

SCHOOL OF COMPUTER SCIENCE AND STATISTICS

TRANSITION YEAR WORKSHOP

The overall aim of the School of Computer Science and Statistics (**SCSS**) **Workshop** is to provide a learning experience to Transition Year students who have an interest in pursuing a Computer Science subject at 3rd level.

The **SCSS Workshop** offers Transition Year students:

- 1. An innovative learning experience with technology-mediated projects introducing them to basic computer programming and other IT skills.
- 2. Access to a unique learning environment which is designed to promote teamwork, creativity and collaborative learning.
- 3. An insight into a 3rd level environment and interaction with 3rd level students & academic staff

So that:

- 1. They become confident users of technology
- 2. They develop teamwork skills
- 3. They are enthused and inspired to go onto a CS/Engineering-related degree at 3rd level

The **SCSS Workshop** is based in Oriel House, just off the main Trinity College campus. The programme runs from Tuesday – Friday, from 9.30am – 3:00pm, with an early finish of 1:00pm on Friday.

During this time the students make extensive use of the Trinity campus, buildings and facilities for learning activities that are mediated and supported by technology and teamwork.

The key elements of the workshop are explained in further detail below.

- **Teams**: When the participants arrive, they are put into teams of four or five. Peer to peer learning and collaboration is encouraged as all of the learning activities are team-based.
- Activities: The teams work on a series of technical projects to introduce them to basic computer programming concepts, equivalent to that of 1st year undergraduate

programs. Past activities have included animation and game design using Scratch, web design using HTML, Cyber Security workshops, Design Thinking sessions and Artificial Intelligence and Machine Learning discussions and activities. There are some hardware-related activities, such as building sensors using Micro:bits. These activities are all aimed at beginners but there are also places for students with some computing expertise. These students will be able to assist their peers with some of the basic programming work and tackle some more advanced challenges themselves!

• **Skills**: Participants learn various technical skills during the week, from electronics to game design and animation. In addition to the technical skills, they will gain experience in planning a project, working in teams, public speaking and working to a deadline.

Overall, during the workshop, the students are given a taste of college life in general and Computer Science in particular. They will see the scope for creativity and imagination in a subject that they might previously have seen as heavily technical and dull. They'll work hard, they'll learn a lot, they'll have lots of fun and they'll make some new friends along the way.