

Human-Computer Interaction (HCI) is a distinctive branch of computer science dedicated to understanding the relationship between people and computers. It provides a set of techniques that enable designers and software engineers to develop computing applications that better respond to the needs, abilities and interests of customers, clients and end-users. This module provides theoretical grounding, practical knowledge, and hands on experience of key skills needed to design and build better interfaces for computing systems.

The module addresses core areas of the ACM SIGCHI Curricula for Human-Computer Interaction and is intended for students with diverse disciplinary backgrounds and experiences, including Computer Science, Cognitive Science and Design.

The module covers the following core topics:

1. Human cognition and models of interaction
2. Usability and user experience
3. Experimental design and statistics for HCI
4. Interface design using user-centred and iterative methods
5. Design thinking and rapid prototyping
6. Qualitative and quantitative evaluation strategies

It also introduces advance topics within the field of HCI. For example:

- Intelligent and next generation user interfaces
- Information visualization
- Social impact interfaces for health and sustainability

Advanced topics are addressed through concrete case studies of successful and innovative design projects.

***Curricular information is subject to change***

## What will I learn?

Learning Outcomes:

On completing the module, students will be able to:

1. Understand different theoretical perspectives on cognition and human behaviour that are relevant to the design of interactive systems.
2. Propose and apply design approaches that are suitable to different classes of interactive system.
3. Rapidly prototype new interactive systems.
4. Identify appropriate techniques for analysis and critique of user interfaces.
5. Undertake quantitative and qualitative studies in order to evaluate and improve the design of interactive systems.

## How will I learn?

Student Effort Hours:

Student Effort Type	Hours
Lectures	24
Practical	12
Specified Learning Activities	44
Autonomous Student Learning	40
Total	120

## Am I eligible to take this module?

Requirements, Exclusions and Recommendations

Not applicable to this module.

Module Requisites and Incompatibles

## How will I be assessed?

Description	% of Final Grade	Timing
Group Project: Design project	40	Unspecified
Group Project: Empirical experiment	40	Unspecified
Assignment: Individual essay	20	Unspecified

## What happens if I fail?

**Compensation**

This module is not passable by compensation

**Resit Opportunities**

In-semester assessment

**Remediation**

If you fail this module you may repeat or substitute where permissible.

## Reading List

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<div class="pageBreak"><nav class="white-box no-left-arrow zero-top-margin">
<h1 class="printOnly"> UCD Course Search
Human Computer Interaction (COMP47680) </h1><h3 class="printOnly">Academic Year 2018/2019</h3><p class="printOnly"><em>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.
University College Dublin accepts no liability for any loss or damage howsoever arising as a result of use or reliance on this information.</em></p>
<h4 class="noPrint">Human Computer Interaction (COMP47680)</h4>
<dl>
<dt>Subject:</dt>
<dd>Computer Science</dd>
<dt>College:</dt>
<dd>Science</dd>
<dt>School:</dt>
<dd>Computer Science</dd>
<dt>Level:</dt>
<dd>3 (Degree)</dd>
<dt>Credits:</dt>
<dd>5.0</dd>
<dt>Semester:</dt>
<dd>Semester Two</dd>
<dt>Module Coordinator:</dt>
<dd>Assoc Professor David Coyle</dd>
<dt>Mode of Delivery:</dt>
<dd>N/A</dd>
<dt>How will I be graded?</dt>
<dd>40% </dd>
</dl>
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<span style="font-size:0.8em"><em>(<a href="https://www.google.com/chrome/" target="_blank">Google Chrome</a> is recommended when printing
this page)</em></span></div>
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