

CRT D-REAL

Structured Doctoral Pathway 2020-21

Overview

The SFI Centre for Research Training in Digitally-Enhanced Reality (D-REAL) is an innovative, industry partnered, research training programme that equips PhD students with deep ICT knowledge and skills across Digital Platform Technology, Content and Media Technology and their application in Industry sectors. D-REAL postgraduate students will make research breakthroughs in areas such as multimodal interaction, multimodal digital assistants, multilingual speech processing, real-time multilingual translation and interaction, machine intelligence for video analytics and multimodal personalisation and agency.

Whether via multimodal devices such as smart phones, embedded displays and IoT, or virtual assistants and VR/AR experiences, media technology is revolutionising the way we interact, collaborate and behave. D-REAL PhD students will develop skills for next generation human-centric media technology, including:

- **machine intelligence-based sensing and understanding of digital content and information,**
- **its transformation and personalisation**
- **its multimodal interaction and delivery via speech, text, video, image and VR/AR, and**
- **its impactful application in multiple industry and societal settings.**

D-REAL is funded by [Science Foundation Ireland](#) and by the contributions of industry partners. TCD is the coordinator for this new Research Centre, and the other University partners include; DCU, NUIG, UCD and TU Dublin. All students will be supervised by an academic in DCU and co supervised by an academic from one of the other University partners. For more information on D-REAL, you can visit the website <http://d-real.ie/>

Module Choices within the CRT in D-REAL

Students are expected to take the core (mandatory) modules. In addition and in conjunction with their supervisors, they can choose up to 20 credits of optional taught modules

Induction and non- accredited training

All students are required to attend the orientation and induction sessions organised by GSO during year one. GSO communicates details of their training schedule to each student at the beginning of each semester. First year students are also required to complete and successfully pass the Online Research Integrity Training Module during year one of their studies.

CRT D-REAL

Structured Doctoral Pathway 2020-21

Core Modules Year 1 to 4

Year 1

- Setting Sail (5 ECTS) TCD
- Smaointe Summer School 2020 (5 ECTS) held in UCD

Year 2

- Enterprise Exp for Graduate Research Students GS606/A (10 ECTS)
- Smaointe Summer School 2021 (5 ECTS) held in TU Dublin

Year 3

- Smaointe Summer School 2022—CAXXX (5 ECTS) held in DCU

Year 4

- Smaointe Summer School 2023 (5 ECTS) held in NUIG

Optional Modules

- Students should choose an additional 20 credits from the Pathway Document of either the [School of Computing Pathway Document](#) or [School of Mechanical & Manufacturing Engineering Pathway Document](#) or [School of Electronic Engineering Pathway Document](#) or [School of Applied Languages & Intercultural Studies Pathway Document](#) or [School of Psychology Pathway Document](#)
- All module choices will require approval from your supervisor

- In addition to the above modules, students will take up to an additional 20 taught credits from any D-REAL partner Institution under the “Broadening Horizons Programme”. These modules will be aligned with the students’ overall professional development plan, and should be agreed with their Supervisors.
- The Smaointe Summer School will rotate between the partner Institutions, attendance is compulsory and the above locations are provisional.