
Small Group	20
Practical	8
Specified Learning Activities	30
Autonomous Student Learning	30
Total	100

Am I eligible to take this module?

Requirements, Exclusions and Recommendations

Not applicable to this module.

Module Requisites and Incompatibles

Incompatibles:

IA20080 - Design Thinking

How will I be assessed?

Assessment Strategy

Description	Timing	Open Book Exam	Component Scale	Must Pass Component	% of Final Grade
Assignment: Reflection Report	Throughout the Trimester	n/a	Pass/Fail Grade Scale	Yes	30
Presentation: Team Project Presentation	Throughout the Trimester	n/a	Pass/Fail Grade Scale	Yes	30

Assessment Strategy

Description	Timing	Open Book Exam	Component Scale	Must Pass Component	% of Final Grade
Attendance: This modules requires active participation and engagement, which necessitates attendance at ALL scheduled classes (80% attendance is required to pass this component).	Throughout the Trimester	n/a	Pass/Fail Grade Scale	Yes	40

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<div class="col-sm-6">Carry forward of passed components

No</div>

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What happens if I fail?

Remediation Type	Remediation Timing
In-Module Resit	Prior to relevant Programme Exam Board

Assessment feedback

<div class="subHeadCB">Feedback Strategy/Strategies</div>

<p>* Feedback individually to students, post-assessment

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<div class="subHeadCB">How will my Feedback be Delivered?</div>

<p>Feedback will be given to students upon request. This will include feedback based on their participation during the modules and their deliverables.</p>

Reading List

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<h1 class="printOnly"> UCD Course Search

Design Thinking for Innovation (IA40420) </h1><h3 class="printOnly">Academic Year 2019/2020</h3><p class="printOnly">The information contained in this document is, to the best of our knowledge, true and accurate at the time of publication, and is solely for informational purposes.

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<h4 class="noPrint">Design Thinking for Innovation (IA40420)</h4>

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<dt>Subject:</dt>

<dd>Innovation Academy</dd>

<dt>College:</dt>

<dd>VP - Research, Innov & Impact</dd>

<dt>School:</dt>

<dd>Innovation Academy</dd>

<dt>Level:</dt>

<dd>4 (Masters)</dd>

<dt>Credits:</dt>

<dd>5.0</dd>

<dt>Trimester:</dt>
<dd>Autumn&Spring&Summer(separate)</dd>
<dt>Module Coordinator:</dt>
<dd>Mr Alan Morgan</dd>
<dt>Mode of Delivery:</dt>
<dd>Face-to-Face</dd>
<dt>Internship Module:</dt><dd>No</dd>

<dt>How will I be graded?</dt>
<dd>Pass/Fail (GPA Neutral) </dd>

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