Information Technology

Program Requirements

Master of Information Technology: Digital Media (5.0 credits)

Requirements:
1. 0.5 credit in:  
   - ITEC 5000 [0.5] & ITEC 5001 [0.0]  
   Analytical Methods for Information Technology
   Information Technology Seminars

2. 1.5 credits in three core courses:  
   - ITEC 5200 [0.5]  
   - ITEC 5201 [0.5]  
   - ITEC 5202 [0.5]  
   - ITEC 5203 [0.5]  
   - ITEC 5204 [0.5]
   Entertainment Technologies
   Computer Animation Technologies
   Visual Effects Technologies
   Game Design and Development Technologies
   Emerging Interaction Techniques

3. 0.5 credit in electives, which may include up to 0.5 credit from a fourth-year course with the approval of the supervisor or the associate director of graduate studies.

4. 2.5 credits in:  
   - ITEC 5909 [2.5]  
   Master’s Thesis

Total Credits: 5.0

Master of Information Technology: Digital Media with Specialization in Data Science (5.0 credits)

Requirements:
1. 0.5 credit in:  
   - DATA 5000 [0.5]  
   Data Science Seminar

2. 0.5 credit in:  
   - ITEC 5000 [0.5]  
   Analytical Methods for Information Technology

3. 1.0 credit from core courses:  
   - ITEC 5200 [0.5]  
   - ITEC 5201 [0.5]  
   - ITEC 5202 [0.5]  
   - ITEC 5203 [0.5]  
   - ITEC 5204 [0.5]
   Entertainment Technologies
   Computer Animation Technologies
   Visual Effects Technologies
   Game Design and Development Technologies
   Emerging Interaction Techniques

4. 0.5 credit in electives, which may include ITEC courses or any other 5000- or 4000-level courses from other departments or programs selected in consultation with the supervisor.

5. 2.5 credits in:  
   - ITEC 5909 [2.5]  
   Master’s Thesis (in the specialization)

Total Credits: 5.0

Note: No additional IT seminar requirements for this stream.

Master of Information Technology: Network Technology (5.0 credits)

Requirements:
1. 0.5 credit in:  
   - ITEC 5000 [0.5] & ITEC 5001 [0.0]  
   Analytical Methods for Information Technology
   Information Technology Seminars

2. 2.0 credits in:  
   - ITEC 5100 [0.5]  
   Planning and Design of Computer Networks
   - ITEC 5101 [0.5]  
   Cross Layer Design for Wireless Multimedia Networks
   - ITEC 5102 [0.5]  
   Designing Secure Networking and Computer Systems
   - ITEC 5103 [0.5]  
   Cloud and Datacentre Networking

3. 1.0 credit in:  
   - ITEC 5905 [1.0]  
   Network Technology Project

4. 1.5 credit in electives, which may include up to 0.5 credit from a fourth-year course with the approval of the supervisor or associate director of graduate studies.

Total Credits: 5.0

Ph.D. Information Technology: Digital Media (10.0 credits)

Requirements:
1. 0.5 credit in:  
   - ITEC 6200 [0.5]  
   Introduction to Interdisciplinary Research in Digital Media

2. 1.0 credit in two courses, at least one of which must be from a different discipline than that of the degree and approved by the supervisor.

3. 0.0 credit in:  
   - ITEC 5001 [0.0]  
   Information Technology Seminars

4. 0.0 credit in:  
   - ITEC 6907 [0.0]  
   Doctoral Comprehensive

5. 0.0 credit in:  
   - ITEC 6908 [0.0]  
   Doctoral Proposal

6. 8.5 credit in:  
   - ITEC 6909 [8.5]  
   Doctoral Thesis in Digital Media

Total Credits: 10.0

Milestones

First Year: completion of course work including ITEC 6200 [0.5].
Second Year: completion of ITEC 6907 [0.0] before the end of the fourth term of registration.
Third Year: completion of ITEC 6908 [0.0] before the end of the eighth term of registration.
Fourth Year: completion of ITEC 6909 Doctoral Thesis in Digital Media

Regulations
See the General Regulations section of this Calendar.

Admission

M.I.T. Digital Media
Students entering the program will have an undergraduate degree in one of the related three primary disciplines of Technology (e.g. Computer Science/Engineering and Information Technology), Content (e.g. Arts and Humanities), and People (e.g. Psychology, Communication and Business).

M.I.T. Network Technology
Students entering the program will have an undergraduate degree in network technology, electrical engineering, computer science, engineering, or a closely-related discipline.
Accelerated Pathway

The accelerated pathway in the Master of Information Technology - Network Technology (MIT-NET) is a flexible and individualized plan of graduate study. Students in their final year of a Carleton BIT Network Technology degree with demonstrated academic excellence and aptitude for research may qualify for this option.

Students in their third year of study in the BIT Network Technology degree should consult with both their Undergraduate Program Coordinator and the Associate Chair for Graduate Studies to determine if the accelerated pathway is appropriate for them and to confirm their selection of courses for their final year of undergraduate studies.

Accelerated Pathway Requirements:

1. At least 0.5 credit from: ITEC 5110, ITEC 5111, ITEC 5112, ITEC 5113, ITEC 5114 with a grade of B+ or higher
2. Minimum overall CGPA of A-

Students may receive advanced standing with transfer of up to 1.0 credit, which can reduce their time to completion.

Admission

Applicants to this program will normally hold a Master's degree in one of the three related disciplines (Technology, Content, and People) but demonstrate the ability to work in multi-disciplinary groups and have some general technology (digital media) background.

Applicants judged to be generally acceptable but deficient in some preparation may be asked to complete course work in addition to the program requirements.

In addition to transcripts and letters of reference, application packages will include a statement of interest outlining the applicant's proposed area of research.