

Academic Preparations for Augmented and Virtual Reality Strand

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All Semester 1 modules in the Augmented and Virtual Reality (AVR) strand are assumed to have no pre-requisites beyond the normal admission requirements for the course. However, the below are some advance preparation guidelines that may benefit students joining the AVR strand

- Note that Computer Vision and Computer Graphics are taught “from scratch” in Semester 1 but may be assumed as pre-requisites in Semester 2. Any previous experience or revision in these areas would be of benefit to students.
- Due to conventional practice in the AVR-related industry and research community, a number of modules may involve tools and libraries in C/C++ or similar languages. Some preparatory work/practice in C/C++ is likely to be of benefit.
- Mathematical concepts are prevalent in Computer Graphics and Computer Vision, which form the cornerstone of AVR-related fields. Although we also offer a Mathematics of Light and Sound Module in Semester 1, revising math topics before joining the course may be of benefit. Some recurring areas include: probability, calculus, linear algebra (vectors, matrices), trigonometry, amongst others.
- PLEASE NOTE: CS7CS4 Machine Learning is a common core module compulsory for all strands of the MSc in Computer Science programme, including AVR. This Semester 1 module assumes students have basic knowledge of linear algebra and probability.
- In addition, students take a small number of elective topics from a pool of modules available to all MSc students. Please review the module details to ensure you have the pre-requisites for taking a particular elective.

More details on all modules (mandatory and elective) are available at:

<https://teaching.scss.tcd.ie/m-sc-computer-science-augmented-and-virtual-reality/>

English Language Skills: The language of instruction and communication, on this programme is English. All students on the course are required to write and present in English, and will, by the end of the course, be required to produce works of a publishable quality.

If your undergraduate education has not been wholly in the English language, it is highly recommended that you consider taking one of the English for Academic Practice (EAP) courses offered in TCD. See: https://www.tcd.ie/slscs/english/trinity_in-sessional_programme/in-sessional_eap/index.php