The Human Interface Technology (HIT) Lab Australia is a partner of the world-leading HIT Lab US, University of Washington, in conjunction with HIT Lab NZ, University of Canterbury, and shares its goals of developing revolutionary interfaces that transform how people interact with computers and improve the human experience. It is the first of its kind in Australia.

Human Interface Technologies have many current and future applications in many fields requiring users to have virtual sensory experiences without actually being in the situation or augmenting physical environment with virtual objects.

The HIT major within the Bachelor of Computing is to introduce cutting-edge visualisation, simulation and virtual reality (VR) and augmented reality (AR) technologies which will underpin many high quality collaborative training & education, research & development programs and commercial development by linking various disciplines. The major begins with a four unit sequence that embeds “storytelling” as its core, then explores the creation of human experience through various media including linear (cinema), interactive (simulation, games & toys) and immersive (virtual reality) modalities. The emphasis throughout the major will be on solving real problems in the world.

Course structure

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Intermediate/advanced elective units are selected from the following:

- Mobile & Ubiquitous Computing
- Computer Graphics & Animation
- Advanced Dynamic Web Development
- Programming C# & .NET Applications
- Artificial Intelligence
- Computer Networks
- Human Computer Interaction
- Advanced Algorithmic Problem Solving & Programming
- Computer Security
- Concurrent Programming
- Data Mining & Text Retrieval
Degree outcomes

A graduate of this course should be able to contribute to meeting the computing (ICT) needs of individuals, organisations and the wider community. The graduate should be able to:

1. demonstrate foundational computing knowledge of:
   - programming, algorithms & data structures
   - systems and applications
   - historical and current trends
   - human interface technology

2. apply knowledge of computing principles and technical skills to develop and maintain solutions by:
   - using abstraction and computational thinking
   - evaluating strengths and weaknesses of potential solutions
   - creating artefacts using a variety of techniques and tools
   - selecting and following a recognised software development methodology
   - adapting existing and emerging computing technologies

3. act professionally by:
   - communicating in different modes to diverse audiences
   - adhering to professional and ethical codes of conduct
   - working independently and collaborating in diverse teams
   - considering economic, social, legal, and ethical consequences

School facilities and resources

Students will gain experience in state-of-the-art laboratories using Apple Macintosh, Microsoft Windows and Linux. All systems in the School of Computing & Information Systems access AARNet (the Australian Academic and Research Network), which connects most Universities and research organisations in Australia to the Internet. Wireless networking is provided for student-owned laptops. School facilities and resources are available to students twenty four hours per day, seven days per week. In addition to the academic program, the School holds dinners, barbecues and social events throughout the year, and there are support and interest groups, a Mentor scheme for beginning students, and an International Affairs Coordinator to assist overseas Computing students.

Entry requirements

To study the Bachelor of Computing (Human Interface Technology) you need to have obtained at least four pre-tertiary Level C TCE subjects, (or interstate equivalent). There are no prerequisite subjects. Mature age students (over 21 years of age) are accepted upon demonstration of ability to successfully complete the course.

Financial assistance and fees

Generous Tasmanian Scholarships are available to students from Australia and overseas. Australian students must pay the Higher Education Contribution Scheme (HECS), either up front at 20% discount, or deferred until able to repay through the taxation scheme. Services and Amenities fees are payable annually, and an Entrance Fee is charged in the first year of enrolment. Other expenses include text books, stationery and photocopying.

Contacts

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