PROGRAM ANNOUNCEMENT
COMMUNICATION, CULTURE AND INFORMATION TECHNOLOGY (CCIT): UNIVERSITY OF TORONTO AND SHERIDAN COLLEGE

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1. INTRODUCTION

University of Toronto at Mississauga (UTM) and Sheridan College have recently initiated a joint program in Communication, Culture and Information Technology (CCIT). A major aim of the program is to train students in the theory, design, application, and management of communication systems. Acoustics and the auditory system form a key link between human communication and communication technologies, and are of central relevance to the program.

The CCIT program combines the internationally recognized academic and research disciplines in the humanities and social sciences at UTM with the professional and applied strengths of Sheridan College — world renowned for programs in computing, visualization, digital media, design, performing arts, and journalism. The program is open to students admitted to the University of Toronto and students will graduate with a Bachelors degree (BA or B.Sc.).

One aim of the CCIT program is to provide students in arts or science programs with a second major that will give them valuable skills in applied areas, thereby increasing their employability (e.g., Psychology and CCIT; Anthropology and CCIT). There are also plans to offer *specialist programs* so that students can concentrate their studies in areas such as digital enterprise management; human communication; professional writing; theatre and media; and visual communication.

Graduates of CCIT will be sensitive to ethical, cultural, and social issues addressed by the humanities and liberal arts, and will also be comfortable working in an applied setting with new and emerging technologies. University of Toronto is extensively recruiting new faculty to manage the program and conduct research. Research on biological communication systems, for example, will take place in the Centre for Research on Biological Communication Systems (CRBCS), an initiative supported by a grant from the Canada Foundation for Innovation (CFI: See Schneider, this issue).

New buildings dedicated to the CCIT program are under construction at both the UTM and Sheridan College campuses. These buildings were made possible by grants from Ontario's SuperBuild Fund and from the City of Mississauga. At UTM, one floor of the CCIT building will be dedicated to the CRBCS. This 2000 m^2 facility will include equipment designed to measure, store, and analyze sound, as well as equipment designed to simulate the acoustic characteristics of natural environments. The CRBCS centre will also house a multimodal virtual-reality test station and several sound-attenuating chambers for experimental testing.

The CRBCS will support a range of studies in acoustics, auditory perception, speech, and multimodal communication. This component of CCIT is described by Schneider (this volume) and will not be reiterated here. With its promise of matching academic excellence with the world of quickly changing practical skills, CCIT will be a dynamic program, and its link to expertise in acoustics and audition will be essential to CCIT's success.

A number of *specialist programs*, currently under consideration for the CCIT curriculum, will provide students with various programs options that lead to different career destinations. A few of these programs are described below.

2.0 DIGITAL ENTERPRISE MANAGEMENT (DEM).

Communication technologies rely on the digitization and transmission of acoustic and visual information. Digital enterprises require the involvement of experts in communication theory, digital technologies, and multi-modal channels of communication.. Such enterprises are managed in ways that are fundamentally different from the management of other kinds of businesses. Students in this specialist program will be trained in the technologies associated with digital enterprises, the perceptual constraints

on communication systems, and the challenges associated with managing such enterprises.

Students in the DEM stream will acquire skills needed to become managers and leaders of digital companies, technological entrepreneurs, E-content developers, and technology policy makers.

3.0 HUMAN COMMUNICATION ACROSS THE LIFESPAN (HCL).

Communication is an essential part of human life, and the auditory system is well adapted to the perception and cognition of auditory signals involved in human communication. Pre-linguistic infants communicate emotionally with their parents through lullabies and tone of voice. With maturation, children learn to perceptually segment spoken utterances into words and syllables, categorize words, and refine their skills at language production. For adults, communication skills are central to career success and social interaction. Management and leadership positions require an enhanced ability to communicate complex ideas, along with an ability to convey and interpret emotional meaning.

Disabilities in communication may occur following brain injury (e.g., due to stroke and trauma) and as a consequence of aging. Emerging technologies, however, provide an opportunity to treat such disabilities. Students in the HCL program will learn how human communication is influenced by cognitive processes, social and cultural factors, and technology. They will develop skills leading to careers in the use of technology in human communication, or in the health services sector (gerontology, speech pathology).

4.0 PERFORMANCE, THEATRE, AND MEDIA STUDIES (PTM).

A performance is a prepared presentation of a character, whether in the context of a political speech, a business presentation, a musical recital or a theatrical event. Performances may be mediated through stage, film, the internet, and television, and these media are continuously transformed by new technologies.

Students in PTM will study aspects of performance including acting, editing, music scoring, and sound design, and will gain an understanding of how performances are mediated by contemporary technologies. Graduates of PTM will be expert communicators, producers, and interpreters of performance in a number of media, and can apply these skills in the arts industry, education, marketing, public relations, or advertising.

5.0 VISUAL COMMUNICATION.

Although the auditory system is particularly well adapted for communication (i.e., speech and music), our culture is increasingly dominated by visual communication. Visual forms of communication include art, advertising, photography, film, web sites, medical images, and simulations of events used for the purposes of research. Are such visual forms of communication analogous to spoken languages or do they each have their own special "language"? What are the most recent techniques for creating visual forms of communication?

These two questions are addressed in two proposed specialist areas — one in Visual Culture and Communication (VCC) and the other in Computer Visualization (CV). Students in the VSS and CV programs will learn to design and interpret visual forms of communication, but whereas the VSS program will emphasize the cultural and historical significance of visual communication, the CV program will train students to be skilled practitioners who use applied visual semiotics to communicate information in visual forms. Graduates of these programs will have skills leading to careers in advertising, graphic design, and visual information technology.

6.0 FURTHER INFORMATION

Details on the CCIT program are provided on the CCIT web site (http://ccit.erin.utoronto.ca/) or may be obtained by calling 905-569-4732.