

2008/09 New Programs and Program Changes

The following is a summary of new programs and program changes proposed by the University of Toronto Scarborough which, if approved, are to become effective in May with the 2008 Summer Session:

NEW PROGRAM

The Department of Computer & Mathematical Sciences proposes the following new program which will also be eligible for inclusion in the Co-operative Program in Physical Sciences and in the Concurrent Teacher Education Program (CTEP). The annual intake once the program reaches a steady state is expected to be 10:

Specialist Program in Quantitative Analysis

The Program in Quantitative Analysis is an interdisciplinary program designed for students interested in applying mathematical ideas and analysis to problems in the biological sciences, social and health sciences, physical sciences, and in finance and risk management. After completing this program students will be well prepared to pursue professional careers as quantitative analysts, go on to professional masters programs in such areas of application or to pursue research degrees in the areas in these fields that require a strong training in quantitative methods.

Degree Level Expectations

1. Depth and Breadth of Knowledge

Students will develop a deep understanding of the key methods in the mathematical sciences that are involved in data analysis. This will enable them to study problems in areas of application in greater depth than is often possible in undergraduate programs in these disciplines. As an interdisciplinary program it will have considerable breadth by exposing students to the mathematical, statistical and computational tools used in quantitative data analysis, and to at least one field in the life or social sciences.

2. Knowledge of Methodologies

Students will learn the basic methods in mathematical analysis, in statistics and in relevant areas of computer science in their first two years of the program. They will go on then to learn statistical and computational methods particularly relevant to the field of application that they have chosen.

3. Application of Knowledge

A central purpose of the program is to teach students how to apply the quantitative methods they are studying in one area of application. This will require them to learn how to approach problems in the chosen area and how to find suitable techniques to solve them.

4. Communication Skills

The program has a basic writing requirement. The project course in the final year will also be a significant piece of written work, and could be presented orally in a seminar.

5. Awareness of Limits of Knowledge

It is unavoidable in the mathematical sciences that students become aware of how little is known in these fields.

6. Autonomy and Professional Capacity

The program gives students quantitative skills that make them eminently employable. These skills also prepare them well for further study in a wide range of fields in the social and life sciences as well as finance.

Program Requirements

The program requires 13 credits in total. Students will be required to complete a culminating project course in their final year of studies that applies the computational, mathematical, or statistical skills they have acquired. They are strongly recommended to complete the equivalent of a minor in an area of application. Suggested areas are: Mathematical Finance, Biological Sciences, Physical Sciences, and Social and Health Sciences. The program has streams corresponding to these. Students should select an area of application in consultation with the Supervisor of Studies. For the project course the student needs a supervisor in the appropriate department, also selected in consultation with the Supervisor of Studies

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Writing requirement (0.5 credits)

(Should be completed by the end of second year.)

One of: ANTA01H, ANTA02H, CLAA02H, ENGA10H, ENGA11H, ENGB06H, ENGB07H, ENGB08H, ENGB17H, ENGB19H, ENGB50H, ENGB51H, GGRA02H, GGRA03H, GGRB05H, HISA01H, HLTA01H, HUMA11H, HUMA17H, HUMA19H, LINA01H, PHLA10H, PHLA11H, WSTA01H.

First Year (3.0 credits specified)

CSCA08H Introduction to Computer Programming

CSCA48H Introduction to Computer Science

CSCA65H Mathematical Expression and Reasoning for Computer Science

MATA23H Linear Algebra I

MATA30H Calculus I

MATA37H Calculus II for Mathematical Scientists

Second Year (4.0 credits specified)

CSCB07H Software Design

CSCB36H Introduction to the Theory of Computation

CSCB63H Design and Analysis of Data Structures

MATB24H Linear Algebra II

MATB44H Differential Equations I

MATB41H Techniques of the Calculus of Several Variables I

STAB52H Introduction to Probability

STAB57H Introduction to Statistics

Second, Third and Fourth Years

Students should choose a stream during their second year of studies which fits with the area of application that interests them. The STAD99H Project Course must be taken during the fourth year and requires a supervisor to be assigned in consultation with the Supervisor of Studies.

Biological Sciences and Psychology Stream (5.0 credits)

CSCC43H Introduction to Databases

CSCD11H Machine Learning and Data Mining

MATB42H Techniques of the Calculus of Several Variables II

[MATB61H Linear Programming and Optimization

or

CSCC73H Algorithm Design and Analysis]

MATC46H Differential Equations II

STAC42H Multivariate Analysis

STAC52H Experimental Design

STAC62H Stochastic Processes

STAC67H Regression Analysis

Plus 0.5 additional full credits from ACT, CSC, MAT or STA courses at the B or above level.

Physical Sciences Stream (5.0 credits)

CSCC50H Numerical Algebra and Optimization

CSCC51H Numerical Approximation, Integration and Ordinary Differential Equations

MATB42H Techniques of the Calculus of Several Variables II

MATB43H Introduction to Analysis

MATC46H Differential Equations II

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MATC34H Complex Variables
MATC35H Chaos, Fractals and Dynamics
STAC62H Stochastic Processes
Plus 1.0 additional full credits from ACT, CSC, MAT or STA courses at the B or above level.

Mathematical Finance Stream(5.0 credits)

ACTB40H Fundamentals of Investment and Credit
CSCC36H Numerical Methods
CSCD11H Machine Learning and Data Mining
MATB61H Linear Programming and Optimization
MATB44H Differential Equations I
MATC46H Differential Equations II
STAC57H Time Series Analysis
STAC62H Stochastic Processes
STAC67H Regression Analysis
STAC70H Statistics and Finance

Social and Health Sciences Stream (5.0 credits)

CSCC36H Numerical Methods
CSCC43H Introduction to Databases
MATB61H Linear Programming and Optimization
STAC42H Multivariate Analysis
STAC52H Experimental Design
STAC57H Time Series Analysis
STAC62H Stochastic Processes
STAC67H Regression Analysis
Plus 1.0 additional full credits from ACT, CSC, MAT or STA courses at the B or above level.

Fourth Year (0.5 credit)

One of:
CSCD94H/D95H Computer Science Project
MATD94H/D95H Readings in Mathematics
STAD94H Statistics Project

MAJOR PROGRAM CHANGES

The Department of Humanities proposes adding a non co-operative version of the Specialist Program in Arts Management (a co-operative version of the program has been offered for many years) and adding a Curatorial Studies stream to the Specialist Program in Art & Culture. (This program currently has five streams: Art History, Drama, Music, Studio & Multidisciplinary)

Specialist Program in Arts Management

Arts Management is designed for students with an interest both in the arts and in the business of the arts, primarily from a not-for-profit perspective. It provides students with a solid grounding in the knowledge and skills necessary for fulfilling professional careers in producing, presenting and exhibiting organizations (theatres, opera companies, orchestras, dance companies, galleries, museums), arts councils, arts service organizations, government, and many other related areas, or for graduate studies in disciplines such as Arts Management, Cultural and Public Policy, and Museum or Curatorial Studies.

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This will be a limited enrolment program since Arts Management is a highly specialized area of study which depends on small class formats. At this time, the Department does not have the capacity to support more than a combined total of 50 students from the co-op and non co-op versions - hence, the need for limited enrolment. It is anticipated that capacity will not be reached for a few years. The expected annual intake once the program reaches a steady state is 20.

Degree Level Expectations

1. Depth and Breadth of Knowledge

As a part of the Visual and Performing Arts area of the Humanities Department, Arts Management affords students the opportunity to experience a broad, interdisciplinary range of perspectives while at the same time offering discipline- and skill-specific management courses for valuable in-depth concentration in essential areas. This program includes the equivalent of a Major in Arts Management, a concentration in chosen area(s) of the arts – Art History, Art Studio, Drama or Music – to provide for a richer understanding of that which is managed, and the opportunity for additional courses to broaden the students' understanding of contemporary issues and their historical context.

2. Knowledge of Methodologies

Students will be introduced to academic and field-based methodologies in the key areas of Arts Management early in and throughout the program; assignments and exercises are often based on professional practice and allow students to not only demonstrate their understanding of the subject matter for evaluation purposes but also learn through writing and developing materials similar to those they would be called upon to create in the industry.

3. Application of Knowledge

A central purpose of the program is to have students apply the theories, practices, methodologies, skills and knowledge to learning opportunities that offer real-world relevance. Students are called upon to demonstrate problem-solving, decision-making, and other essential discipline-based skills through assignments that require them to interpret, defend, analyze, support, evaluate and otherwise use their evolving judgement to ask insightful questions and propose reasonable solutions to new problems and situations. The synthesis of different types of learning experiences is demonstrated within the capstone VPAD12H course.

4. Communication Skills

As a Humanities program, Arts Management calls upon its students to be skilful and authentic communicators. Students develop and refine essential communication skills (critical thinking, reading, writing, listening, and speaking) not only through courses that investigate communications concepts but throughout the program with regular discussion, presentations and writing assignments.

5. Awareness of Limits of Knowledge

Arts Management is a relatively young field of study with research and understanding of practice coming from contemporary sources, and students are made aware of the evolving nature of the discipline. As students are afforded some level of intellectual authority for the development of knowledge within any given course and they are asked to continually challenge what is presented, they see that learning is collaborative and progressive rather than finite and handed down by the professor.

6. Autonomy and Professional Capacity

The program provides strong skill and contextual knowledge preparation for employment in cultural management and/or graduate work in a wide range of related fields. Close contact with instructors and the program supervisor allows the development of the kind of relationships that result in ideal letters of recommendation for employment or further study.

Program Admission

This is a limited enrolment program and entry is competitive. Application procedures for current UTSC students can be found at the Registrar's Office website: www.utsc.utoronto.ca/registrar/. Admissions are granted on the basis of applicants' academic performance, background in one or more of the arts, and demonstrated interest and

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potential ability in Arts Management. The minimum qualifications for entry are 4.0 credits and a cumulative GPA of at least 2.5.

Program Requirements

With the exception of work terms, the program requirements are the same as the requirements of the co-operative program. Students complete seven full credits in the arts management core program, two full credits in the management field, six to eight full credits from one or two artistic field(s), and a further three to five full credits from the elective field for a total of 20.0. Continuous consultation with the Supervisor of Studies is strongly encouraged for all students in each year of their program.

1. Arts Management Core Courses

Students must complete seven full credits as follows:

a. The following five full credits:

VPAA10H Introduction to Arts Management
VPAA12H Audience and Resource Development
VPAB05H Introduction to Contemporary Cultural Theory
VPAB06H Challenging Normative Values in Art, Culture and Society
VPAB13H Financial Management for Arts Managers
VPAB15H Arts Education and Outreach
VPAB16H Managing and Leading in Cultural Organizations
VPAC13H Planning and Project Management in the Arts and Cultural Sector
VPAC15H Cultural Policy
VPAD12H Senior Seminar in Arts Management

b. One half credit from the following list:

VPAC17H Arts Marketing
VPAC18H Arts Fundraising and Development

c. One half credit from the following list:

VPAC19H Performing Arts Management: Principles and Practices
VPAC20H Visual Arts Management: Principles and Practices

d. One full credit from the following list:

VPAC16H Legal and Human Resource Issues in Arts Management
VPAD06H Planning for Equity and Diversity in Arts Organizations
VPAD13H Art, Culture, and Policy
VPAD14H Independent Studies in Arts Management

2. Management Field of Study

The following two full credits are required:

MGTA03H Introduction to Management I
MGTA04H Introduction to Management II

Plus one additional full credit from Management or Economics (normally at the C level). NOTE that the Calendar states that many C-level Management require MGTB23H and MGTB29H as prerequisites, but Arts Management students will be allowed access to certain Management courses without these prerequisites; see the Arts Management Supervisor of Studies for details.

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3. Related Field(s) of Study

Six to eight full credits from one or two other areas of study. These courses must:

- follow the requirements established for a Major program in an artistic discipline within the Visual and Performing Arts (six FCEs)
- complete the requirements established for a Major program in an artistic discipline within the Visual and Performing Arts (seven FCEs chosen in consultation with that program's Supervisor of Studies)
- complete the requirements established for two Minor programs, at least one of which must be in an artistic discipline within the Visual and Performing Arts (four FCEs each - eight FCEs total, chosen in consultation with both programs' Supervisors of Studies)

The completion of a Major program in a chosen artistic field is particularly valuable for students contemplating graduate studies; additional areas of studies (offered by the double Minor option) may be valuable in certain fields of work and further studies.

Specialist Program in Art and Culture (Curatorial Studies stream)

The development of this stream has come about through student interest in curatorial studies and the presence of faculty members highly experienced in the field. The expected annual intake once the stream reaches steady state is 10. Because of the level of scholarship, the understanding of art historical ethics, responsibilities (such as handling art works) and the writing standards required, there will be a GPA requirement for continued enrolment in this stream of the program.

Degree Level Expectations

1. Depth and Breadth of Knowledge

Situated within a specialist program designed to give students a broad range of theoretical perspectives on art and culture and a strong experience of the interdisciplinary, Curatorial Studies offers both historical and current study of international curatorial practices. The instructors associated with Curatorial Studies include a former curator from the Smithsonian's Museum of Contemporary African Art, a former editor of a well-known contemporary art magazine, a former employee of the European Curatorial Department of the Art Gallery of Ontario, a current member of the AGO's Canadian Curatorial Committee, and the Director/Curator of the Doris McCarthy Gallery. Courses will train students in ethics and responsibilities of curating as well as in the practicalities of conceiving, assembling, installing, and writing about a curatorially driven exhibition.

2. Knowledge of Methodologies

VPHC72H (Art, the Museum and the Gallery) is field-based so that students see first-hand the practices of contemporary curators in galleries and museums (and some other art history courses which students may elect offer the same opportunity).

3. Application of Knowledge

The final core course, VPHD43H (Curating Contemporary Art) puts students through the experience of conceptualizing, preparing, mounting, and writing about an exhibition.

4. Communication Skills

Based entirely in Humanities, Curatorial Studies offers writing experience at every turn, and since the program has a high minimum cumulative GPA (3.0), students will work closely with instructors in small classes, obtaining an unusual degree of attention to their communication skills.

5. Awareness of Limits of Knowledge

Students will understand that curatorial practices are globalized and dynamic, and that knowledge must be sought continually.

6. Autonomy and Professional Capacity

The program provides strong preparation for graduate work in curatorial studies. Close contact with instructors allows the development of the kind of relationships that result in strong and detailed letters of

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recommendation. Students will have a strong sense of the structures of the local art market and museum and gallery structure should they wish to seek employment directly after graduation.

Program Admission

Enrolment in the Curatorial Studies stream is limited. Application procedures can be found at the Registrar's Office website: www.utscc.utoronto.ca/registrar/. To be admitted, students must have at least 4.0 credits including at least two of VPAA05H, VPAA10H and VPHA46H and a cumulative GPA of at least 2.5. Once admitted, this grade point average must be maintained for continued enrolment in the program.

Program requirements

In common with the other streams of the Specialist Program in Art and Culture, the Curatorial Studies stream will require 13.5 credits.

1. VPAA05H Collaborations in the Visual and Performing Arts
VPAA10H Introduction to Arts Management
VPAB15H Arts Education and Outreach
VPAC20H Visual Arts Management: Principles and Practices
2. Seven FCE in Art History including:
VPHA46H Ways of Seeing: Introduction to Art Histories
VPHB71H Exhibiting Art
VPHB72H Museum and Curatorial Practice: Theoretical and Ethical Issues
VPHC54H Art Writing
VPHC72H Art, the Museum, and the Gallery
VPHD43H/VPD61H Curating Contemporary Art
3. Core courses:
HUMB11H Critical Thinking, Reasoning and Decision-Making
VPAB05H Introduction to Contemporary Cultural Theory
VPAB06H Challenging Normative Values in Art, Culture and Society
4. VPAC03H Intermediate Seminar
VPAC47H The Body in Modernity: Theories and Representations
VPAC48H The Body in Contemporary Culture: Theories and Representations
VPAD05H Senior Project
5. At least 1 full credit at the B level from VPA or another appropriate discipline, chosen in consultation with the Program Supervisor.
6. Students in Curatorial Studies must maintain a minimum cumulative GPA of 2.5.

PROGRAM DELETIONS

There are no program deletions.