



FOR APPROVAL

PUBLIC

OPEN SESSION

TO: UTM Academic Affairs Committee

SPONSOR: Professor Rhonda McEwen, Vice-Principal Academic & Dean
CONTACT INFO:

PRESENTER: Professor Heather Miller
CONTACT INFO: vdteachlearn.utm@utoronto.ca

DATE: May 2, 2022 for May 9, 2022

AGENDA ITEM: 3

ITEM IDENTIFICATION:

Major Modification: Mode of Delivery Change within the Specialist in Digital Enterprise Management (DEM) and Major in Communication, Culture, Information and Technology, (CCIT), UTM

JURISDICTIONAL INFORMATION:

Under section 5.6 of its terms of reference, the Academic Affairs Committee is responsible for major and minor modifications to existing degree programs.

GOVERNANCE PATH:

- UTM Academic Affairs Committee [for approval] (May 9, 2022)

PREVIOUS ACTION TAKEN:

None

HIGHLIGHTS:

The University of Toronto Mississauga (UTM) and Sheridan College currently offer joint programs administered by the Institute of Communication, Culture, Information & Technology (ICCIT) - the Major in Culture, Communication, Information and Technology (CCIT Major) and the Specialist in Digital Enterprise Management (DEM Specialist). These programs were launched in Fall 2001 and Fall 2003, respectively. With approximately two decades of joint delivery of the program, an alumni network of several thousand, and an ever-evolving creative industry context, University of Toronto Mississauga and Sheridan College have determined that

there is an opportunity for each institution to deliver its own first-rate and distinctive interdisciplinary programs aligned to their respective strengths, expertise, and learning objectives.

Together, both institutes have agreed that the final intake (of second year UTM students) into the joint UTM/Sheridan CCIT Major and DEM Specialist will be Fall 2021. These programs will continue to run jointly at both institutions until 2024, when the final cohort admitted in Fall 2021 will have completed their program requirements. Beginning in Fall 2022, Sheridan-based courses will transition to UTM, to be offered at the UTM campus by ICCIT and led by ICCIT faculty. These courses will support students entering the CCIT Major and DEM Specialist in Fall 2022 and onward.

This change in program delivery and faculty engagement will not affect the program learning outcomes or completion requirements of either program. The migration of Sheridan-based courses to UTM will facilitate more effective integration of technical and media production skills with theory based courses and the opportunity to better map subject area and content foci across all ICCIT courses. This change will also allow for increased engagement of ICCIT faculty with the program and its students.

UTM and Sheridan College are steadfast in their commitment to providing a high-quality student experience through to 2024. Students unable to complete their joint program requirements by 2024 will be advised on a case-by-case basis by ICCIT staff and faculty and will be accommodated through UTM-based courses.

Wide consultation across UTM and Sheridan January 2019. Section 6 (Consultation) of the proposal outlines in detail the consultation process. Similarly, resource implications have been detailed in Section 7 (Resources) of the proposal.

RECOMMENDATION:

Be It Resolved,

THAT the proposed mode of delivery change within the Specialist in Digital Enterprise Management (DEM) and Major in Communication, Culture, Information and Technology, (CCIT), as recommended by the Vice-Principal Academic & Dean, and as detailed in the proposal dated April 27, 2022, be approved, effective September 1, 2022

DOCUMENTATION PROVIDED:

- Major Modification Proposal: Mode of Delivery Change within the Specialist in Digital Enterprise Management (DEM) and Major in Communication, Culture, Information and Technology, (CCIT)

University of Toronto

Major Modification Proposal:

Significant Modifications to Existing Graduate and Undergraduate Programs

This template should be used to bring forward all proposals for major modifications to existing graduate and undergraduate programs for governance approval under the University of Toronto's Quality Assurance Process.

Program being modified:	Specialist Program in Digital Enterprise Management, HBA (ERSPE1307) Major Program in Communication, Culture, Information & Technology, HBA (ERMAJ1034)
Proposed major modification:	Change to the modes of delivery of the programs, resulting in significant changes to: <ul style="list-style-type: none">- the faculty engaged in delivering the program; and- the essential physical resources utilized in program delivery.
Department/unit (if applicable):	Institute of Communication, Culture, Information & Technology (ICCIT)
Faculty/academic division:	University of Toronto Mississauga (UTM)
Faculty/ Academic Division contact:	Rhonda McEwen Vice-Principal Academic & Dean, UTMM Vpdean.utm@utoronto.ca
Dean's Office contact:	Yen Du Manager, Academic Programs, Reviews & Quality Assurance Yen.du@utoronto.ca
Proponent:	Tracey Bowen Acting Director, ICCIT Tracey.bowen@utoronto.ca
Version date:	April 27, 2022

1 Summary

- Please provide a brief summary of the change(s) being proposed as it relates to the current structure of the program.

Historically, the University of Toronto Mississauga (UTM) and Sheridan College have offered joint programs administered by the Institute of Communication, Culture, Information & Technology (ICCIT) - the Major in Culture, Communication, Information and

Technology (CCIT Major) and the Specialist in Digital Enterprise Management (DEM Specialist). These programs were launched in Fall 2001 and Fall 2003, respectively. With approximately two decades of joint delivery of the program, an alumni network of several thousand, and an ever-evolving creative industry context, University of Toronto Mississauga and Sheridan College have determined that there is an opportunity for each institution to deliver its own first-rate and distinctive inter-disciplinary programs aligned to their respective strengths, expertise, and learning objectives. This was supported by the findings and recommendations of the 2017 UTQAP external review of ICCIT and its programs.

Together, both institutions have agreed that the final intake (of second year UTM students) into the joint UTM/Sheridan CCIT Major and DEM Specialist will be Fall 2021. These programs will continue to run jointly at both institutions until 2024, when the final cohort admitted in Fall 2021 will have completed their program requirements. As of Fall 2024, both programs will be completed fully at UTM. While the DEM Specialist is a joint program, it is important to note that the program completion requirements have always allowed a student to complete all requirements at UTM (i.e. Sheridan-based courses are options for this program but not required). In Fall 2022, courses that are currently taught at Sheridan College will begin migrating to UTM, and instead will be taught on the UTM campus by ICCIT and led by ICCIT faculty (200 level courses in 2022, 300 level courses in 2023 and 400 level courses in 2024. These courses will support students entering the CCIT Major in Fall 2022 and onward.

UTM and Sheridan College are steadfast in their commitment to providing a high-quality student experience through to 2024. Students unable to complete their joint program requirements by 2024 will be advised on a case-by-case basis by ICCIT staff and faculty and will be accommodated through UTM-based courses.

2 Effective Date

This major modification will be effective September 1, 2022.

In Fall 2021, the final cohort of students will be accepted into the joint CCIT Major and DEM Specialist programs. Students entering this program in Fall 2021 (or before) will complete their program requirements at both UTM and Sheridan College, as prescribed in the academic calendar of the year they entered the program.

Beginning Fall 2022, students entering the CCIT Major and DEM Specialist will complete all program requirements at UTM.

3 Academic Rationale

- What are the academic reasons for the change proposed, and how do they fit with the unit's and division's academic plans?

ICCIT programs were initially developed in the late 1990s in co-operation with Sheridan College in response to a call from the Provincial Government for Colleges and Universities to develop relevant joint programs. The introduction of ICCIT programs also coincided with the abolition of the Ontario high school preparation year, grade 13 (Ontario Academic Credit or OAC) that led to the creation of a 'double cohort' of applicants to Ontario higher education institutions.

ICCIT has evolved since its initial beginnings, becoming an institute (EDU:A) in 2010. Since 2010, the Institute has hired 24 faculty – 17 in the tenure stream and 7 in the teaching stream. This includes two (2) Professors, nine (9) Associate Professors, six (6) Assistant Professors, two (2) Associate Professors Teaching Stream, and five (5) Assistant Professors Teaching Stream. Together the faculty contribute to a diverse teaching and research repertoire in the Institute. With interdisciplinarity at the core of ICCIT's work, the faculty are able to integrate both theory and media practices into their own research and teaching. With the phenomenal growth in faculty in the last 10-12 years, ICCIT now has the strength, stability, and breadth in expertise to fully deliver the CCIT Major and DEM Specialist programs. See section 7 (Resources) for a breakdown of the faculty strength.

In recent years, overlap in content areas across courses offered at both institutes has become more prevalent, particularly in the areas of game theory and design. For example, UTM Assistant Professor, Teaching Stream, Michael Nixon is a game design scholar and offers UTM-based courses with game design theory and principles which overlap with Sheridan-based courses in game design and digital media and virtual environment design, i.e. CCT270H5 Principles of Game Design, CCT311H5 Game Design & Theory, and CCT312H5 Interactive Storytelling for Game Design; UTM Assistant Professor Marie-Pier Boucher integrates digital media development into her media environment courses; Assistant Professor Steve Szigeti is a subject expert in data visualization; and Associate Professor Brett Caraway teaches the theory and practical development of virtual environments, overlapping with such Sheridan-based courses such as CCT353H5 Digital Media: Video, CCT449H5 Immersive VR Journalism, CCHT451H5 Digital Media: Audio, and CCT453H5 Digital Media: Advanced Video Production. See section 7 of this proposal for a complete list of faculty.

One of the recommendations of the 2017 external reviewer's report for ICCIT was better integration of Sheridan courses with UTM offerings, particularly in the areas of undergraduate research. After consultation with the UTM Dean's Office and Sheridan College representatives, it became clear that integration would be more effective if all courses were taught at UTM. A 2018 course audit and curriculum mapping exercise determined that ICCIT could effectively migrate courses that were taught at Sheridan to the UTM campus and faculty without compromising program learning outcomes. Moreover, the delivery of all ICCIT

courses at UTM would more effectively ensure the integration of theory with the practical aspects of digital media technologies design and development while maintaining better quality control of delivery and outcomes.

It is important to note that the migration of courses from Sheridan to UTM will not impact the program requirements or learning outcomes for the Digital Enterprise Media (DEM) Specialist Program. DEM students have always been able to take Sheridan-based courses as electives, and will be able to continue to do so up to Fall 2024 (when migration of Sheridan-based courses will be complete). DEM students will also be eligible to enroll in migrated courses that are now UTM-based. New DEM-focused courses (at UTM) were introduced in 2018-2019. These courses offer a stronger management focus that is better aligned with the DEM program learning outcomes and student interest, appealing more to DEM students.

This change in program delivery and faculty engagement will also not affect the CCIT Major's program learning outcomes. The migration of Sheridan-based courses will facilitate more effective integration of technical and media production skills with theory based courses and the opportunity to better map subject area and content foci across all ICCIT courses. This change will also allow for increased engagement of ICCIT faculty with the program and its students.

One of the key challenges faced by ICCIT for these joint programs is maintaining both facilities, in terms of laboratories and the development of state-of-the-art technical education environments, and appropriate technical support for both teaching and research. Given the rapidity of change within many of the areas covered by ICCIT's teaching portfolio, there is a continual need to innovate both at the programmatic and course level. The Sheridan course audit (see Appendix F: Projected Resource Requirements) completed as part of the migration is intended to address the curricular challenges that have arisen over the past several years.

4 Description of the Proposed Major Modification(s)

- Please describe in detail what changes are being proposed. Major modifications include changes to the program requirements that will significantly change what students will know and be able to do when they complete the program.
- Other major modifications that may be included are significant changes to admissions requirements, significant changes to faculty engaged in program and; a change to mode of delivery, change to the language of the program and offering the program at another location or institution.
- Please be explicit about how the learning outcomes have changed and include both previous and proposed learning outcomes or one version of the current learning outcomes with the new learning outcome in track changes. You may wish to use Appendices A and B.

- Describe how the modification reflects universal design principles and/or how the potential need to provide mental or physical health accommodations has been considered in the development of this modification.
- Please provide calendar copy, either in track changes or as two separate documents in appendices C and D as applicable.

Proposed changes:

1. The CCIT Major and DEM Specialist programs will no longer be delivered jointly by UTM and Sheridan College; instead, they will be delivered fully by UTM. The migration plan is:
 - i. The final cohort of students in the jointly offered programs will begin their programs in Fall 2021.
 - ii. Effective Fall 2022:
 - Students selecting the CCIT Major or DEM Specialist as a subject post will complete all of the course and program requirements at UTM;
 - all 200-level courses taught at Sheridan will be migrated to UTM, and will be delivered by UTM faculty, as appropriate;
 - iii. Effective Fall 2023, all 300-level courses taught at Sheridan will be migrated to UTM, and will be delivered by UTM faculty, as appropriate;
 - iv. Effective Fall 2024, all 400-level courses taught at Sheridan will be migrated to UTM, and will be delivered by UTM faculty, as appropriate.
 - v. Students who began the CCIT Major and DEM Specialist programs in Fall 2021 are expected to have completed their programs and graduated by Summer 2024; students who have not done so will still be able to complete their programs and degrees, but will be accommodated through UTM offered courses.
2. Students will no longer be able to complete the college credential (Certificate in Digital Communication)
 - As a replacement for the college credential, UTM has developed a Certificate of Completion in Media Studies.

Further to the details noted above, there is slight modification in terms of program requirements for the CCIT Major (as discussed above, program requirements for the DEM Specialist will not change). Currently students must choose 0.5 credits in the second year as well as complete 2.0 credits at the 300 & 400 level at Sheridan. Students will still be required to take 0.5 credits from a list of second year courses in addition to the required courses listed; however, all courses will be located at UTM. Similarly at the 300- and 400-level, students will still be required to take these 2.0 credits, but these will now be at UTM. The breadth of courses offered will remain.

As joint students of both UTM and Sheridan College, students in the CCIT Major and DEM

Specialist were eligible to participate in Sheridan College's Certificate in Digital Communication¹, a roster of media skills workshops developed to provide continuity of technical skills acquisition. This certificate program will no longer be available to CCIT Majors and Specialists after the Sheridan course migration is complete. In response to this, ICCIT has developed a Certificate of Completion in Media Studies² at UTM (launch in February 2021). ICCIT students, at no additional cost to them, now have the opportunity to participate in a selection of media skills development workshops that provide enhanced cohesion between ICCIT and the job market. Workshop selection is self-directed based on a student's individual interests and skillset, enabling students to be in control of their own learning experience. Students who complete 10 media skills workshops over the course of their ICCIT program will be eligible for a Certificate of Completion, outlining the workshops they attended, aligning skills they acquired and distinguishing them as having advanced digital media skill sets. The workshop roster is a result of consultations with CCIT and DEM course syllabi, the Director of the ICCIT, faculty, current and graduating students, alumni, and industry leaders. The input from these various entities offer valuable insights and strengthened connections between student-identified learning needs, as well as industries' requisite skills. The full complement of workshops will be approved annually by the ICCIT Curriculum Committee, with a core series repeated annually.

The migration of Sheridan courses to UTM will ease student mental stress and anxiety as it will lessen the burden of commuting between two campuses, navigating two sets of institutional rules and protocols, and juggling two different course management platforms. Students have articulated these particular stress factors during Student Advisory Council meetings and individual consultations over the past five years.

As of the 2021-22 academic year, there were a total of 34 CCT courses that were being taught at Sheridan. Twenty (20) of these Sheridan-taught courses will begin migrating to UTM starting in September 2022 (200-level courses). There are fourteen (14) Sheridan-taught courses that will be retired during the migration process. These courses are being retired to address the redundancy in CCT course offerings. With the growth that ICCIT has experienced, there is an abundance of UTM-based course offerings that speak to faculty expertise and student interest. Many of the Sheridan-based courses overlap in content and skill acquisition and have also not been offered in many years. Students interested in content covered in these retiring courses will have exposure through existing UTM-based CCT courses. See table below for a complete list of the courses, showing whether the course will be migrated or retired (and if retired, giving the rationale for this decision). In addition, Appendix E outlines the academic year each course is either migrated or retired.

Impact of the proposed changes on program learning outcomes:

¹ <https://caps.sheridancollege.ca/products/digital-marketing-management.aspx>

² <https://utm.calendar.utoronto.ca/section/Communication,-Culture,-Information-and-Technology>

The migration of Sheridan taught CCT courses will not affect the program learning outcomes of either the CCIT Major or the DEM Specialist. For more information see Appendix A.

SHERIDAN taught COURSE	MIGRATE	RETIRE	Academic rationale
CCT204H5 Design Thinking	X		CCT204H5 is a required course for program completion and foundational course in design concepts.
CCT250H5 Technology and Creative Expression	X		CCT250H5 provides students with appropriate frameworks and tools to create visual, written, and oral communication media for a range of industry sectors and audiences. The ICCIT curriculum committee will review course learning outcomes for more effective curriculum mapping to 3 rd and 4 th year production courses such as CCT353H5 and CCT357H5.
CCT260H5 Web Culture and Design	X		CCT260H5 is the foundational course for a series of three courses that scaffold web design and development skills
CCT270H5 Principles in Game Design	X		CCT270H5 provides the core concepts and applications for 3 rd & 4 th year theory & practical courses in game design.
CCT305H5 - Design & Implementation of Multimedia Documents	X		CCT305H5 represents the third year design theory and skills course. CCT305H5 builds on both theoretical and technical skills developed in CCT204H5 and CCT250H5.
CCT311H5 - Game Design & Theory	X		This course will be reassessed for prerequisite skills to the fourth year theory course in game design <i>CCT483 Play, Performance and Community in Digital Games</i> .
CCT312H5 - Interactive Story Telling for Game Development		X	Due to faculty teaching interests at Sheridan, three 3 rd year courses were offered. Two of these courses overlap with the UTM offered course by a recent faculty hire. A sub-group of the ICCIT curriculum

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			committee reviewed all game design and development courses to identify an appropriate series of courses at the second, third and fourth year levels. It was determined that CCT312H5 and CCT334H5 create too much overlap. CCT311H5 was kept as the theory-based course and CCT382H5, CCT419H5 and CCT483 (all three already offered at UTM) will cover all necessary concepts in story telling and prototyping.
CCT333H5 - Social Innovation	X		This course directly addresses learning outcome LO11, Assess and critically analyse the social impact of communication and digital media and the technologies that facilitate their dissemination. This course may also be included as part of the new ICCIT major in <i>Technology Coding and Society</i> .
CCT334H5 - History & Theory of Game Production	X		CCT334H5 will provide a historical foundation for both the ICCIT games stream and a potential new minor in Game Studies that is currently under development with the English department.
CCT336H5 - Comics & Digital Culture		X	Course based on Sheridan faculty research interest, retirement has no impact on CCIT major learning outcomes.
CCT351H5 - Theory & Practice of Animation		X	Course based on Sheridan faculty research interest, retirement has no impact on CCIT major learning outcomes
CCT352H5 - History & Practice of Design	X		This course will be reassessed upon migration to UTM for advanced concepts in design and design thinking and as a prerequisite for <i>CCT434H5 Design Thinking II</i>
CCT353H5 - Digital Media: Video PRA0101	X		Photography and videography have been important skills for CCIT students who hope to work within the creative industries post-graduation. Video and photography courses at the third

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			and fourth year levels will be retained and taught at UTM to maintain the development of these skills. The ICCIT curriculum committee will review course learning outcomes for more effective curriculum mapping with CCT250H5 and CCT453H5.
CCT356H5 - Online Advertising & Marketing	X		The Digital Enterprise Management specialist program offers specialist students several marketing courses that are more management focused. CCT356H5 has historically focused on marketing for CCIT majors with focus on the creative and digital media industries.
CCT357H5 - Digital Media: Photography	X		(see rationale for CCT353H5)
CCT360H5 - Intermediate Web Design PRA0101	X		CCT360H5 is the intermediate web design and development course and prerequisite for CCT460H5.
CCT384H5 - Inclusive Design & Social Responsibility		X	This course has significant overlap with <i>CCT380H5 Human Computer Interaction and Communication</i> .
CCT391H5 - Topics in Communication, Culture, Information & Technology		X	<i>CCT395H5 Special Topics in Communication, Culture, Information & Technology</i> is already offered at UTM.
CCT406H5 - Capstone Design Project	X		CCT406H5 is a technically oriented complement to the research focused <i>CCT405H5 Individual project</i> . Students must find an appropriate faculty supervisor to oversee a design-based research project.
CCT412H5 - Self-Directed Research Project: Advanced Studio Practices		X	Course based on Sheridan faculty research and student supervision interest, retirement has no impact on CCIT major learning outcomes. Students may use CCT406H5 to explore a design-based project.
CCT423H5 - Game Development Project		X	Course based on Sheridan faculty research and student supervision interest, retirement has no impact on CCIT major learning outcomes. Students may use CCT405H5

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			Independent (already offered at UTM) to explore a design-based project.
CCT433H5 - Sustainable Design	X		This course will build on theory, concepts and technical skills developed in CCT333H5. This course may also be included as part of the new ICCIT major in <i>Technology Coding and Society</i> .
CCT434H4 - Design Thinking II	X		This course will be reassessed and revised as an advanced design course
CCT448H5 - Game Design as Problem Solving		X	Covered by CCT419H5 in terms of practical applications and problem solving
CCT449H5 - Immersive VR Journalism		X	Can be covered in <i>CCT454H5 Documentary Practices</i> and <i>WRI430 Journalistic Investigation</i> .
CCT450H5 - Design Interactive Books		X	Course based on Sheridan faculty research interest, retirement has no impact on CCIT major learning outcomes.
CCT451H5 - Digital Media: Advanced Audio Production		X	Similar skills are developed in <i>WRI380 Podcasting</i> and <i>CCT371 Sound as Media</i> already offered at UTM
CCT452H5 - Graphic Design & Popular Culture		X	Course based on Sheridan faculty research interest, no impact on CCIT major learning outcomes
CCT453H5 - Digital media: Advanced Video Production	X		(see rationale for CCT353H5)
CCT456H5 - Analysis & Visualization of Open Data		X	The skills developed in visually analyzing data are developed in <i>CCT470H5 Information Visualization</i> already taught at UTM
CCT457H5 - Digital Media: Advanced Photography Production	X		This course enables students to develop advanced skills in digital photography that may be incorporated in the development of digital artifacts.
CCT460H5 - Advanced Web Design PRA0101	X		This is the advanced web design and development course that builds on the concepts and skills developed in CCT260H5 and CCT360H5.

CCT482H5 - Interactive Electronic Design	X		This course will be redesigned as the advanced offering of <i>CCT286H5 Interactive Media</i> and <i>CCT385H5 Conceptualizing Media Environments</i> already taught at UTM.
CCT491H5 - Topics in Communication, Culture, Information & Technology		X	<i>CCT495H5 Special Topics in Communication, Culture, Information & Technology</i> Is already offered at UTM.

5 Impact of the Change on Students

- Outline the expected impact on continuing students, if any, and how they will be accommodated.
- Please detail any consultation with students.

Students that started CCIT Major and DEM Specialist prior to Fall 2022 will not be affected by the migration, they will remain joint students of UTM and Sheridan College and be able to complete their course requirements as stated in the academic calendar at both institutions. Ongoing advising has been stressing the need for students to stay in cohort and make course decisions that will see their completion of Sheridan courses by April 2024. It is expected that most students in both joint programs will be able to complete their program requirements by Summer 2024 (the last offering of Sheridan-based CCT courses). Students that are not able to do so will be advised on a case-by-case basis by ICCIT staff and faculty and will be accommodated through UTM-based courses.

New students entering the CCIT Major in Fall 2022 (or after) will start the program in their second year of study and complete all courses at UTM. As discussed above, DEM Specialist students will not see a change in program requirements as the program has always been able to be completed solely at UTM. DEM students have the option to complete Sheridan-based CCT courses that would count toward program elective options. Migrated courses will continue to be open to DEM Specialists.

Additionally, student enrollment has increased dramatically in the 6 year period of 2014-2020 (154% for the CCIT Major and 88% DEM Specialist³). The practical logistics of scheduling and moving students between two institutions has become increasingly problematic. Moving Sheridan-based courses to UTM will allow for streamlining of course offerings and more flexibility in student timetables.

³ Data from FAC Dashboard

The decision to migrate Sheridan courses to UTM has been informed by ongoing consultation with students through the ICCIT Student Advisory Council regarding issues and concerns over program continuity and integration. The growth, yearly faculty hiring in ICCIT, and continual curriculum mapping have facilitated an effective migration strategy.

6 Consultation

- Describe the impact of the major modification on other programs and any consultation undertaken with the Dean and chair/director of relevant academic units.

This major modification does not impact any other programs.

Prior to implementation of this modification, ICCIT and Sheridan College jointly launched a campaign to communicate plans of the delivery mode change to faculty, staff, and students. This included discussions at faculty meetings, e-mail communications to impacted faculty, staff, and students, student town halls, announcements and FAQ on institutional webpages, and a strategic social media campaign.

In addition, The ICCIT Director consulted with the following:

January - June 2019

- ICCIT faculty and staff.
- Christine Capewell, Executive Director, Budget, Planning & Finance.

September 2019

- Amrita Daniere, Vice Principal Academic & Dean UTM and Angela Lange, former Vice Dean Faculty UTM.
- Anuar Rodrigues, former Director, Academic Planning, Policy, and Research
- Heather Miller, Vice Dean Teaching and Learning
- Yen Du, Manager, Academic Programs, Reviews & Quality Assurance.

January 2020

- Alison Syme, Chair - Department of Visual Studies (some programming at Sheridan College)
- Alexandra Gillespie, Chair – English and Drama (some programming at Sheridan College).

February 2020

- Jane Stirling, Executive Director, Communications.
- Lorretta Neebar, Registrar UTM.

March 2020

- Emails and meeting for faculty, sessionals, Sheridan instructors
 - March 6th
- Students and staff – Town Halls
 - Tuesday, March 10: Sheridan: 2 pm to 4 pm, Macdonald-Heaslip Hall.
 - Wednesday, March 11: University of Toronto Mississauga: 10 am to 12 pm, DV2072.
- Meeting with Budget, Planning & Finance representatives
 - March 19th

7 Resources

- Describe any resource implications of the change(s) including, but not limited to, faculty complement, space, libraries and enrolment/admissions.
- Please be specific where this may impact significant enrolment agreements with the Faculty/Provost's office.
- Indicate if the major modification will affect any existing agreements with other institutions, or will require the creation of a new agreement to facilitate the major modification (e.g., Memorandum of Understanding, Memorandum of Agreement, etc). Please consult with the Provost's office (vp.academicprograms@utoronto.ca) regarding any implications to existing or new agreements.

- **Faculty complement** – the instructional faculty for the courses migrating to UTM will include existing faculty, new hires, and sessional instructors. Three faculty searches were held during the 2021-2022 academic year for new hires – two in the area of Design (1 tenure; 1 teaching stream) and one in Visual Studies, Race and Militarization (tenure stream). These positions are expected to begin at UTM on July 1, 2022 and will ensure ICCIT has the faculty strength to support these two programs at UTM. Please see Appendix F for the Projected Resource Requirements. Faculty offices will be on a shared basis.
- **Staff** – An additional UTM staff member to support the administration and operation of these two programs is required to offset some of the support previously provided by Sheridan College. This Media Technician position has already been approved and filled (as of September 2021).

- **Space** – The ICCIT currently has research and teaching lab spaces on the 3rd and 4th floors of the Communication, Culture & Technology (CCT) Building on the UTM campus in the following rooms, with a total project area of 238 NASMs: CCT 3085, CCT 3110, CCT 4012 & 4020, and CCT 4075. These spaces will be used for some of the hands-on experiences for students in courses migrating to UTM. In addition, a classroom analysis was conducted in November 2019 by the Academic Planning, Policy, and Research unit in the UTM Dean’s Office where it was determined that there is sufficient space for courses. When the F2 building is completed, additional facilities, including a Maker space, will become available.
- **Libraries** – Currently enrolled CCIT Major and DEM Specialist students already have access to the University of Toronto Libraries (UTL) system. This will not change as a result of this modification.
- **Software and technology devices** – There will be need to acquire software licenses and hardware devices. These are estimated in Appendix F for the Projected Resource Requirements. The cost of this equipment and software will be covered as part of the existing tuition fees for these two programs.
- **Revenue-Sharing with Sheridan** – the current revenue-sharing arrangement for Sheridan-based CCT courses will remain in effect until the 2024-2025 fiscal year as Summer 2024 will be the final academic term for CCT courses at Sheridan College. Students that are still completing joint program requirements after Summer 2024 will be accommodated through UTM-based courses.
- **Student Enrolments** – There are no plans to alter the enrolments for these two programs – program size will remain and international-domestic student ratio will remain as is.

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Name	Unit of Primary Budgetary Appt and %	Unit of Other Budgetary Appt and % (if applicable)	Commitment to Other Programs (Please list other programs in which the person routinely teaches/supervises.)	Nature of Contribution to CCIT Major & DEM Specialist (Course instructor [CI] and the course they will teach, etc.)
Tenure Stream: Full				
McEwen, Rhonda	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	CI - CCT202H5
Packer, Jeremy	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	<i>On Leave</i>
Tenure Stream: Associate				
Boase, Jeffrey	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	CI - CCT208H5; CCT481H5
Caraway, Brett	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	CI – CCT219H5; CCT285H5; CCT325H5
Cohen, Nicole	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	CI – CCT418H5
Coleman, Beth Malaika	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	CI - CCT109H5
Karppi, Tero Jukka	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	CI – CCT331H5; CCT365H5; CCT432H5
McEwan, Breanna	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	CI – CCT208H5; CCT386H5; CCT416H5
Munteanu, Cosmin	ICCIT, UTM (100%)		CCIT, MI, PhD in Information, PhD in Computer Science	CI - CCT380H5; CCT480H5
Sharma, Sarah	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	<i>On Leave</i>
Tenure Stream: Assistant				

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

Name	Unit of Primary Budgetary Appt and %	Unit of Other Budgetary Appt and % (if applicable)	Commitment to Other Programs (Please list other programs in which the person routinely teaches/supervises.)	Nature of Contribution to CCIT Major & DEM Specialist (Course instructor [CI] and the course they will teach, etc.)
Boucher, Marie-Pier	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	CI – CCT333H5; CCT433H5; CCT482H5
Bountali, Olga	ICCIT, UTM (51%)	Management, UTM (49%)	Department of Management; Rotman School of Management, graduate programs	CI – CCT476H5
Chen, Yujie	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	CI – CCT200H5; CCT420H5; CCT486H5
Dahya, Negin	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	CI - CCT308H5
Topouzova, Lilia	ICCIT, UTM (100%)		CCIT, MI, PhD in Information	CI – CCT353H5; CCT453H5
Yoo, Hyesung	ICCIT, UTM (51%)	Management, UTM (49%)	Department of Management; Rotman School of Management, graduate programs	CI – CCT354H5
NEW HIRE (Design)	ICCIT, UTM (100%)			CI – CCT250H5; CCT352H5; CCT357H5; CCT433H5; CCT457H5
NEW HIRE (Visual Studies)	ICCIT, UTM (100%)			CI – CCT333H5

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

Name	Unit of Primary Budgetary Appt and %	Unit of Other Budgetary Appt and % (if applicable)	Commitment to Other Programs (Please list other programs in which the person routinely teaches/supervises.)	Nature of Contribution to CCIT Major & DEM Specialist (Course instructor [CI] and the course they will teach, etc.)
Teaching Stream: Associate				
Bowen, Tracey	ICCIT, UTM (100%)			CI – CCT352H5; CCT410H5
Teaching Stream: Assistant				
Cherki El Idrissi, Sarah	ICCIT, UTM (100%)			CI – CCT112H5; CCT225H5; CCT225H5; CCT324H5
Guadagnolo, Daniel	ICCIT, UTM (100%)			CI – CCT305H5; CCT333H5; CCT356H5
Maddalena, Katherine	ICCIT, UTM (100%)			CI – CCT250H5; CCT305H5
Nixon, Michael	ICCIT, UTM (100%)			CI – CCT111H5; CCT211H5; CCT270H5; CCT311H5;
Szigeti, Stephen	ICCIT, UTM (100%)			CI – CCT110H5; CCT204H5; CCT311H5; CCT352H5; CCT353H5; CCT433H5; CCT434H5
NEW HIRE (Design)	ICCIT, UTM (100%)			CI – CCT260H5; CCT360H5; CCT460H5

8 UTQAP Process

The UTQAP pathway is summarized in the table below.

Steps	Approving Body	Approval Date
Development/consultation within Unit	Tracey Bowen Acting Director, ICCIT	March 28, 2022
Decanal & Provostial Sign-Off	Heather Miller Vice-Dean, Teaching & Learning	April 27, 2022
	VPAP sign-off	April 26, 2022
Divisional Governance Approval	UTM Academic Affairs Committee	May 9, 2022
AP&P – reported annually		May 2022
Ontario Quality Council – reported annually		July 2022

9 Appendix A: Current Learning Outcomes, and Degree-Level Expectations

Address how the design, structure, requirements and delivery of the program support the program learning outcomes and degree-level expectations.

The CCIT Major Program Learning Outcomes will not change nor will they be affected. Some of the courses will have added PRAs to better accommodate the development and integration of digital media skills within the course delivery. Sheridan labs had restricted enrolment and were smaller than those available at UTM. The resource implications have been identified in Appendix F.

1. Breadth & Depth of Knowledge

1.1 Breadth of Knowledge

In the course of their studies, students will gain an awareness and appreciation of the variety of modes of thinking, methods of inquiry and analysis, and ways of understanding the world through communication and digital media. Students will engage in critical thinking and analytical skills through the theoretical study of communication and digital media concepts and applications and the application of design skills for developing a range of communication media, digital artifacts and virtual environments.

Corresponding CCIT Program Learning Outcomes:

L01 Interpret and apply the theoretical frameworks required to analyze and evaluate a range of communication modalities and digitally mediated environments

L02 Assess and critically analyze the audiences for which communication texts are developed

How the Program Design/Structure Supports the Degree-Level Expectations:

The two introductory courses *CCT109H5 Contemporary Communication Technologies* and *CCT110H5 Rhetoric and Media*, prepare students to enter ICCIT programs by providing them with a breadth of knowledge in communication and digital media theories and practices. CCT109 helps students gain an awareness and appreciation of the history and modes of thinking about communication and digital media, introduces them to research methods in communication, and ways of identifying and understanding audiences. Students in CCT109H5 examine the social, political, and economic impacts of new media from the early days of the telegraph to the latest network technologies.

CCT110H5 Rhetoric and Media requires students to critically examine the written, visual, aural, and dynamic rhetoric as it pertains to communications for academic and other

purposes across a range of digital media discourses. CCT110H5 is writing intensive with the intent of providing students with the communication skills they need to clearly and effectively communicate their ideas to diverse audiences. Students are also exposed to creating podcasts and visual communications campaigns as part of the course assignments.

Second year program requirements, *CCT204H5 Design Thinking* provides students with the foundational skills for designing and developing digital artifacts and *CCT218H5 Foundations of Media and Technology Studies* builds and expands on communications and digital technology theories and concepts developed in CCT109H5 and CCT110H5, providing a foundation for third and fourth year courses that look at various aspects of media environments, ethics, and technology users at a more granular level. Courses such as *CCT212H5 Hacker Culture* and *CCT250H5 Technology and Creative Expression* and *CCT260H5 Web Culture and Design* introduce students to the mechanics, theoretical underpinnings and ethical questions of designing and manipulating digital artifacts and environments within social and cultural contexts.

1.2 Depth of Knowledge

Students will attain depth of knowledge in the analysis, evaluation and interpretation of communication and digital media through a progression of introductory, core and specialized courses that address critical, theoretical, and design perspectives. Students have opportunities to develop their technical skills from introductory courses such as CCT204H5 Design Thinking I, CCT260H5 Web Culture and Design and CCT286H5 Interactive Media to intermediate offerings in third year and advanced courses in fourth year. Students also have the opportunity to develop fourth year research and design-based independent projects synthesizing both theoretical and technical knowledge.

Corresponding CCIT Learning Outcomes:

- L04** Assess and critically analyze how information and communication media are used,
- L05** Critically evaluate development and implementation strategies for communication media projects,
- L06** Identify and solve design problems in relation to developing digital media and propose solutions in a culturally sensitive and ethical manner,
- L08** Develop technical fluency in current digital media creation software tools and have skills, appropriate to learning any similar types of software that may be developed in future,
- L011** Assess and critically analyze the social impact of communication and digital media and the technologies that facilitate their dissemination.

How the Program Design/Structure Supports the Degree-Level Expectations:

Through a combination of theoretically focused and production based courses, CCIT provides students with a foundation in communication and new media theory within the

second year (first year in program) and then exposes students to intermediate and advanced production techniques so they main gain technical proficiency and creative problem solving using a range of media. Depth of knowledge is achieved through more focused examinations of media and its social impact in courses such as *CCT300 Critical Analysis of Media*, *CCT33H53 Social Innovation* and *CCT340H5 Gender Media and Technology*, enabling students to build on their knowledge and develop a critical capacity for understanding the interaction between theories and modes of communication, in relation to the social, cultural and economic impact of new technologies. Several of the courses create a progressive suite such as *CCT260H5 Web Culture and Design*, *CCT360H5 Intermediate Web Design* and *CCT460H5 Advanced Web Design* that help students develop technical proficiency within the digital environments they most often work within. Courses such as *CCT341H5 Introduction to IT Consulting* and *CCT380H5 Human Computer Interaction and Communication*, provide students with the knowledge, design, and team building skills to advance in their fourth year courses that integrate theory, design, technical skills and rhetoric for more focused examinations of the impact of digital communication technologies on users in courses such as *CCT480H5 User Experience Analysis*, *CCT48H53 Play, Performance and Community in Digital Games* and *CCT485 User Experience Design*. The progression of third and fourth year courses also prepares those students who choose to do an independent reading course (CCT401H5) Individual thesis-based project (CCT405H5) or design based project (CCT406).

2. Knowledge of Methodologies

Students will have knowledge of and experience with different methodologies and approaches relevant to research and design within the field of communication and digital media.

Corresponding CCIT Learning Outcomes:

L03 Develop appropriate methodologies for researching in the communication and digital media fields,

L05 Critically evaluate the development and implementation strategies for communication media projects.

How the Program Design/Structure Supports the Degree-Level Expectations:

CCT208H5 Communication Research Methods provides students with a broad understanding of and exposure to methodologies within the field of communication and media. Through a small research project, students learn to collect, manage, analyze and interpret social science research data. *CCT308H5 Advanced Research Methods* builds on the skills and knowledge developed in CCT208 through focused study of select methodologies and an experiential learning opportunity where each student is placed on a faculty research project to test their skills and consider both theoretical and ethical questions around *doing* research in the communication and media field. *CCT38H50 Human Computer Interaction and*

Communication, provides students interested in user experience design with the appropriate design and testing skills and concepts required for the fourth year user experience design courses.

3. Application of Knowledge

Students will be able to frame relevant questions for further inquiry within or beyond the communication and digital media field. They will be able to identify and apply the appropriate tools with which they can address such questions effectively from both a theoretical and technical perspective.

Corresponding CCIT Learning Outcomes:

L04 Assess and critically analyze how information and communication media are used,

L05 Critically evaluate development and implementation strategies for communication media projects,

L06 Identify and solve design problems in relation to developing digital media and propose solutions in a culturally sensitive and ethical manner,

L08 Develop technical fluency in current digital media creation software tools and skills appropriate to learning any similar types of software that may be developed in future,

L09 Design appropriate frameworks and tools and create visual, written and oral communication media for a range of industry sectors and audiences,

L011 Assess and critically analyze the social impact of communication and digital media and the technologies that facilitate their dissemination.

How the Program Design/Structure Supports the Degree-Level Expectations:

CCIT is structured to integrate creative problem solving with technical proficiency grounded in a critical understanding of communication and media theory. Many courses highlight this integration through the application of technical skills to complex problems using real world scenarios. Students in CCIT are introduced to group work early on and must learn to develop their interpersonal skills such as critical listening and negotiation and value diverse perspectives. They are required to make informed judgements as both an individual and often as part of a group, as they identify the most appropriate tools and methods for addressing the problem, evaluate a range of possible solutions keeping in mind the impact of those solutions, and then apply their skills effectively.

4. Communication Skills

Students will be able to effectively communicate and critically evaluate information, arguments, and analyses, using a range communication tools and digital platforms.

Corresponding CCIT Learning Outcomes:

L02 Assess and critically analyze the audiences for which communication texts are developed,

L09 Design appropriate frameworks and tools and create visual, written and oral communication media for a range of industry sectors and audiences,

L010 Assess and apply appropriate rhetorical strategies in written, oral, and digital form, clearly, accurately and concisely.

How the Program Design/Structure Supports the Degree-Level Expectations:

CCT110H5 Rhetoric and Media sets the foundation for more focused inquiry into the use and impact of rhetoric on audiences through diverse modes of communication. For example, *CCT300H5 Critical Analysis of Media* looks at the theoretical underpinnings of media and moral panics, further developing the student's awareness of how they communicate and for what purpose. *CCT210H5 Signs Referents and Meanings* provide students with semiotic tools for critiquing the meanings within different communication and media products, as well as gain a sense of their own use of rhetoric when creating digital texts in written, visual and oral form. *CCT304H5 Visual Communications in Digital Environments* provides students with opportunities to interrogate how images are used to communicate messages and make everyday decisions and *CCT47H50 Information Visualization* provides opportunities to analyze how we visually communicate and read data. Students further develop their communication skills through their creation of project reports, reflections, group presentations and digital artifacts; modes of assessment that are used frequently along with term papers and tests in third and fourth year courses.

5. Awareness of Limits of Knowledge

Students will acknowledge and appreciate the limits of their own knowledge. They will also gain an awareness of the uncertainty, ambiguity, and limits of our collective knowledge and how these might influence analyses and interpretations of communication and digital media artifacts, environments and tools.

Corresponding CCIT Learning Outcomes:

L05 Critically evaluate development and implementation strategies for communication media projects,

L011 Assess and critically analyze the social impact of communication and digital media and the technologies that facilitate their dissemination.

How the Program Design/Structure Supports the Degree-Level Expectations:

Through group activities within lecture, group problem solving and also individual projects, students have the opportunity to evaluate communication tools and methods and identify weaknesses within the problem and limitations of their own knowledge. Courses such as *CCT485 User Experience Design* highlight the importance of looking beyond what is already

known and clearly evident, and better understand what is not known. The project based approach to many CCIT courses such as *CCT341H5 Introduction to IT Consulting*, *CCT404H5 Integrative Design Project* and *CCT480H5 User Experience Analysis* requires students to identify the limits of their knowledge and further inquire into the impact of digital technologies on users and society at large. Further to these in-class courses, *CCT410H5 Internship I*, *CCT Internship II* and *CCT409H5 Work-based Learning* situates students in the workplace where they are quickly confronted with the limitations of their knowledge and must rely on their abilities to be self-directed researchers in order to complete their assigned tasks. Students have the opportunity to work a diverse range of placements including small to medium sized businesses, start-ups, non-profit and community organizations.

6. Autonomy and Professional Capacity

Students will acquire the skills and knowledge they need to become informed, ethical, independent and creative thinkers and decision-makers; gain an awareness and appreciation that knowledge and its applications are influenced by and contribute to society; and to lay the foundation for learning as a life-long endeavour.

Corresponding CCIT Learning Outcomes:

L06 Identify and solve design problems in relation to developing digital media and propose solutions in a culturally sensitive and ethical manner,

L07 Organize, manage and participate on collaborative project teams for solving problems using digital media,

L012 Reflect on and develop professional work practices both inside and outside of the classroom for future careers and/or studies.

How the Program Design/Structure Supports the Degree-Level Expectations:

One of the most important contributors to CCIT students' development of autonomy and professionalism is through experiential learning. Students are engaged in a wide range of hands-on projects as both individuals and also as a member of a team tasked with a specific problem. Students are assessed not only on their skills and knowledge, but also on their ability to work professionally and effectively with others to find the best solution to the problem. They must consider the ethical ramifications of their solutions, their contributions as team members (some courses require group contracts as part of the project assignment) and the challenges of upholding their own academic integrity while working collaboratively. The internship and work-integrated learning courses provide students with the opportunity to not only test the skills and knowledge they have developed, but also become more autonomous actors across different real world contexts as they learn to live with ambiguity and analyze problems on their own. For many students, the internships and work-integrated learning experiences provide exposure to professional environments that they have not had access to in the past. They are able to develop their own professional persona

and better understand the need to be flexible and adaptable for the challenges of technological advancement and innovation that envelop the industries they have chosen for their careers. An important element of all CCIT experiential learning opportunities is reflection, a way for students to explore the depths and the limitations of their knowledge and become more self-aware of who they are as future agents of change.

10 Appendix B: Course Descriptions

Sheridan-Based Courses

CCT204H5 • Design Thinking I

(Offered at Sheridan College) An introduction to the basic concepts and skills of design thinking as an interdisciplinary subject. Emphasizes creative and critical thinking in the design process; provides the student with the theory and operational skills necessary to solve design problems in the realms of symbolic and visual communication, material objects, environments, and organized services and activities.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 24L/12P

CCT250H5 • Technology and Creative Expression

(Offered at Sheridan College) Advances in technology have provided users ready access to empowering technologies of creative expression. This emergence of prosumer and amateur production technology has both destabilized and revolutionized established practice in digital imaging, time based media, gaming, and design. This course provides a survey of contemporary theories, technologies and critical challenges in a variety of media of creative expression.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 24L/12P

CCT260H5 • Web Culture and Design

(Offered at Sheridan College) The course will explore how the web has influenced culture and how websites are designed and managed. Topics will include the presentation of text, graphics, audio and video on the web. Design, web server concepts, human communication systems and organizational contexts will be considered in creating web sites using scripting languages and web software tools.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)
Distribution Requirement: Social Science
Total Instructional Hours: 36P

CCT270H5 • Principles in Game Design

(Offered at Sheridan College) An overview of videogame theory, best practices, emergent trends and technology, with strong participation by industry professionals. This course features a variety of guest speakers addressing different facets of game design, supported by later discussion and analysis. Students will experience a broad overview of principles in game design that may inspire further development and design activities in related game design courses.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)
Distribution Requirement: Social Science
Total Instructional Hours: 36L

CCT305H5 • Design and Implementation of Multimedia Documents

(Offered at Sheridan College) The principles and techniques of user-centered, functional design are introduced and applied to the analysis of software interfaces and the creation of multimedia documents. The roles of shared metaphors and mental models in clear, concise and usable designs are emphasized. Students will produce multimedia documents, which make effective use of text, colour, user input, audio, still, and time-based images.

Prerequisites: [CCT204H5](#) or [CCT250H5](#)
Distribution Requirement: Social Science
Total Instructional Hours: 24L/12P

CCT311H5 • Game Design and Theory

(Offered at Sheridan College) This course will address the principles and methodologies behind the rules and play of games. The lectures and practical work will foster a solid understanding of how games function to create experiences, including rule design, play mechanics, game balancing and the integration of visual, tactile, audio and textual components into games.

Prerequisites: [CCT270H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT312H5 • Interactive Story Telling for Game Development

(Offered at Sheridan College) This course will address traditional storytelling and the challenges of interactive narrative. Students will develop a solid understanding of traditional narrative theory as well as experimental approaches to storytelling in literature, theatre and film with relevance to game development.

Prerequisites: [CCT270H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT333H5 • Social Innovation

(Offered at Sheridan College) This course introduces students to the strategies and processes of social innovation through usability studies, systems analysis, and artifact prototyping for new products or services for underserved groups. Students will learn various techniques of understanding user needs requirements and design methodologies, and apply this knowledge to create socially innovative prototypes to apply to real world situations. By the end of this course, students will have worked in groups to develop design alternatives for a technological artifact or system of their choosing, gain knowledge of human-centred design strategies and learn how to become change agents through case studies, best practice analyses, and relevant readings.

Prerequisites: [CCT250H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT334H5 • History and Theory of Game Production

(Offered at Sheridan College) This course will examine the principles, theory and practice behind the production of games. By examining the history and contributions of early founders such as Atari and Activision, all the way to present-day leaders such as Electronic Arts and Sony, students will gain an understanding of how the global video game industry operates. The lectures and practical work will foster an approach to the

understanding of game production issues including technology, law, marketplace and audience demand.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT336H5 • Comics and Digital Culture

(Offered at Sheridan College) Examining the medium of comics and graphic novels and its evolution in an era of digital production and dissemination. Starting from a foundational understanding of the visual grammar of comics, students create their own graphic narratives and later explore the dynamics of digital dissemination by creating viral and memetic content for an Internet audience.

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT351H5 • Theory and Practice of Animation

(Offered at Sheridan College) This course introduces the student to the history of animation from the earliest exploration of the animated image in the early 1900's to the most current computer, traditional and web-based practices. This course will focus on important stylistic, narrative and technological developments.

Prerequisites: A minimum of 8.0 university credits including [CCT109H5](#) and [CCT110H5](#).

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT352H5 • History and Practice of Design

(Offered at Sheridan College) This course examines the historical development of communication design from the industrial revolution to the present. The student will focus on the emergence of design practice and theory in changing economic, technological and social contexts.

Prerequisites: [CCT204H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT353H5 • Digital Media: Video

(Offered at Sheridan College) This course will explore the theoretical and practical aspects of producing narrative time based imagery within a digital environment. The conceptual and digital tools as well as workflows and delivery systems that have been developed to produce images will be explored.

Prerequisites: A minimum of 8.0 university credits including [CCT109H5](#) and [CCT110H5](#).

Distribution Requirement: Social Science

Total Instructional Hours: 48P

CCT356H5 • Online Advertising and Marketing

(Offered at Sheridan College) This course investigates the industrial practices and tools of effectively marketing and promoting goods and services online. Topics include analysis of contemporary online advertisement design, the effective use of social media technologies in product marketing, planning online campaigns that reinforce and complement existing marketing and advertising efforts, and understanding key metrics used to evaluate a campaign's effectiveness.

Prerequisites: [CCT260H5](#)

Exclusions: [CCT354H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT357H5 • Digital Media: Photography

(Offered at Sheridan College) This course will explore the theoretical and practical aspects of producing theme based single and sequential imagery within a digital environment. We will explore the conceptual and digital tools as well as workflows and delivery systems that have been developed to produce images.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 48P

CCT360H5 • Intermediate Web Design

(Offered at Sheridan College) This course builds upon the concepts introduced in Web Culture and Design and expands upon them to include the theory and practical aspects of creating modern, compliant standards for websites. Its focus is primarily on the design and presentation of websites on the client side. Students will learn how to develop websites for consumption on various platforms including desktop browsers, mobile devices, etc.

Prerequisites: [CCT260H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36P

CCT384H5 • Inclusive Design and Social Responsibility

(Offered at Sheridan College) The course provides an overview of inclusive design, a paradigm that empowers people of all ages and abilities. By analyzing products, buildings and communities from an inclusive perspective and making the needs of people the central focus of the design process this new paradigm seeks to develop form from function to increase the usefulness and responsiveness of our physical world for a wider and more diverse range of people.

Prerequisites: [CCT204H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT391H5 • Topics in Communication, Culture, Information and Technology

(Offered at Sheridan College) An in-depth examination of selected CCIT topics Topics will vary from year to year and the content in any given year depends on the instructor. The contact hours for this course may vary in terms of contact type (L, S, T, P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

Prerequisites: A minimum 8.0 university credits.

Distribution Requirement: Social Science

Total Instructional Hours: 36P

CCT406H5 • Capstone Design Project

(Offered at Sheridan College) An applied project-based capstone course in which groups will be paired with an identified client with real-life needs in digital media creation. Students will work in small cross-functional teams to develop and present proposals to client representatives and a panel of industry experts. Students will also be taught the arts of networking, proposal writing and project management.

Prerequisites: A minimum of 13.0 university credits including [CCT204H5](#) or [CCT260H5](#).

Distribution Requirement: Social Science

Total Instructional Hours: 36P

CCT412H5 • Self-Directed Research Project: Advanced Studio Practices

(Offered at Sheridan College) This course facilitates a student-led research project to be carried out under the supervision of a faculty member. This is an opportunity to develop a critical and practical perspective on selected issues and practices within CCIT. Students design and implement an advanced project on a topic of interest using advanced creative and critical production skills. The aim is to redefine and articulate critical ideas through the process of making creative work. Students must obtain signed permission from a potential supervising faculty member.

Prerequisites: 1.0 credit

from [CCT305H5](#) or [CCT351H5](#) or [CCT353H5](#) or [CCT357H5](#) or [CCT360H5](#).

Distribution Requirement: Social Science

CCT423H5 • Game Development Project

(Offered at Sheridan College) This course will provide the opportunity to develop a practical understanding of the game development cycle. Students will design and develop an original game in support of a specific narrative, set of rules or play mechanics.

Prerequisites: [CCT311H5](#) or [CCT312H5](#)

Distribution Requirement: Humanities, Social Science

Total Instructional Hours: 36P

CCT433H5 • Sustainable Design

(Offered at Sheridan College) This course immerses students in sustainable design methodologies based upon whole systems analysis, applying the quadruple bottom line of people, profit, planet, and culture to understand and design for environmental issues and social change. During this course, students will apply the process and rhetoric of sustainable systems thinking to the re-design of an object or service applying such methodologies as cradle-to-cradle, 'design-for-environment', pricing based on full cost accounting, greening of the supply chain, and corporate responsibility. Throughout the course, students will examine the need for sustainable design through case studies, best practice analyses, and relevant readings

Prerequisites: A minimum of 13.0 university credits including ([CCT204H5](#) or [CCT250H5](#))

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT434H5 • Design Thinking II

(Offered at Sheridan College) An advanced project-based seminar on the art and creative directions of design thinking. Combining traditional and innovative creativity methods, a variety of design projects are conceptualized and drafted for proposal or implementation. This course embraces design thinking as a holistic, interdisciplinary approach that integrates methodical creativity and overarching design principles, such as aesthetics, futures-thinking, progress and metadesign.

Prerequisites: [CCT204H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT448H5 • Game Design as Problem Solving

(Offered at Sheridan College) In this course, learners will identify and analyze the problems associated with game design such as The Door Problem and The Stamp Collecting Dilemma. Applying their own creativity and various schools of game theory such as Player-Centric Design, learners will prepare game mechanics that address and attempt to solve these problems.

Prerequisites: [CCT311H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36P

CCT449H5 • Immersive VR Journalism

(Offered at Sheridan College) This course focuses on creating digitally produced stories designed to provide a first-person, interactive experience with news events, animation and documentary film. 3D gaming, 3D drawing tools, and immersive technologies will be used to engage the audience member, creating a sense of 'presence'. Four theoretical domains will be discussed as part of a new narrative design framework foundational to Immersive VR Journalism: VR presence, narrative, cognition and journalistic ethics.

Prerequisites: [CCT312H5](#) or [CCT351H5](#) or [CCT353H5](#) or [CCT357H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36P

CCT450H5 • Designing Interactive Books

(Offered at Sheridan College) This advanced self-directed project-based course allows students who are already familiar with the principles of page layout and interactive multimedia to design and publish in iBooks. The principles and practice of creative concept development and art direction are actively applied. Students will develop original content in text, digital media, and engage in the creative application of iBooks Author's widgets as a writer, editor, illustrator, and designer. Balancing an industry-ready mindset with an avant-garde spirit, students are also encouraged to investigate this medium as an art form in alternative, experimental directions.

Prerequisites: [CCT204H5](#) and [CCT305H5](#) or permission of instructor

Distribution Requirement: Social Science

Total Instructional Hours: 36P

CCT451H5 • Digital Media: Advanced Audio Production

(Offered at Sheridan College) This course explores how to design and produce a soundtrack for film or television. The foundations of technical theory and nomenclature will be provided, as well as aesthetic guidelines. Practical exercises will explore: voice recording, use of library sound effects, creative sound design, sound editing and processing technology and soundtrack mixing.

Prerequisites: [CCT353H5](#)

Distribution Requirement: Humanities

Total Instructional Hours: 36P

CCT452H5 • Graphic Design and Popular Culture

(Offered at Sheridan College) This course will continue from where History and Practice of Design leaves off; from the beginning of the Post-Modern period or c.1975. It will study the history of graphic design to the present in roughly chronological order; it will focus on specific topics rather than on movements, schools or chronological events. Topics will highlight how social trends, political forces, technological innovation and continuing folk traditions all contribute to the visual environment we all inhabit today. Topics will emphasize popular culture as a force shaping graphic design while also referring to a theoretical graphic design discourse.

Prerequisites: [CCT204H5](#) and [CCT352H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT453H5 • Digital Media: Advanced Video Production

(Offered at Sheridan College) This course focuses on advanced theoretical and practical aspects of video production and editing. Storytelling techniques, the relationship of form to content, and montage strategies will be investigated. Over the course of the term students will work in teams to direct, film and edit video using digital technologies.

Prerequisites: [CCT353H5](#)

Distribution Requirement: Humanities

Total Instructional Hours: 48P

CCT456H5 • Analysis and Visualization of Open Data

(Offered at Sheridan College) This course explores the open data/open government movement with the goal of understanding the promises and perils of the open data movement, better understanding what conclusions can and cannot be extrapolated from open data standards, using common visualization tools to make better sense of large open data sets, and concluding with a design competition where students build a prototype application that leverages open data sources to develop new services.

Prerequisites: [CCT356H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 36L

CCT457H5 • Digital Media: Advanced Photography Production

(Offered at Sheridan College) This course focuses on advanced theoretical and practical aspects of digital image production and editing. Production techniques, professional practices and workflows, the relationship of form to content, and digital darkroom strategies will be investigated. Over the course of the term students will work individually and in teams to create and edit images using professional grade digital technologies.

Prerequisites: [CCT357H5](#)

Distribution Requirement: Social Science

Total Instructional Hours: 48P

CCT460H5 • Advanced Web Design

(Offered at Sheridan College) This course builds on the client-side web development skill of the Intermediate Web Design courses by adding a server-side programming and database design component. Students will learn the theoretical and practical aspects of implementing a database including data modelling, development, communication and security. Additionally, server-side programming will be introduced as a means of communication and interaction between client-side web pages and database data, allowing students to develop a dynamic database driven website.

Prerequisites: [CCT260H5](#) and [CCT360H5](#)

Recommended Preparation: Solid experience with static HTML is mandatory. Previous exposure to the logic of a programming language is advised.

Distribution Requirement: Social Science

Total Instructional Hours: 36P

CCT482H5 • Interactive Electronic Design

(Offered at Sheridan College) This course investigates the emerging field of critical making, which encourages students to approach social, communication and cultural issues through material engagement versus the literal and oral media more traditionally used in social science research. Students will not only explore core tensions and challenges regarding technology's role and influence in society, but engage these challenges directly through the design and physical creation of alternative technological prototypes. Basic mechanics, electronics and programming will be taught, with an understanding that thinking materially is rare for many most social science students. No previous knowledge is assumed.

Prerequisites: Minimum of 13.0 university credits.

Distribution Requirement: Social Science

Total Instructional Hours: 36P

CCT491H5 • Topics in Communication, Culture, Information and Technology

(Offered at Sheridan College) An in-depth examination of selected CCIT topics. Topics will vary from year to year and the content in any given year depends upon the instructor. The contact hours for this course may vary in terms of contact type (L, S, T, P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

Prerequisites: A minimum of 13.0 university credits including [CCT109H5](#) and [CCT110H5](#) and permission of instructor

Distribution Requirement: Social Science

Total Instructional Hours: 36P

UTM-Based Courses

CCT109H5 • Contemporary Communication Technologies

This course examines different information and communication technologies (ICTs) through the analysis of such genres as contemporary written, visual, oral, electronic and musical forms. It illustrates a range of theoretical perspectives that seek to explain the relationship between communication and technology. This course will also examine, briefly, the history of ICTs.

Distribution Requirements: Social Science

Total Instructional Hours: 24L/11P

Mode of Delivery: In Class

CCT110H5 • Rhetoric and Media

This course critically examines the written, visual, aural, and dynamic rhetoric as it pertains to communications for academic and other purposes across a range of digital and interactive media discourses.

Prerequisites: [CCT109H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/11T

Mode of Delivery: In Class

CCT111H5 • Critical Coding

This experiential learning course introduces students to the practice and theory of coding, programming, and basic development of user-oriented software. The lectures illustrate a core range of software development concepts that provide the foundations needed for the practical coding of front-end applications such as mobile interfaces or of back-end software such as introductory artificial intelligence or social media analysis. The practicals are lab-based and focus on applying these theoretical skills to solving problems grounded in a critical understanding of the interaction between people, culture, and society, by developing software or apps in languages such as Java, Objective C, Swift, Python.

Corequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12P

Mode of Delivery: In Class

CCT112H5 • Introduction to Management in the Networked Information Economy

This course introduces students to the foundational principles and analytical tools from the management discipline that are appropriate for understanding enterprises in the context of the networked information economy. Particular emphasis is given to the interconnections between information and communications technologies, innovation, the role of managers and their decision-making processes, and related social, cultural, and economic institutions.

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT200H5 • Race, Media and Culture

This course provides an introduction to the intersecting fields of critical race, media, and cultural studies. We will pay particular attention to dynamics of social difference and power and the communication strategies and technologies through which these are navigated, reproduced and interrupted. Students will be introduced to critical and

analytical tools for understanding the cultural and media circulation, regulation and reimagination of things like race, sexuality, time, gender, class, indigeneity, space, ethnicity, ability and nationality. These critical tools equip students with the skills to write, design and build ethical innovations in new media and culture.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/11T

Mode of Delivery: In Class

CCT202H5 • Human-Machine Communication

From voice responsive cars and virtual assistants to social robots and smart toys, people are increasingly interacting with communicative technologies in their daily lives. In this course students will consider the implications of this evolution in communication practice – informing design, ethics, efficacy, privacy, and other implications. Human-machine communication is a specific area of study within communication encompassing human-computer interaction, human-robot interaction, and human-agent interaction.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT203H5 • Business Research Methods

This course provides an introduction to research design, conduct, and analysis for making informed business decisions. The course will focus on basic methodologies, qualitative and quantitative methods, data sources, reliability, validity, and other measurement issues, data collection and research design, ethics in research, and report writing and presentation.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Exclusions: [CCT208H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT204H5 • Design Thinking I

An introduction to the basic concepts and skills of design thinking as an interdisciplinary subject. Emphasizes creative and critical thinking in the design process; provides the student with the theory and operational skills necessary to solve design problems in the realms of symbolic and visual communication, material objects, environments, and organized services and activities.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12P

Mode of Delivery: In Class

CCT205H5 • Digital Innovation and Cultural Transformation

This course examines a range of theoretical perspectives and worldviews that assess the cultural and social changes brought about by modern technology. These perspectives will be used to analyze the potential problems initiated by the introduction of digital and computing technologies to various contexts. Possible topics include: cybernetics; media convergence; artificial intelligence/life; smart technology; digital environmentalism and digital warfare.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT206H5 • Law, Technology and Culture

This course will provide a detailed review of copyright, trademark and patent law with a special emphasis on how they apply to digital media. This course will also review the law of contract as it applies to digital industries and investigate the relevant tort law. In addition, other regulatory issues will be discussed such as telecommunications and broadcasting law both from a Canadian and an international perspective.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/11T

Mode of Delivery: In Class

CCT208H5 • Communications Research Methods

This course is a survey of research methodologies in the field of communication and media. A central goal of the course is to train students how to critically assess methods commonly used in social science research. Students will also become familiar with how to properly collect and interpret quantitative and qualitative social science research data.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Exclusions: [CCT203H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/8T

Mode of Delivery: In Class

CCT210H5 • Signs, Referents, and Meaning

How written or spoken statements, gestures, and aesthetic objects come to have meanings. How we recognize and fail to recognize such meanings. The nature, systems, and processes of interpretation. The role of mental models.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Exclusions: [CCT213H5](#) or VIC223YI

Distribution Requirements: Social Science

Total Instructional Hours: 24L/11T

Mode of Delivery: In Class

CCT211H5 • Fundamentals of User Interface Programming

This experiential learning course introduces students to the practice and theory of coding, programming, and development of user interfaces. The lectures illustrate an advanced range of software development concepts needed for the practical coding of user interfaces across a variety of devices. The practicals are lab-based and focus on applying these theoretical skills to design, implementation, and testing of user interface software components. Students will have the opportunity to acquire project management and software engineering skills (Scrum, Agile), programming languages (Java, Javascript, Objective C, Swift, and other mobile and web programming languages), and evaluation methodologies (unit testing, bug tracking).

Prerequisites: [CCT109H5](#) and [CCT110H5](#) and [CCT111H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12P

Mode of Delivery: In Class

CCT212H5 • Hacker Culture

By subverting and re-appropriating technologies, hackers influence both the evolution of computing and the politics of digital media. Hacking contributes to shaping the future of entrepreneurship, free speech, surveillance, and intellectual property. The course will examine the cultural, social, and legal facets of hacking in fields ranging from software production to political activism and the hacker underground. It will be based on social science research on hackers as well as concrete examples of data re-appropriation and technology modification.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT218H5 • Foundations of Media and Technology Studies

An introduction to foundational theories for studying the relationship between media, technology and society. The course presents technology as a social practice and considers a wide variety of concepts and methods for studying its cultural and political significance.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/11T

Mode of Delivery: In Class

CCT219H5 • Media Economics I

This course presents economic principles that explain how markets help organize exchange and production among competing but nevertheless cooperating economic units. Theories of consumer demand, the economic nature and function of business firms, optimal business decision rules of monopoly, oligopoly, and anti-combines regulations, as well as game theory, are presented. Efficiency criteria pertaining to the operation of firms and markets, the role of property rights, and the scope for public policy, are also examined.

Prerequisites: [CCT109H5](#) and [CCT110H5](#) and [CCT112H5](#)

Exclusions: [CCT319H5](#) or [ECO100Y5](#) or ([ECO101H5](#) or [ECO102H5](#))

Distribution Requirements: Social Science

Total Instructional Hours: 36L

Mode of Delivery: In Class

CCT221H5 • Digital Marketing I (DEM)

Techniques for developing a comprehensive marketing strategy will be developed with particular emphasis on digital products and services. The nature of digital markets, approaches to advertising, pricing and such areas as versioning will also be discussed.

Prerequisites: [CCT109H5](#) and [CCT110H5](#) and [CCT112H5](#)

Exclusions: [CCT322H5](#) or [MGT252H5](#) or [MGT352H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT222H5 • Political Economy of Communication, Culture, and Technology

The course analyzes the relationship between media systems, communication technologies, and power. As an introduction to a political economy approach, this course surveys how media, culture, information and technologies are produced, circulated, and consumed, with attention to both historical developments and contemporary practices in the digital era. The course provides a basic understanding of media systems, technologies, and culture production in relation to the market, the state, and civil society. Students will develop a basic understanding of the political, economic, cultural, and regulatory environment in which media, culture, and technologies are produced, and pay particular attention to the implications of processes such as globalization, digitization, marketization, and commodification for social life.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT224H5 • Organizational Studies I

This course provides a comprehensive overview of the activities and processes that take place in organizations. Major emphasis is placed on the investigation of the varied measures that can be developed to assess and subsequently improve the performance of the organization. The interpretation of measures in managerial decision-making will also be investigated in detail.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT225H5 • Information Systems

This course has been designed to provide students with a basic understanding of the role of computers and communication systems in modern organizations. Unlike programming courses, the focus here is on the application of computer-based systems to support information requirements for problem solving and managerial decision-making. Topics include concepts of information, humans as information processors, survey of hardware and software applications, introduction to information systems analysis and design.

Prerequisites: [CCT224H5](#)

Exclusions: [MGM371H5](#) or [MGT371H5](#) or [RSM327H1](#) or [MGAC70H3](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT226H5 • Data Analysis I

This course introduces students to the basic tools of data analysis, most particularly statistics and modeling that are critical for subsequent courses in Marketing and Data Analysis II. Students are introduced to basic principles of descriptive and inferential statistics with a focus on the types of data that they will typically encounter in a digital environment.

Prerequisites: [CCT109H5](#) and [CCT110H5](#) and [CCT112H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12P

Mode of Delivery: In Class

CCT250H5 • Technology and Creative Expression

Advances in technology have provided users ready access to empowering technologies of creative expression. This emergence of prosumer and amateur production technology has both destabilized and revolutionized established practice in digital imaging, time based media, gaming, and design. This course provides a survey of contemporary theories, technologies and critical challenges in a variety of media of creative expression.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12P

Mode of Delivery: In Class

CCT260H5 • Web Culture and Design

The course will explore how the web has influenced culture and how websites are designed and managed. Topics will include the presentation of text, graphics, audio and video on the web. Design, web server concepts, human communication systems and organizational contexts will be considered in creating web sites using scripting languages and web software tools.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 36P

Mode of Delivery: In Class

CCT261H5 • Speculative Design I

This introductory course in information architecture is a foundation of user interface design. Information architects work in organizations to design interfaces that enable users to find and navigate complex data via technology. Using architectural and design concepts to create and organize user-friendly information structures, this course includes exploring theories and hands-on practice with information organization, structure, categorization, representation, navigation and modeling.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12P

Mode of Delivery: In Class

CCT270H5 • Principles in Game Design

An overview of videogame theory, best practices, emergent trends and technology, with strong participation by industry professionals. This course features a variety of guest speakers addressing different facets of game design, supported by later discussion and analysis. Students will experience a broad overview of principles in game design that may inspire further development and design activities in related game design courses.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 36L

Mode of Delivery: In Class

CCT273H5 • Professional Practice and Communication

This professional practice course provides students with basic skills in professional communication, acumen, and problem solving that will help them develop personally and professionally.

Prerequisites: 70% in [CCT110H5](#) or [WRI203H5](#), departmental approval.

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT285H5 • Immersive Environment Design

Students will develop skills in the areas of bitmap/vector graphics, audio/visual production and editing, 2D/3D modeling and animation, and video game design. Students will produce immersive environments while addressing and engaging issues of remix culture and intellectual property.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12P

Mode of Delivery: In Class

CCT286H5 • Interactive Media Design

This course provides students with the opportunity to learn the skills necessary to produce responsive web content. Students will develop skills in the areas of website design, interactive and animated web content, mobile app development, and mobile game development.

Prerequisites: [CCT109H5](#) and [CCT110H5](#) and [CCT285H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 36P

Mode of Delivery: In Class

CCT295H5 • Topics in Communication, Culture, Information and Technology

An in depth examination of selected topics in communication, culture, information and technology. Topics vary from year to year, and the content in any given year depends on the instructor. The contact hours for this course may vary in terms of contact type (L, S, T, P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 36L

Mode of Delivery: In Class

CCT300H5 • Critical Analysis of Media

This course offers an overview of critical theoretical concepts and applies them to contemporary media. Students will use concepts from social theory, media studies and technology studies to critically analyze the many facets of the evolution and pervasiveness of digital media.

Prerequisites: [CCT210H5](#) or [CCT218H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT301H5 • Design for Online Cultures

This course builds upon the concepts introduced in [CCT218H5](#), Introduction to Digital Culture, through an exploration of the design and development of online information services (e.g. websites, digital libraries). It examines the standards, modeling approaches, and methods for testing. Students will experiment with different approaches to design of websites or other online services for different types of delivery devices (e.g. desktops, mobiles).

Prerequisites: [CCT218H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT302H5 • Developing and Managing Communication Campaigns and Projects

Communication campaigns and projects, whether they involve marketing, politics, or advertising require the establishment of objectives, tasks, and milestones. Furthermore developing and managing campaigns requires the development of knowledge and skills relating to the management of teams. Students will acquire analytic skills allowing them to understand the development and management of communication campaigns and projects. Current theory and research will comprise an integral part of the course as will study of the appropriate software tools. A significant component of the assessment for this course will be a group project that will involve the design of a communication campaign or project which will be presented to a group of experts.

Prerequisites: A minimum of 8.0 university credits.

Course Experience: University-Based Experience

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT303H5 • Communicating In and Between Organizations

This course examines the nature of communications in organizations. Communications are the glue that holds organizations together. Understanding theoretically and practically the multi-faceted functions of communication in and between organizations is essential for anyone seeking to develop a career in an organization whether it be private or public. Students will acquire analytic skills allowing them to understand organizational communication from a variety of different perspectives. They will also be required to develop and actively critique practical examples of organizational communication.

Prerequisites: [CCT210H5](#) or [CCT218H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT304H5 • Visual Communication and Digital Environments

This is a project-based course that focuses on analyzing and evaluating the persuasive impact of the images we use every day to make decisions about our social networks, what we buy, how we live, what we care about, and who we are. Students will learn about rhetorical devices used in visual communications and then work in teams to create a persuasive awareness campaign for an NGO, Government Agency, Healthcare organization or other social interest group as the final project.

Prerequisites: [CCT210H5](#)

Course Experience: University-Based Experience
Distribution Requirements: Social Science
Total Instructional Hours: 24L/8T
Mode of Delivery: In Class

CCT307H5 • Critical Infrastructure Studies

This course explores how infrastructures shape society, culture, and understanding of the human condition. We examine different infrastructures from electric networks to communication networks, data farms, environmental sensing systems, smart cities, and satellite technologies and our reliance on them. We will also examine how these infrastructures are sustained and maintained. By building on critical theories and approaches to infrastructures and their impact, the course investigates the power of infrastructure to establish the conditions of our daily lives.

Prerequisites: [CCT218H5](#)
Exclusions: [CCT207H5](#)
Distribution Requirements: Social Science
Total Instructional Hours: 24L
Mode of Delivery: In Class

CCT308H5 • Advanced Research Methodologies

This course provides students with an in-depth study and critical analysis of research methodologies within the discipline of communications and new media. Students will learn to explicitly identify generalizable findings, ethical concerns, study limitations, and new contributions to the field of knowledge using existing studies in qualitative, quantitative and mixed methodologies. Students will also gain experience in identifying and assessing problems within a research design and develop the ability to recommend revisions and/or new contexts and techniques for replicating the studies.

Prerequisites: [CCT203H5](#) or [CCT208H5](#)
Distribution Requirements: Social Science
Total Instructional Hours: 24L/12T
Mode of Delivery: In Class

CCT310H5 • Popular Culture and Society

How does consumerism affect symbolic production, circulation and transactions? Major modern theories of mass communication will be presented (Fiske, Bourdieu, Benjamin, Jenkins, Frankfurt school, and Marxist approaches). Students will explore new structures

of mass communication in relation to popular culture systems, and their economic, technological and institutional dimensions. Topics include Disney, Hollywood, celebrity culture, social media, and user generated content in digital environments.

Prerequisites: [CCT210H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT314H5 • Mind, Media and Representation

This course applies a variety of theoretical and practical approaches to consider the multiple and often conflicting ways representations in media are produced and consumed. The study of representations is approached from the perspective that they are best understood as both discursive and ideological. Questions to be examined include: What does it mean for historical and contemporary representations to carry economic, ideological and discursive power? To what extent do audiences hold power to resist or negotiate with representations? How might we interrogate the notion that we live in a post-feminist, post-racialized society in which older ideas about gender, race and power no longer apply or need re-thinking?

Prerequisites: A minimum of 8.0 university credits including [CCT109H5](#) and [CCT110H5](#).

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT315H5 • Theory of Linguistic Communication

This course examines the conceptual foundations of the theory of linguistic and non-linguistic meaning and communication. What is communication? How do animals communicate? What is special about language?

Prerequisites: Minimum of 8.0 university credits

Distribution Requirements: Humanities

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT316H5 • Communication and Advertising

A study of theories in communication and meaning with different reference to advertising, advertising messages, and advertising management.

Prerequisites: [CCT210H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT317H5 • Creative and Experimental Coding

This course will instruct students in the use of programming languages such as Python or Processing for novel applications, including cases from animation, design, and information visualization. Appropriate use of code libraries, platforms and programming techniques will be developed. Assessment will be based on both programming and the expressive use of programs in their case context.

Prerequisites: [CCT211H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12P

Mode of Delivery: In Class

CCT320H5 • Communication, Technology, and Social Change

This course explores how media and media technology have shifted the nature of the existing political and social orders, We will focus on how social movements and political challengers have used media to disrupt and, in many cases, overthrow leaders, corporations, and governments. This will bring us in contact with theories of social movement mobilization, political communication, and digital media. We will also explore the ways that legacy and digital media have changed to be in service of misinformation and state repression.

Prerequisites: [CCT212H5](#) or [CCT218H5](#) or [CCT222H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT321H5 • Introduction to Finance

This course will provide students with an understanding of investment appraisal from a financial standpoint. It will provide them with the necessary tools to construct the financial component of a business plan and analyze the financial performance of a company. It will examine the practical problems of capital budgeting and highlight the techniques of performing ongoing monitoring of a company's financial health and risks.

Prerequisites: [CCT112H5](#) and ([CCT219H5](#) or [CCT319H5](#)) and [CCT224H5](#)

Exclusions: [MGM230H5](#) or [MGT230H5](#) or [MGT331Y1](#) or [MGT337Y5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 36P

Mode of Delivery: In Class

CCT324H5 • Organizational Studies II

Overview of individual and group behaviour in organizations, including motivation, communication, decision making, influence and group dynamics. Examination of major aspects of organizational design including structure, environment, technology, goals, size, inter-organizational relationships, innovation and change.

Prerequisites: [CCT224H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT325H5 • Media Economics II

This course explores macroeconomics through the analysis of national and international crises. The course begins with a discussion of the nature of economics, a brief examination of markets, and a discussion of crisis and growth. We survey the institutions and dynamics of growth in the post WWII period, their breakdown in the 1960s and the spread of international crisis in the 1970s, and the crises of various economic policy responses from the 1980s to the present. After this historical overview, we explore macroeconomic theory and its development over the last 50 years. We study the Keynesian model and its emphasis on employment and output, its crisis in the late 1960s and early 1970s, the rise of monetarist alternatives, the elaboration of aggregate supply and demand models highlighting prices instead of employment, the surge of supply-side and rational expectations economics during the Reagan administration and the continuing debates among economists over the merits and problems of the various theoretical approaches. The course closes with an examination the various forms of crises tied to the emergence of information and communications technologies and the knowledge economy.

Prerequisites: [CCT219H5](#) or [CCT319H5](#) or [ECO100Y5](#) or ([ECO101H5](#) or [ECO102H5](#)).

Exclusions: [MGD425H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT326H5 • Communication across the Lifespan

Changes in communication from infancy to old age arise from changes in perception and cognition, as well as changes in social and environmental needs and supports. These changes will be characterized and related to relevant theories. Practical implications for information and communication technologies will be suggested.

Prerequisites: [CCT204H5](#) and [CCT210H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT331H5 • Social Media and Society

This course introduces students to critical approaches to social media drawing from theories and fields including software studies, platform studies, critical theory and political economy. The course provides students with tools and theories to analyze and understand current social media connectivity, and how social media platforms function as socio-cultural systems.

Prerequisites: [CCT218H5](#) or [CCT222H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT332H5 • Canadian Communication Policy

This course examines the policy and regulatory frameworks that shape media, culture, and technology in Canada. The course surveys the historical development of communication policy in Canada, broadly understood, and introduces students to issues and debates in the development of communication policy for specific sectors such as broadcasting, creative industries, platforms, and the internet.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT335H5 • Technology and the City

Technology continues to reshape the physical contours of our built environments as much as it redefines our conceptualization of how we inhabit and interact within them. This course investigates how urban form, space, infrastructure and communication are mediated by new and evolving technologies.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/11T

Mode of Delivery: In Class

CCT340H5 • Gender, Media and Technology

This course brings a gendered lens to the study of media and technology. The course explores the (re)production and (re)presentation of gender through communicative practices in a variety of mediums, including print media, TV, activist media, video games and online platforms. The course develops an understanding of gender ideologies and how media, technologies, and communication help produce gender. The course examines the way gender identities are constructed by mainstream and alternative media; gendered divisions of media and digital labour; the relationship between ICTs and the performance of gender and sexuality; masculinities, gender politics; feminist theory; and the construction and negotiation of gender in relation to mediated environments.

Prerequisites: [CCT109H5](#) and [CCT110H5](#) and ([CCT200H5](#) or [CCT210H5](#) or CCT222 or [WRI203H5](#))

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT341H5 • Introduction to IT Consulting

Information Technology (IT) Consulting is a growing profession that embodies the use of computer-supported collaborative tools in the execution of business functions. In this course students engage with the principles of Computer Supported Co-operative Work (CSCW) through an experiential opportunity to work with a real client. Students create an IT Consulting company and take on the role of consultants, learning core skills (soft and

hard) necessary for this profession, including client management, communication, ideation, analysis and solution development, project management, presentation skills, and web design. Using case studies we discuss consulting lessons learned and problems to avoid within the context of industry best practices.

Prerequisites: Minimum of 8.0 university credits.

Course Experience: Partnership-Based Experience

Distribution Requirements: Social Science

Total Instructional Hours: 24P

Mode of Delivery: In Class

CCT354H5 • Digital Marketing II

This course examines digital marketing strategies and the role of online and mobile advertising platforms. Students will explore how emerging technologies are used to facilitate B2B and B2C transactions. A number of domains will be covered (search, display, programmatic trading, mobile, social, etc.) to give students a comprehensive understanding of both existing marketing strategies and emerging trends. This class will emphasize the strengths and weaknesses of various approaches to digital marketing while helping students develop a greater understanding of the different elements of marketing campaigns from formulation and implementation to integration and assessment.

Prerequisites: [CCT221H5](#) or [CCT322H5](#)

Exclusions: [CCT356H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT355H5 • Critical Approaches to Innovation

This course provides students with a survey of critical theories appropriate to the study of technological innovation. Students will: 1) explore theories of the social, cultural, and ecological impacts of technological innovation; 2) apply these theoretical lenses to the study of trends in innovation; and 3) propose a product or approach to innovation using social, cultural, or ecological criteria.

Prerequisites: [CCT224H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT361H5 • Speculative Design II

In this course students are introduced to programming languages regularly used in management operations. Students will learn what these languages are, when and why they are applied, and how to read and write basic scripting code. The goal of this course is to familiarize students with scripting so that they can communicate more effectively with programmers in business settings.

Prerequisites: [CCT261H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12P

Mode of Delivery: In Class

CCT365H5 • Surveillance

From the Orwellian Big Brother to Foucault's panopticon, surveillance has become an everyday facet of modern life. From a surveillance studies perspective surveillance can be applied as a framework for understanding social, political, and technological interrelationships. This framework can help us study more effectively power, identity, persuasion, and control associated with the spread of Information Communication Technologies (ICT's). This course will introduce students to viewpoints, vision and visibility in surveillance studies. The class will look at a range of topics from information politics, identification, privacy, security, suspicion, social sorting, bodies, borders and biometrics to explore a range of perspectives under the surveillance studies umbrella. It will introduce students to key issues surrounding data, discrimination, and visibility in a global context to undercover the watched world.

Prerequisites: [CCT109H5](#) and [CCT110H5](#) and [CCT206H5](#) or [CCT222H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT371H5 • Sound as Media

Sound as Media will provide students with an immersive introduction to the field of sound studies. The course offers a counterpoint to surveys of visual media by exploring acoustic technologies in historical, cultural and spatial context. By considering examples such as the gramophone, public address system, boombox, and MP3 player as well as the theories that account for them, students will develop an understanding of media forms that engage the ear as well as the eye. They will in turn, have the opportunity to apply this understanding to the final project which will give them hands-on experience with creating a sound-based documentary.

Prerequisites: A minimum of 8.0 university credits including [CCT109H5](#) or [CCT110H5](#) or [CCT111H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT373H5 • Career Planning and Development

The transition from university studies to professional settings necessitates the articulation of how acquired skill sets, education, professional contacts, supporting resources, and related experiences connect to and influence career trajectories. To facilitate agility in navigating the ever-shifting global economy, within and outside of the classroom students are provided with a mixture of structured, self-directed, independent, and team activities that aid in the development and refinement of professional identities, community networks, communication approaches, and problem solving skills.

Prerequisites: [CCT273H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT374H5 • Critical Histories of Information Technologies

The course approaches current information and communication technologies from critical and historical perspectives. It investigates the interests, motives and tactics of news media, pop culture producers, amateurs, universities, corporations, and governments in promoting, sustaining, and interpreting information and communication systems. It also asks how the focus will be on media and information technologies, more theoretical or methodological readings will necessarily cover other systems. Case studies may include investigations of orality, writing, the printing press, industrialized printing, and electronic media from the telegraph and the telephone to broadcasting and the internet.

Prerequisites: [CCT218H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT376H5 • Introduction to Modelling Information

The analysis and modelling of information is key to being able to develop appropriate information architectures for organizations in particular and society as a whole. Students explore the modelling and analysis of information from a conceptual, technical and practical perspective.

Prerequisites: A minimum of 8.0 university credits.

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT380H5 • Human-Computer Interaction and Communication

The emphasis in this course will be on theoretical, methodological, and empirical issues in the study of Human-Computer Interaction. Intelligent interface designs, usability assessment, user modeling and the accessibility of the technology for the disabled are among the topics to be examined. Related behavioural investigations concerning the ease and efficiency of users' interactions with computerized environments will also be discussed.

Prerequisites: [CCT109H5](#) and [CCT110H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 36P

Mode of Delivery: In Class

CCT381H5 • Media Audiences

Audiences are social constructions which must be imagined to be actualized. Beginning with an exploration of the nature and role of audiences from early 20th century media, students explore how audiences make meaning of popular media platforms today. How are audiences situated within media texts, what role does this play in how media is generated and circulated, and how do audiences both enact and resist media influence? Broadcast models, interactive models, audience reading, gender, culture, race, and audience feedback are investigated.

Prerequisites: [CCT210H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT382H5 • Prototyping Digital Games

This course explores the fundamentals of the process of game design through prototyping. It focuses on the contexts and components of game design, such as design iteration and user testing along relevant dimensions such as art style, narrative, and game balance. Students will be introduced to design across different genres and types of digital games, including games for education, serious games, indie, and AAA games. Working in collaborative groups, students will learn and practice the appropriate methodology to design game mechanics, characters, art assets and other appropriate deliverables in order to create a game or high-fidelity prototype.

Prerequisites: ([CCT211H5](#) or [CCT285H5](#)) and [CCT270H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12P

Mode of Delivery: In Class

CCT383H5 • The Interactive Society

This course introduces students to the theoretical and practical study of how interactive digital media and systems affect, influence and reshape our society and what does it mean to be a "user" in the information-centric society. It will expose students to specific theoretical issues such as privacy by design, usable privacy, marginalized and at-risk user groups, the digital divide, behavioural modification (persuasion) through new media, ICT4D (info tech for development) and empowerment/alienation through intelligent interactive systems. Focus will be on developing skills that will enable students to propose changes (design, policy, framework) to existing and future envisioned interactive technologies that address the issues analyzed.

Prerequisites: A minimum of 8.0 university credits including [CCT109H5](#) and [CCT110H5](#).

Distribution Requirements: Social Science

Total Instructional Hours: 36P

Mode of Delivery: In Class

CCT385H5 • Conceptualizing Media Environments

Marshall McLuhan was one of the first theorists to conceptualize media as environments. Media were no longer conceptualized as instruments or tools but as systems that would capture their audience within. This course investigates the role of media in structuring and conditioning how we inhabit environments. From geology to ecology, from the umwelt to ecosystems, from urban to outer space, from bodies to biospheres, this class looks at media as modes of inhabitation. The intersections of media and environments will thus be problematized in their social, cultural, and political dimensions. Students will be introduced to these systems from a conceptual and a practical perspective through the study of scientific, artistic and design projects.

Prerequisites: [CCT218H5](#) and [CCT310H5](#)
Distribution Requirements: Social Science
Total Instructional Hours: 24L
Mode of Delivery: In Class

CCT386H5 • Information Practice in Virtual Worlds: Exploration of Information Environments

From Webkinz to World of Warcraft, in the past decade immersive, 3D gaming environments have driven the technological and social development of virtual worlds. With or without the gaming aspects, virtual worlds have the potential to support a wide variety of activities related to information creation, distribution, reception, and use in supporting social, economic, and cultural causes. Compared to everyday information practices, however, those enacted in virtual worlds are uniquely characterized by multimodality, synchronicity, digital embodiment and geographic distribution of users. In this course, students engage in participatory learning in virtual environments such as Second Life and World of Warcraft, using avatars to assess how the world's technological and social features support and constrain information practices. Using theories of gaming, virtuality, and information lifecycles, students critically analyse how information is produced and used in these environments.

Prerequisites: A minimum of 8.0 university credits including [CCT109H5](#) and [CCT110H5](#).
Distribution Requirements: Social Science
Total Instructional Hours: 24L/12T
Mode of Delivery: In Class

CCT390H5 • Digital Media and Communications Abroad

Students on International exchange programs are encouraged to seek out courses in digital media and technologies that enrich their learning within an international context. This course is intended as an opportunity for students to study global issues and contexts abroad that provide a comparator to the Canadian media and communications landscape.

Prerequisites: Permission of ICCIT Director.
Distribution Requirements: Social Science
Total Instructional Hours: 36S
Mode of Delivery: In Class

CCT395H5 • Topics in Communication, Culture, Information & Technology

An in-depth examination of selected topics in communication, culture and information technology. Topics vary from year to year, and the content in any given year depends upon the instructor. The contact hours for this course may vary in terms of contact type (L, S, T, P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

Prerequisites: Minimum of 8.0 university credits.

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT399Y5 • Research Opportunity Program (ROP)

This course provides an opportunity for third or higher year students to assist with the research project of a professor in return for 399Y course credit. Students have an opportunity to become involved in original research and enhance their research skills. Based on the nature of the project, projects may satisfy the Humanities, Sciences or Social Sciences distribution requirement. Participating faculty members post their project description for the following summer and fall/winter session on the ROP website in mid-February and students are invited to apply at that time. See [Experiential and International Opportunities](#) for more details.

Prerequisites: A minimum of 10.0 credits or permission of instructor

Exclusions: [CCT299Y5](#) or [VCC399Y5](#)

Mode of Delivery: In Class

CCT400H5 • Advanced Project

Majors and specialists are given the opportunity to develop a critical perspective on selected issues in CCIT. Students design and implement an advanced project on a topic of interest by engaging with advanced readings. A central aim is to refine the skills in critical analysis and in oral and written communication.

Prerequisites: completion of 13.0 university credits

Distribution Requirements: Social Science

Total Instructional Hours: 24S

Mode of Delivery: In Class

CCT401H5 • Advanced Thesis Course

Students will carry out a research project on a topic of their choosing which is related to their specific program focus in Digital Enterprise Management. Students will meet as a group for selected seminars emphasizing advanced research skills and thesis writing. Students will develop a research proposal, conduct research, and produce a research paper.

Prerequisites: [CCT203H5](#) or [CCT208H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24S

Mode of Delivery: In Class

CCT402H5 • Creating, Protecting and Managing Digital Artifacts

Digital artifacts play an increasingly important role in our society. It is essential that in the digitization of these artifacts appropriate attention is paid to their representation, protection and management. Students will review the theories and practices of representation. They will investigate the technologies associated with the storage of digital artifacts as well as investigating appropriate legal perspectives. This varied knowledge will be integrated into a study of best practices in the management of digital artifacts.

Prerequisites: A minimum of 13.0 university credits including [CCT206H5](#).

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT403H5 • Finance, Innovation and the Digital Firm

Students will learn about financial aspects of digital industries. They will gain knowledge about how financial and other incentives shape the decisions of agents in the digital marketplace. Such a knowledge helps to identify industry trends aiding their own decisions when participating in Internet related industries. Topics covered include online and traditional media industries, aspects of e-commerce and marketing, open source software and crowd-sourcing. A highly effective way to gain such knowledge is by covering a relevant topic in an academic essay. This way the students will also improve their writing skills, and learn better how to cover financial aspects of their chosen topic in a scholarly manner.

Prerequisites: Minimum of 13.0 university credits.

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT404H5 • Remote Work, Technology and Collaboration

This project-based course aims to demonstrate how collaboration is a critical capability often overlooked. During the course students will integrate their learning and experience and first hand see how, in combination with collaboration it can lead to creatively solving problems in areas as varied as business, health care delivery, urban planning and development. In addition to lectures, students will have the benefit of a series of guest lecturers. A large, group based project will serve to integrate learning and allow students the benefit of experiential learning.

Prerequisites: A minimum of 13.0 credits.

Recommended Preparation: [CCT204H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 36L

Mode of Delivery: In Class

CCT405H5 • Individual Project

A research project carried out under the supervision of a faculty member. Students will carry out a research project on a selected topic related to CCIT. Students must obtain signed permission from the faculty member who they would like to have as their supervisor.

Prerequisites: Completion of 13.0 university credits.

Exclusions: [CCT401H5](#)

Distribution Requirements: Social Science

Mode of Delivery: In Class

CCT407Y5 • Advanced Field Experiences in CCIT

This course provides students the opportunity to test their skills, immerse themselves within a different cultural or social context and explore communication and technology issues through an intense field experience either in Canada or abroad. The type of field experience varies from year to year and some experiences may evolve through collaborations with other disciplines or through special industry projects. The advanced field experience may involve travel and participation in international conferences or other relevant activities. Students are responsible for travel expenses.

Prerequisites: Permission of the ICCIT Director.

Exclusions: [CCT409H5](#)

Distribution Requirements: Social Science

Mode of Delivery: In Class

CCT409H5 • Special Topics in Work-Based Learning

An advanced unpaid field placement working on specially designed projects that explore collaborative, collective and global approaches to practical knowledge application. The placements may include international internships, collaborative group internships and community-based initiatives. The projects may vary from year to year depending on the external partners. Students will engage with others in the course through an online class component and complete individual reports and critical evaluations of the work experience.

Prerequisites: A minimum 13.0 university credits and CGPA of 2.5.

Exclusions: [CCT410H5](#)

Distribution Requirements: Social Science

Mode of Delivery: In Class

CCT410H5 • CCIT Internship I

This course is a practical internship and is available only upon application from students registered in the CCIT/DEM/TCS programs. Through a placement, students will apply the expertise in communication, culture, and information technology that they have gained through previous courses. Students must plan well in advance for the placement and work closely with the placement officer for CCIT to determine eligibility and suitability. A report and presentation will be required at the end of the placement. These, along with the employer's assessment, will provide the main part of the course mark.

Prerequisites: Completion of 13.0 credits with a minimum CGPA of 2.5 and approval of the internship coordinator/instructor, and evidence of additional career development (e.g. workshops, networking events, and professional communication with faculty, librarians, staff, and peers).

Exclusions: [CCT409H5](#) and [WRI410H5](#).

Distribution Requirements: Social Science

Total Instructional Hours: 14S

Mode of Delivery: In Class

CCT411H5 • CCIT Internship II

This course is a practical internship and is available upon application from students registered in any CCIT program who have completed [CCT410H5](#). The course is intended

for students who have the opportunity to continue their [CCT410H5](#) internship for a second semester. A report and presentation will be required at the end of the placement. These, along with the employer's assessment, will provide the main part of the course mark.

Prerequisites: Completion of 13.0 university credits including [CCT410H5](#) and a CGPA of 2.5 and permission of internship coordinator.

Distribution Requirements: Social Science

Total Instructional Hours: 12S

Mode of Delivery: In Class

CCT414H5 • Special Topics in Knowledge, Media and Design

An in-depth examination of selected topics in interactive digital media with emphasis on knowledge, media and design. The contact hours for this course may vary in terms of contact type (L, S, T, P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

Prerequisites: A minimum 13.0 university credits

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT416H5 • Social Data Analytics

This course highlights the research in analysis for social data and builds skills to undertake those analysis. It is a lab-intensive course intended to build up data analytic skills for novice and intermediate researchers. Students look at recent studies using "big data" which are primarily theoretical, including critiques of data analytics and concerns surrounding data ethics. Students learn a programming language -- Python -- and how to scrape social data, store and collect it, run basic statistics, generate visuals, and create a report based on a project of interest.

Prerequisites: [CCT203H5](#) or [CCT208H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24P

Mode of Delivery: In Class

CCT417H5 • Alternative Media

This course examines the history, politics and aesthetics of a range of alternative, underground and radical media, as well as their relation to mainstream media. Students will study and experiment with a range of alternative media, including zines, graffiti, hacking, and culture jamming, for example. Students will gain hands-on experience in the creation of alternative media.

Prerequisites: Minimum of 13.0 credits.

Distribution Requirements: Social Science

Total Instructional Hours: 24S

Mode of Delivery: In Class

CCT418H5 • Work, Media and Technology

The course analyses the political, historical, and technical relationships between media, technology, and work in contemporary capitalism. The course will examine the power and social relationships that structure work in contexts such as media, creative industries, and the platform or "gig" economy. The course will focus on critical theories of work and will engage with case studies of the intersection of work, media and technology. The aim of the course is to build a tool kit for encountering an increasingly casualized and digitally-mediated labour market.

Prerequisites: [CCT222H5](#) or [CCT319H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24S

Mode of Delivery: In Class

CCT419H5 • User Experience Design - UXD and Board Games

This course allows students to explore issues related to user interface, user experience, materiality, gamification and game theory. Board games represent a space to consider social interaction, the use of materials, the role of emotion in design (UX), knowledge sharing and the role gamification plays in influencing behaviour. Students will be exposed to professional and research publications related to design, game theory, user experience and game mechanics.

Prerequisites: A minimum of 8.0 credits including [CCT210H5](#) or [CCT218H5](#) or [CCT270H5](#) or [CCT380H5](#) or [CCT382H5](#).

Distribution Requirements: Social Science

Total Instructional Hours: 36S

Mode of Delivery: In Class

CCT420H5 • Information Technology and Globalization

The variety of ways in which various information technologies influence and are influenced by globalization will be critically examined. The class will explore metaphors or ways of thinking about society and technology to critically examine the complex process and the diverse consequences of globalization. Topics may shift focus yearly but will include the economy, culture, politics, social movements, migration, social identity, war and global conflict, etc.

Prerequisites: A minimum of 13.0 university credits including [CCT109H5](#) and [CCT110H5](#).

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT424H5 • Organizational Studies III

An in-depth study of the development of innovative strategies for organizations with an emphasis on digital enterprises. The nature of strategic innovation will be studied and a variety of analytic frameworks introduced. Concepts will be explored through a combination of lectures and case studies.

Prerequisites: [CCT112H5](#) and ([CCT219H5](#) or [CCT319H5](#) or [CCT321H5](#)) and ([CCT221H5](#) or [CCT322H5](#)) and [CCT324H5](#).

Exclusions: [MGT400H5](#) or [MGM400H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT430H5 • Networked Life

The rise of information and communication technologies in contemporary societies has highlighted the interdependent nature of relationships; person-person, person-machine, machine-person, and machine-machine. Network analysis offers a point-of-view with which we can analyze networks to understand the roles of people and technology, identify the source of existing or potential issues, and the exchange of resources and information. This course applies network theory and methodology to examine how technology is used to maintain and build personal networks. It will further explore how personal networks intersect with larger institutional networks (e.g. corporations and universities) and informal networks (e.g. online communities and sports clubs). In the process, students will be guided in how to identify, measure, and collect data on selected networks, how to then analyze this data using a variety of analytic techniques.

Prerequisites: [CCT203H5](#) or [CCT208H5](#)
Distribution Requirements: Social Science
Total Instructional Hours: 24L
Mode of Delivery: In Class

CCT431H5 • Drones, Robots, Artificial Intelligence

Drones, robots, and artificial intelligence are three interrelated technologies that are changing the most fundamental considerations of how society and sociality should operate. Work, war, consumption, and even love are being reconfigured. This course will address debates concerning the cultural, political, economic, military, and economic considerations surrounding the growing use of these technologies.

Prerequisites: A minimum of 13.0 university credits.
Distribution Requirements: Social Science
Total Instructional Hours: 24L
Mode of Delivery: In Class

CCT432H5 • Ethics and Code

A self-driving car should always protect pedestrians, even if that implies serious threat for the vehicle's passengers. Current ethical challenges within our computational cultures has brought forward dilemmas involving code such as designing killer robots, the use of technology to predict and prevent crimes before they happen, and platform surveillance in social media. Students in this course will use theories and case based examples to examine questions such as what is meant with ethics in new media and critical computing, can we program computational systems according to ethical models, and does digital culture force us to rethink what ethics are?

Prerequisites: A minimum of 13.0 university credits.
Distribution Requirements: Social Science
Total Instructional Hours: 24L
Mode of Delivery: In Class

CCT435H5 • Media and Outer Space

Examines the relationship between media studies and Outer Space inhabitation and exploration. Through analysis of military, technological, industrial, scientific, design, artistic, and civilian projects, films, novels, science fictions, and other media forms, the class investigates and reveals the historical, social, cultural, and political implications of our mediated relation with Outer Space. Technologies and topics include: the space race

and the Cold War, space imagery, extreme environments, space travel, space suits, space vehicles, and space habitats, satellites, extra-terrestrial intelligence, mining, extraction, terraforming, radiation, gravity, and levitation.

Prerequisites: A minimum of 13.0 university credits

Exclusions: [CCT495H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT440H5 • Power, Privilege and Technology

How is social inequality reproduced and encoded in technology systems and in digital media? In what ways do technology and media creations inform and influence perceptions, beliefs, and practices that impact girls and women, communities of colour, Indigenous groups, LGBTQ+ and other minoritized people? This course will address overlapping and intersectional issues of power, privilege, oppression, and sociotechnical imaginaries - all related to networks, big data and predictive analytics, algorithms, digital gig economies, and interactive multimedia like social media and virtual reality.

Prerequisites: [CCT200H5](#) and [CCT222H5](#)

Exclusions: [CCT395H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT441H5 • Online Collaborative Project Management

Information Communication Technologies have facilitated a perceptible change in collaborative practices across geographically dispersed teams and projects. Therefore, Computer Supported Collaborative Work (CSCW) is, increasingly, a major area of design and research across many disciplines and contexts. This class takes a theoretical and practical approach to computer supported collaboration by placing students in interdisciplinary teams spread across traditional geographic boundaries. The class covers topics which include: organizing and managing project teams, quantitative methods for project planning and scheduling, introduction to computer-based project management and collaboration tools. The class will be focused on project based learning and will look at key literatures in CSCW and project management.

Prerequisites: Minimum 13.0 university credits and minimum CGPA of 2.5.

Distribution Requirements: Social Science

Mode of Delivery: In Class

CCT454H5 • Documentary Practices

This course explores the form and practice of documentary. Objectivity, ethics, censorship, representation, reflexivity, responsibility to the audience and authorial voice will be examined. Students will engage in practical engagement with documentary forms including the expanded field of documentary using tools such as photography, audio, video, 360 video, VR and new technologies.

Prerequisites: A minimum of 13.0 credits.

Distribution Requirements: Humanities

Total Instructional Hours: 36P

Mode of Delivery: In Class

CCT461H5 • Speculative Design III

Emerging technologies have the potential to transform business models and architectures. In this course students learn the functional and technical underpinnings of selected emerging technologies and critically analyse how these technologies are impacting business functions. Students also gain hands-on experience with emerging technologies and consider how they may be applied or adapted to solve management issues.

Prerequisites: [CCT361H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12P

Mode of Delivery: In Class

CCT470H5 • Information Visualization

Visual literacy and the visualization of information are increasingly important competencies in a growing number of fields. This course will explore the history of visually representing information, consider issues related to data visualization and approaches to visually representing data. In addition, students will develop a better understanding of what visualization works best for various types of data, what makes for a strong visualization and the importance of narrative in the construction of graphic data representation.

Prerequisites: [CCT210H5](#) and ([CCT286H5](#) or [CCT304H5](#))

Distribution Requirements: Social Science

Total Instructional Hours: 24P

Mode of Delivery: In Class

CCT472H5 • Media Archaeology

This course examines media as technical objects with specific histories and a contemporary presence. In the contemporary context where media technologies are programmed to become obsolete, residual forms and practices provide materials traces for analysis. The class will focus on the evolution of media forms, looking particularly at early, antiquated, and obsolete practices and technologies of communication in order to recover their material traces, and to situate them in their historical, social, cultural, and political contexts. Through texts, archival materials, and case studies, old media will be brought back to life to question notions of authenticity, authority, preservation, archiving, temporality, agency, power, evolution, decay, and death.

Prerequisites: A minimum of 13.0 credits and 2.3 CGPA

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT473H5 • Career Strategies

In this course students will learn about various challenges that new graduates, future managers, and future executives will face in the workplace. Students will learn the theoretical as well as practical techniques that will help them succeed after graduating from their undergraduate programs.

Prerequisites: Minimum of 13.0 credits.

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT475H5 • Integrated Learning in Digital Media, Communication, and Technology

This capstone project course requires students to reflect on the experiences they gained during their two work placements connected with the Professional Experience Certificate in Digital Media, Communication, and Technology, and develop a comprehensive case study that integrates theories learning within their ICCIT studies with workplace applications. Students will be required to participate in one-on-one consultations with

the course instructor between weekly group seminars. Consultations are approximately one hour per week for a total of 12 hours (in addition to the scheduled group seminars).

Prerequisites: [CCT273H5](#) and [CCT373H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 12S

Mode of Delivery: In Class

CCT476H5 • Foundations of Operations Management

Operations Management deals with the functions of an enterprise that create value for the customers. The scope of study covers all processes involved in the design, production and physical distribution of goods and services. With global competition continuously increasing, a firm's survival depends upon how well it integrates the operations function into the enterprise's general planning and strategy. It is thus essential for business managers to acquire an understanding and appreciation of operations.

Prerequisites: A minimum of 13.0 university credits including [CCT224H5](#).

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT477H5 • UX Design - Understanding Users

The focus of the course is on understanding the experiences of users and their communities as affected by their interaction with digital technologies in information-centric societies. Students will learn the theoretical framework and practical aspects of advanced user-centered design principles (such as participatory design and technocentric ethnographies). This course represents an opportunity for students to enrich their understanding of the deep interconnections between human factors, human needs, interactive technologies, information, as projected on several dimensions: cultural, societal, ergonomic, and economic.

Prerequisites: [CCT380H5](#)

Exclusions: [CCT485H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 36P

Mode of Delivery: In Class

CCT478H5 • UX Design - Prototyping and Evaluation

The course investigates how people interact with interactive digital systems from an evaluation and formal testing perspective, and introduces students to the methods of User Experience Assessment and User Experience Analysis (UXA). This studio-based experiential course examines how interactive systems are implemented and deployed to meet users' needs, with a focus on formal Human Computer Interaction (HCI) evaluation methods. Students will acquire the capacity to evaluate systems and to critically assess different HCI and UX validation methods which are based on industry approaches carried out by User Research Analysis.

Prerequisites: [CCT380H5](#)

Exclusions: [CCT480H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 36P

Mode of Delivery: In Class

CCT481H5 • Augmented Places and Social Media Spaces

Increasingly we are seeing a hybridization of information and location, where media provide a framework or environment for users (participants) to construct reality and relationships. The course explores emergence of new ubiquitous communication practices and the increasingly pervasive use of technology for the augmentation of people, places, and objects. In this course, students will explore various approaches to context-based information systems, and the shaping of social media spaces.

Prerequisites: A minimum of 13.0 university credits.

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT483H5 • Play, Performance and Community in Digital Games

Students will explore the complex relationship between games and play. Starting with an overview of the major play theories, students will learn how cognitive, philosophical and social theories of play are used to guide and inform game design. The increasingly prominent role of the player in the co-creation and performance of digital games will be examined. Students will also explore the emergence of player communities and consider the various issues that this introduces into design and management process, including important new questions about governance, player and creative freedoms, and immaterial labour.

Prerequisites: A minimum of 13.0 credits, including [CCT270H5](#).

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT486H5 • Digital Platforms: A Global Perspective

From Apple, Amazon, and Facebook to LINE, WeChat and Tik Tok, digital platforms dominate contemporary life. This course provides an intellectual voyage of the global spread of digital platforms from the days when they were not yet recognized as platforms to the contemporary era when users can hardly think of an internet without platforms. We will explore questions concerning the penetration of platforms into the social fabric of our digital life on a global scale while paying attention to the local conditions and specificity. Students will engage with key concepts, theories, and approaches related to platform studies through readings and discussions about different types of platforms, ranging from e-commerce and social media to live-streaming and on-demand service matching.

Prerequisites: A minimum of 13.0 University credits

Exclusions: [CCT490H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT487H5 • Advanced Communication Policy in a Global Context

This course provides students with a theoretical and practical understanding of media, technology, and cultural policy in a global context. The course focuses on issues such as national identity and globalization, media convergence, intellectual property, global media regulation, security and privacy by examining how media, communication, and cultural policy is created, influenced, and contested by a range of actors.

Prerequisites: [CCT206H5](#) and [CCT332H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

CCT490H5 • Topics in Communication, Culture, Information and Technology

An in-depth examination of selected topics in communication, culture, information and technology. Topics vary from year to year, and the content in any given year depends upon the instructor. The contact hours for this course may vary in terms of contact type (L, S, T, P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

Prerequisites: A minimum 13.0 university credits.

Distribution Requirements: Social Science

Total Instructional Hours: 24S

Mode of Delivery: In Class

CCT495H5 • Topics in Communication, Culture, Information & Technology

An in-depth examination of selected topics in communication, culture, information and technology. Topics vary from year to year and the content in any given year depends on the instructor. The contact hours for this course may vary in terms of contact type (L, S, T, P) from year to year, but will be between 24-36 contact hours in total. See the UTM Timetable.

Prerequisites: A minimum of 13.0 university credits.

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

CCT499Y5 • Research Opportunity

This course provides an opportunity for third or higher year students to assist with the resource project of a profession in return for 499Y credit. Students have an opportunity to become involved in original research and enhance their research skills. Participating faculty members post their project description for the following summer and fall/winter session on the ROP website in mid-February and students are invited to apply at that time. See [Experiential and International Opportunities](#) for more details.

Prerequisites: A minimum of 13.0 credits or permission of instructor

Distribution Requirements: Social Science

Mode of Delivery: In Class

MGD415H5 • E-Business Strategies

Electronic business, the extensive use of the web and the Internet, is radically changing existing businesses. New Internet businesses are also being created at an unprecedented rate. New business models, e-business technologies, payment mechanisms, legal and regulatory issues (e.g., intellectual property rights, privacy and security) and the economics of e-business will be investigated from a research and practical perspective.

Prerequisites: [CCT112H5](#) and [CCT355H5](#)

Exclusions: [MGT415H5](#) or [MGT471H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

MGD420H5 • Global Digital Industries

The nature of digital industries will be investigated. The structure and dynamics of various industries, and how they interact with each other, will be emphasized. Topics covered include industries related to traditional media, entertainment, software and other new media. A global perspective will be adopted in this course.

Prerequisites: [CCT112H5](#) and ([CCT321H5](#) or [MGM230H5](#)) and ([CCT221H5](#) or [CCT322H5](#) or [MGT252H5](#)) and ([CCT324H5](#) or [MGT262H5](#)).

Distribution Requirements: Social Science

Total Instructional Hours: 24L/12T

Mode of Delivery: In Class

MGD421H5 • Technological Entrepreneurship

This course explores the methods and frameworks of entrepreneurship through an experiential learning model (learning by doing). Students will begin the process of developing a new business venture, exploring their own business ideas and developing a business plan and pitch while working in teams. Topics include the business model, customers and markets, financial models, competition, intellectual property, funding and investment and characteristics of entrepreneurial teams.

Prerequisites: [CCT112H5](#) and ([CCT219H5](#) or [CCT319H5](#)) and ([CCT321H5](#) or [MGM230H5](#)) and ([CCT221H5](#) or [CCT322H5](#) or [MGT252H5](#)) and ([CCT324H5](#) or [MGT262H5](#))

Distribution Requirements: Social Science

Total Instructional Hours: 36L

Mode of Delivery: In Class

MGD426H5 • Enterprise Risk Management

This course will address the identification and management of risks that are specific to digital industries such as network penetration, transaction processing interruption and flow disruption, provision of audit and backup facilities. The course will also integrate technical security issues along with managerial and legal considerations.

Prerequisites: [CCT112H5](#) and [[CCT219H5](#) or [CCT319H5](#) or EC0100Y5 or ([ECO101H5](#) or [ECO102H5](#))] and ([CCT321H5](#) or [MGM230H5](#)) and ([CCT221H5](#) or [CCT322H5](#) or [MGT252H5](#)) and ([CCT324H5](#) or [MGT262H5](#))

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

MGD427H5 • Advanced Legal Issues

This course will build on the foundations established in [CCT206H5](#). Issues relating to the protection of digital rights, taxation, privacy, jurisdiction and regulation will be examined in detail through the use of recent legal scholarship and evolving case law.

Prerequisites: [CCT112H5](#) and [CCT206H5](#)

Exclusions: [MGM390H5](#) or [MGM393H5](#) or [MGM394H5](#) or [MGM423H5](#) or [MGM429H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

MGD428H5 • Project Management

Approaches to the management of complex technical projects will be investigated. Topics include project estimating, costing and evaluation, organizing and managing project teams, quantitative methods for project planning and scheduling, introduction to computer-based project management tools. The course may involve an applied field project.

Prerequisites: 8.0 credits, including [CCT112H5](#)

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

MGD429H5 • Data Analysis II

This course builds on [CCT226H5](#), Data Analysis I, focusing mainly on the data analysis and management in a database context. Topics covered include behavioural modeling, click stream analysis, Web traffic analysis and other modeling and analysis topics that are relevant in a digital context.

Prerequisites: [CCT226H5](#) and [CCT221H5](#) or [CCT322H5](#)

Distribution Requirements: Social Science

Mode of Delivery: In Class

MGD430H5 • Knowledge Management and Strategy

Increasingly knowledge is becoming one of the key resources managed by firms and organizations. This course explores the management of knowledge with particular emphasis on the use of digital technologies in capturing, storing and disseminating knowledge, knowledge sharing, and the overall development of knowledge management strategies.

Prerequisites: [CCT324H5](#)

Enrolment Limits: Priority is given to students in the Digital Enterprise Management Program followed by other CCIT programs.

Distribution Requirements: Social Science

Total Instructional Hours: 24L

Mode of Delivery: In Class

11 Appendix C: Current Calendar Copy

Certificate in Digital Communication for CCIT and DEM Students

1. CCIT students must take a total of 3.0 credits (2 half credits at the 200 level and 4 half credits at the 300/400 level) at Sheridan and complete the CCIT Major program in order to qualify for a Certificate in Digital Communications.
2. DEM students can fulfill the requirements for the certificate (with 1 half credit at the 200 level and 5 half credits at the 300/400 level) at Sheridan College.

Major Program ERMAJ1034 CCIT (Arts)

Communication, Culture Information & Technology (CCIT) is an undergraduate interdisciplinary major program, the curriculum for which provides students with a foundation in the analysis, evaluation and interpretation of communication and digital media using appropriate methodologies. CCIT provides students the opportunity to design a range of communication media and digital artifacts suitable for collaboration, communication, learning, and exploration. Since the CCIT Major is a joint program with Sheridan College, graduates receive both a Bachelor of Arts degree from the University of Toronto and a Certificate in Digital Communication from Sheridan College.

8.0 credits are required including at least 4.0 at the 300/400 level. Program must be taken in combination with another major or two minors.

Limited Enrolment --Admission is based on academic performance (CGPA) in a minimum of 4.0 credits that must include a minimum grade of 65% in each of [CCT109H5](#) and [CCT110H5](#). Each year the ICCIT program sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand.

All students (including transfer students) must complete 4.0 U of T credits before requesting this program.

Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.

Tuition fees for students enrolling in the CCIT Major program will be higher than for other Arts and Science programs.

First Year (1.0 credit required) [CCT109H5](#) and [CCT110H5](#)

Second Year (3.0 credits required)

1. [CCT204H5](#) and [CCT208H5](#) and [CCT218H5](#)

2. 0.5 credit from [CCT200H5](#) or [CCT206H5](#) or [CCT210H5](#) or [CCT222H5](#)
3. 0.5 credit from [CCT205H5](#) or [CCT207H5](#) or [CCT212H5](#) or [CCT250H5](#) (Students who do not choose [CCT250H5](#) will need to take an additional 0.5 credits to complete the Sheridan Certificate in Digital Communication requirements)
4. 0.5 credit from any 200-level CCT course

(4.0 credits required)

Minimum of 4 half credit courses taught at UTM from any 300/400 level CCT/VCC course. One of these half credits must be at the 400

Third and Higher level.

Years

Minimum of 4 half credit courses taught at Sheridan from any 300/400 level CCT course. One of these half credits must be at the 400 level.

NOTES:

1. 300/400-level CCT courses are restricted to students in CCIT programs only.
2. It is your responsibility to ensure that the prerequisites for course listed in the calendar have been met. Students without the prerequisites can be removed at any time. **No waivers will be granted.**

Digital Enterprise Management - Specialist (Arts) ERSPE1307

Description

Digital Enterprise Management (DEM) is a specialist program, providing students with the skills and knowledge for utilizing digital technologies to solve business management and organizational problems in creative and innovative ways. Students study, build, and critically analyze enterprise-grade emerging technologies in addition to studying the traditional managerial fields such as finance, law, economics, organizational studies, risk management, design, and project management. Understanding the challenges and demands of managing organizations that use and/or develop digital technologies will prepare students for both traditional and digital enterprises.

Enrolment Requirements:

Limited Enrolment — Enrolment in this program is highly competitive. Meeting the minimum requirements does not guarantee admission. Minimum requirements include the following:

- A minimum of 4.0 credits completed at U of T
- [CCT109H5](#) (with a minimum grade of 65%)
- [CCT110H5](#) (with a minimum grade of 65%)
- [CCT112H5](#) (with a minimum grade of 65%)

NOTES:

1. Tuition fees for students enrolling in the DEM Specialist Program will be higher than for other Arts and Science Programs.
2. The minimum CGPA and grade(s) required for program entry are determined annually based on demand. It is, however, never below the stated minimums above.
3. All students (including transfer students) must complete 4.0 U of T credits before requesting this program.
4. Courses completed as CR/NCR will not be counted as part of the 4.0 credits required for program entry.

Completion Requirements:

13.5 credits are required.

First Year: [CCT109H5](#) and [CCT110H5](#) and [CCT112H5](#)

Second Year:

- [CCT203H5](#) and [CCT206H5](#) and [CCT219H5](#) and [CCT221H5](#) and [CCT224H5](#) and [CCT25H5](#) and [CCT261H5](#)

Higher Years:

1. [CCT321H5](#) and [CCT324H5](#) and ([CCT325H5](#) or [MGD425H5](#)) and [CCT354H5](#) and [CCT355H5](#) and [CCT361H5](#)
2. [CCT424H5](#) and [CCT461H5](#) and [MGD421H5](#) and [MGD426H5](#) and [MGD428H5](#)
3. 1.0 credit from [CCT401H5](#) or [CCT410H5](#) or [CCT476H5](#) or [MGD415H5](#) or [MGD425H5](#) or [MGD427H5](#).
4. 2.0 credits of CCT or MGD at the 300- or 400-level. Cannot include any courses already used above.

Notes:

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

1. Students cannot combine the Digital Enterprise Management Program with the CCIT Major program, or the Management Major Program or the Commerce Major program.
2. Students are encouraged to review CCT 300 and 400 level elective courses in advance, and take necessary 200 level CCT courses to meet prerequisites in higher years.
3. Student who cannot complete [CCT219H5](#), due to exclusion with [ECO100Y5](#) or [ECO101H5](#) or [ECO102H5](#), will need to take any 0.5 credit from any 200/300-level CCT course or 400-level MGD course in its place.

12 Appendix D: Proposed Calendar Copy

Please note that there is no change to the DEM calendar copy.

Major Program ERMAJ1034 CCIT (Arts)

Communication, Culture Information & Technology (CCIT) is an undergraduate interdisciplinary major program, the curriculum for which provides students with a foundation in the analysis, evaluation and interpretation of communication and digital media using appropriate methodologies. CCIT provides students the opportunity to design a range of communication media and digital artifacts suitable for collaboration, communication, learning, and exploration.

8.0 credits are required including at least 4.0 at the 300/400 level. Program must be taken in combination with another major or two minors.

Limited Enrolment --Admission is based on academic performance (CGPA) in a minimum of 4.0 credits that must include a minimum grade of 65% in each of [CCT109H5](#) and [CCT110H5](#). Each year the ICCIT program sets a minimum required CGPA. This will vary from year to year and is based, in part, on supply and demand.

All students (including transfer students) must complete 4.0 U of T credits before requesting this program.

Courses with a grade of CR/NCR will not count as part of the 4.0 credits required for program entry.

Tuition fees for students enrolling in the CCIT Major program will be higher than for other Arts and Science programs.

First Year (1.0 credit required) [CCT109H5](#) and [CCT110 H5](#)

Second Year (3.0 credits required)

1. [CCT204H5](#) and [CCT208H5](#) and [CCT218H5](#)

2. 0.5 credit from [CCT200H5](#) or [CCT206H5](#) or

[CCT210H5](#) or [CCT222H5](#)

3. 0.5 credit from [CCT205H5](#) or [CCT207H5](#) or [CCT212H5](#) or [CCT250H5](#)

Third Year
and higher

(4.0 credits required)

Minimum of 8 half credit courses from any 300/400 level

CCT/VCC course. One of these half credits must be at the 400 level.

NOTES:

1. 300/400-level CCT courses are restricted to students in CCIT programs only.
2. It is your responsibility to ensure that the prerequisites for course listed in the calendar have been met. Students without the prerequisites can be removed at any time. **No waivers will be granted.**

13 Appendix E: Course Migration & Retirement Schedule

The following table outlines the schedule for submitting course migration and retirement changes to the divisional Social Sciences Curriculum Committee

Academic year	Courses to be retired and minor changes to be approved by Social Sciences CC to affect following year calendar and timetable	Courses to be migrated from Sheridan to UTM and appear as such on UTM timetable
2020/2021	Revised program requirement copy (see Appendix D) will be submitted for approval for the 2022/2023 Academic Calendar.	No course migration
2021/2022	Students entering CCT109H5 and CCT110H5 will be advised as the first cohort to take all courses at UTM once accepted to the major in spring of 2022. (SH) and or other Sheridan location designator to be removed from CCT204H5, CCT250H5, CCT260H5, CCT270H5 for the 2022/2023 UTM Calendar.	No course migration Only students accepted to the CCT major by summer 2021 permitted enrollment in courses held at Sheridan.
2022/2023	(SH) designator to be removed from CCT305H5, CCT311H5, CCT333H5, CCT352H5, CCT353H5, CCT356H5, CCT357H5, CCT360H5 for the 2023/24 UTM Calendar	CCT204H5 Design Thinking CCT250H5 Technology and Creative Expression CCT260H5 Web Culture & Design CCT270H5 Principles in Game Design will all be offered at UTM.
2023/2024	The following courses will be proposed for retirement to take effect as of the 2024/2025 calendar & timetable: CCT312H5 Interactive Story telling for Game Development CCT336H5 - Comics & Digital Culture CCT351H5 - Theory & Practice of Animation CCT384H5 - Inclusive Design & Social Responsibility CCT391H5 - Topics in Communication, Culture, Information & Technology (SH) designator to be removed from CCT406H5, CCT433H5, CCT434H5, CCT453H5, CCT457H5, CCT460H5 and CCT482H5 for the 2024/2025 UTM Calendar	CCT305H5 - Design & Implementation of Multimedia Documents CCT311H5 Game Design & Theory CCT333H5 - Social Innovation CCT334H5 - History & Theory of Game Production CCT352H5 - History & Practice of Design CCT353H5 - Digital Media: Video CCT356H5 - Online Advertising & Marketing CCT357H5 - Digital Media: Photography CCT360H5 - Intermediate Web Design
2024/2025	Course Migration complete all ICCIT courses delivered at UTM, no ICCIT courses taught at Sheridan	CCT406H5 - Capstone Design Project CCT433H5 - Sustainable Design CCT434H5 Design Thinking II CCT453H5 Digital media: Advanced Video Production

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

	<p>The following courses will be proposed for retirement to take effect as of the 2025/2026 UTM Calendar & Timetable:</p> <p>CCT412H5 - Self-Directed Research Project: Advanced Studio Practices</p> <p>CCT423H5 - Game Development Project</p> <p>CCT448H5 - Game Design as Problem Solving</p> <p>CCT449H5 - Immersive VR Journalism</p> <p>CCT450H5 - Design Interactive Books</p> <p>CCT451H5 - Digital Media: Advanced Audio Production</p> <p>CCT452H5 Graphic Design & Popular Culture</p> <p>CCT456H5 Analysis & Visualization of Open Data</p> <p>CCT491H5 - Topics in Communication, Culture, Information & Technology</p>	<p>CCT457H5 - Digital Media: Advanced Photography Production</p> <p>CCT460H5 Advanced Web Design</p> <p>CCT482H5 Interactive Electronic Design</p>
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14 Appendix F: Projected Resource Requirements

Sheridan Course	Migrate	Retire	Academic rationale	Sheridan	Sheridan seats	ICCIT	ICCIT seats	Instructor type
CCT204H5 Design Thinking	X		CCT204 is a required course for program completion and foundational course in design concepts.	2 LEC section of 120 FALL 1 LEC section of 40 FALL 7 PRA at 40 FALL 1 LEC at 30 SUMMER 1 LEC at 45 SUMMER 1 PRA at 30 SUMMER 1 PRA at 45 SUMMER	355	1 LEC section of 200 FALL 5 PRAs x 40 1 LEC section of 200 WINTER 5 PRAs x40 Smaller LEC – perhaps 60 SUMMER 2 PRAs x 30 students (enrolment controls; only people in program; can increase if waitlist gets too high)	460	Current faculty
CCT250H5 Technology and Creative Expression	X		CCT250 provides students with appropriate frameworks and tools and create visual, written and oral communication media for a range of industry sectors and audiences.	FALL 2 LEC x 60 WINTER 1 LEC x 80	200	FALL or WINTER 1 LEC section of 120 3 PRAs x x45	120	Current faculty or New Hire (Design, tenure stream)
CCT260H5 Web Culture and Design	X		CCT260 is the foundational course for a series of three courses that scaffold web design and development skills	Not required course FALL 2PRAs x 35 FALL 1 PRA x30 WINTER 2 PRA x 35 WINTER 1 PRA x 30 SUMMER 2 PRA x 40	280	Not required course FALL 3 LEC or 100 seats FALL 2PRAs of 35 and 1 of 30 WINTER 4 sections of 30 or 100 seats WINTER 2 PRAs of 35 and 1 of 30 SUMMER 2 sections of 40 or 80 seats Only instructor	280	New Hire (Design teaching stream)
CCT270H5 Principles in Game Design	X		CCT270 provides the core concepts and applications for 3 rd & 4 th year theory & practical courses in game design.	FALL 120 seats WINTER 120 seats No PRAs	240	WINTER 200 seats possible prerequisite (intro to game studies)	200	Current faculty
CCT305H5 - Design & Implementation of Multimedia Documents	X		CCT305H5 represents the third year design theory and skills course. CCT305 builds on both theoretical and technical skills developed in CCT204 and CCT250.	WINTER 1 LEC at 120 3 PRAs at 40	120	WINTER 1 LEC at 120 WINTER 3 PRA x 40	120	Current faculty
CCT311H5 - Game Design & Theory	X		This course will be reassessed for prerequisite skills to the fourth year theory course in game design CCT483 <i>Play, Performance and Community in Digital Games</i> .	FALL 2 LECs at 40	80	FALL 2 PRAs at 45	90	Current faculty
CCT312H5 - Interactive Story Telling for Game Development		X	Due to faculty teaching interests at Sheridan, three 3rd year courses were offered. Two of these courses overlap with the UTM offered course by a recent faculty hire. A sub group of the ICCIT curriculum committee reviewed all game design and development courses to identify an appropriate series of courses at the second, third and fourth year levels. It was determined that CCT312 and CCT334 create too much overlap. CCT311 was kept as the theory-based course and CCT382 (already offered at UTM) and CCT382 will cover all necessary concepts in story telling and prototyping.					
CCT333H5 - Social Innovation	X		This course directly addresses learning outcome LO11, Assess and critically analyse the social impact of communication and digital media and the technologies that facilitate their dissemination. This course may also be included as part of the new ICCIT major in Technology <i>Coding and Society</i> .	1 LEC at 30 WINTER	30	1 LEC at 60 part of TCS	60	Current faculty or New Hire (Visual Studies, tenure stream)
CCT334H5 - History & Theory of Game Production	X		Skills and content already addressed in UTM third year <i>game prototyping (CCT382 Prototyping Digital Games)</i>					Current faculty
CCT336H5 - Comics & Digital Culture		X	Course based on Sheridan faculty research interest, retirement has no impact on CCIT major learning outcomes.					
CCT351H5 - Theory & Practice of Animation		X	Course based on Sheridan faculty research interest, retirement has no impact on CCIT major learning outcomes.					
CCT352H5 - History & Practice of Design	X		This course will be reassessed upon migration to UTM for advanced concepts in design and design thinking and as a prerequisite for CCT434 <i>Design Thinking II</i>	2 LECs at 40 FALL	80	2 PRAs at 45	90	Current faculty or New Hire (Design, tenure stream)

CCT353H5 - Video PRA0101	X		Photography and videography have been important skills for CCIT students who hope to work within the creative industries post-graduation. Video and photography courses at the third and fourth year levels will be retained and taught at UTM to maintain the development of these skills.	3 PRAs at 30 WINTER 1 PRA at 30 SUMMER	120	3 PRAs at 45 each TA support required	135	Current faculty
CCT356H5 - Online Advertising & Marketing	X		The Digital Enterprise Management specialist program offers specialist students several marketing courses that are more management focused. CCT356 has historically focused on marketing for CCIT majors with focus on the <u>creative and digital media industries</u> (see rationale for CCT353H5)	1 LEC at 120 FALL 1 LEC at 120 WINTER Low enrolment	240	WINTER 1 LEC at 120	120	Current faculty
CCT357H5 - Photography	X		(see rationale for CCT353H5)	3 PRA at 30 FALL	90	2 PRAs at 45 TA support required	90	New Hire (Design, tenure stream)
CCT360H5 - Intermediate Web Design PRA0101	X		CCT360 is the intermediate web design and development course and prerequisite for CCT460H5.	3 PRAs at 40 FALL 1 PRA at 30 SUMMER	150	FALL 2 PRAs at 50 SUMMER 1 PRA at 50 TA support required	150	New Hire (Design, teaching stream)
CCT384H5 - Inclusive Design & Social Responsibility		X	This course may have significant overlap with CCT380 Human Computer Interaction and Communication					
CCT391H5 - Topics in Communication, Culture, Information & Technology		X	CCT395 Special Topics in Communication, Culture, Information & Technology is already offered at UTM.					
CCT406H5 - Capstone Design Project	X		CCT406 is a technically oriented complement to the research focused CCT405 Individual project. Students must find an appropriate faculty supervisor to oversee a <u>design-based research project</u> .	1 PRA at 40 WINTER	40	1 PRA at 20	20	N/A - individual project course
CCT412H5 - Self-Directed Research Project: Advanced Studio Practices		X	Course based on Sheridan faculty research and student supervision interest, retirement has no impact on CCIT major learning outcomes. Students may use CCT406H5 to <u>explore a design-based project</u> .					
CCT423H5 - Game Development Project		X	Course based on Sheridan faculty research and student supervision interest, retirement has no impact on CCIT major learning outcomes. Students may use CCT405H5 Independent (already offered at UTM) to explore a <u>design-based project</u> .					
CCT433H5 - Sustainable Design	X		This course will build on theory, concepts and technical skills developed in CCT333H5. This course may also be included as part of the new ICCIT major in Technology <u>Coding and Society</u> .	1 LEC at 45 FALL	45	2 PRAs at 30 (incl TCS)	60	Current faculty or New Hire (Design, tenure stream)
CCT434H4 - Design Thinking II	X		This course will be reassessed and revised as an <u>advanced design course</u>	4 LECs at 30 WINTER	120	4 PRAs at 30	120	Current faculty
CCT448H5 - Game Design as Problem Solving		X	Covered by CCT419 in terms of practical applications and <u>problem solving</u>					
CCT449H5 - Immersive VR Journalism		X	Can be covered in CCT454 Documentary Practices and WRI430 Journalistic Investigation.					
CCT450H5 - Design Interactive Books		X	Course based on Sheridan faculty research interest, retirement has no impact on CCIT major learning <u>outcomes</u> .					
CCT451H5 - Advanced Audio Production		X	Similar skills are developed in WRI380 Podcasting and CCT371 <u>Sound as Media</u> already offered at UTM					
CCT452H5 - Graphic Design & Popular Culture		X	Course based on Sheridan faculty research interest, no impact on CCIT major learning outcomes					
CCT453H5 - Advanced Video Production	X		(see rationale for CCT353H5)	FALL 1 PRA at 20	20	3 PRAs at 30 TA support required	90	Current faculty
CCT456H5 - Analysis & Visualization of Open Data		X	The skills developed in visually analyzing data are developed in CCT470H5 Information Visualization already <u>taught at UTM</u>					
CCT457H5 - Advanced Photography Production	X		This course enables students to develop advanced skills in digital photography that may be incorporated in the <u>development of digital artifacts</u> .	1 PRA at 20	20	1 PRA at 30 TA support required	30	New Hire (Design, tenure stream)
CCT460H5 - Advanced Web Design PRA0101	X		This is the advanced web design and development course that builds on the concepts and skills developed in CCT260H5 and CCT360H5.	4 PRA at 40 WINTER 1 PRA at 30 SUMMER	190	4 PRAs at 30 FALL TA support required	120	New Hire (Design, teaching stream)
CCT482H5 - Interactive Electronic Design	X		This course will be redesigned as the advanced offering of CCT286 Interactive Media and CCT385 Introduction to Media Environments already taught at UTM. (CCT385 title change will drop Introduction as this will be an <u>intermediate level course</u>).	1 PRA at 40 WINTER	40	1 PRA at 30	30	Current faculty
CCT491H5 - Topics in Communication, Culture, Information & Technology		X	CCT495 Special Topics in Communication, Culture, Information & Technology is already offered at UTM.					

ICCIT Sheridan Transition

Additional Resources Required:

Faculty 3 (two research and one teaching stream - Design x2 & Visual Studies, Race & Militarization)

Staff Media Technician - USWA PB 12

Software Adobe Creative Suite Licenses - 2nd year
Adobe License Renewal - 3rd & 4th year
Design Software (interactive game design)

Equipment DSLR Cameras - CCT357 / CCT457
Video Equipment - CCT353 / CCT453
Warranty
Accessories - tripods, mics, cases, lenses
