



<p>1.0 Degree Title Specify the two degrees for concurrent degree programs</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">B. Com</div> <p>1.1 Major (Legacy= Subject) (30-char. max.)</p> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <p>1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.)</p> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <p>1.3 Minor (with Concentration, if applicable) (30 char. max.)</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Minor in Mathematics</div> <p>1.4 Category</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Faculty Program (FP)</td> <td><input type="checkbox"/> Honours (HON)</td> </tr> <tr> <td><input type="checkbox"/> Major</td> <td><input type="checkbox"/> Joint Honours Component (HC)</td> </tr> <tr> <td><input type="checkbox"/> Joint Major</td> <td><input type="checkbox"/> Internship/Co-op</td> </tr> <tr> <td><input type="checkbox"/> Major Concentration (CON)</td> <td><input type="checkbox"/> Thesis (T)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Minor</td> <td><input type="checkbox"/> Non-Thesis (N)</td> </tr> <tr> <td><input type="checkbox"/> Minor Concentration (CON)</td> <td><input type="checkbox"/> Other</td> </tr> </table> <p style="margin-left: 100px;">Please specify</p> <div style="border: 1px solid black; width: 150px; height: 20px; margin-left: 100px; margin-bottom: 5px;"></div> <p>1.5 Complete Program Title</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Minor in Mathematics</div>	<input type="checkbox"/> Faculty Program (FP)	<input type="checkbox"/> Honours (HON)	<input type="checkbox"/> Major	<input type="checkbox"/> Joint Honours Component (HC)	<input type="checkbox"/> Joint Major	<input type="checkbox"/> Internship/Co-op	<input type="checkbox"/> Major Concentration (CON)	<input type="checkbox"/> Thesis (T)	<input checked="" type="checkbox"/> Minor	<input type="checkbox"/> Non-Thesis (N)	<input type="checkbox"/> Minor Concentration (CON)	<input type="checkbox"/> Other	<p>2.0 Administering Faculty/Unit</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Desautels Faculty of Management / B. Com</div> <p>Offering Faculty/Department</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Science / Mathematics and Statistics</div> <p>3.0 Effective Term of revision or retirement Please give reasons in 5.0 "Rationale" in the case of retirement (Ex. Sept. 2004 = 200409) <input type="checkbox"/> Retirement</p> <p>Term: <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-left: 20px;">200701</div></p> <p>4.0 Existing Credit Weight Proposed Credit Weight</p> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div style="border: 1px solid black; padding: 2px; width: 150px;">24 credits</div> <div style="border: 1px solid black; padding: 2px; width: 150px;">18 Credits</div> </div> <p>5.0 Rationale for revised program</p> <div style="border: 1px solid black; padding: 10px; margin-top: 5px;"> <p>This program revision has come in response to the changing needs of the Desautels Faculty of Management who lately introduced new changes in its management core.</p> </div>
<input type="checkbox"/> Faculty Program (FP)	<input type="checkbox"/> Honours (HON)												
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<input type="checkbox"/> Joint Major	<input type="checkbox"/> Internship/Co-op												
<input type="checkbox"/> Major Concentration (CON)	<input type="checkbox"/> Thesis (T)												
<input checked="" type="checkbox"/> Minor	<input type="checkbox"/> Non-Thesis (N)												
<input type="checkbox"/> Minor Concentration (CON)	<input type="checkbox"/> Other												
<p>6.0 Revised Program Description (Maximum 150 words)</p> <div style="border: 1px solid black; padding: 10px; margin-top: 5px;"> <p>Students entering the Minor are normally expected to have completed MATH 133, MATH 140 and MATH 141 or their equivalents. Otherwise they will be required to make up any deficiencies in these courses over and above the 18 credits required by the program.</p> </div>													

7.0 List of existing program and proposed program

Existing program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

8.7.1 Minor in Mathematics

Adviser: Professor D. Leisen, Department of Mathematics and Statistics, Faculty of Science

Required Courses

(6 credits)

- MATH 222 (3) Calculus 3
- MATH 315 (3) Ordinary Differential Equations

Complementary Courses

(18 credits)

- MATH 223 (3) Linear Algebra
- or MATH 235 (3) Algebra 1
- and MATH 236 (3) Algebra 2

The remaining credits may be freely chosen from the Required and Complementary courses for Majors and Honours students in Mathematics (MATH 324 is strongly recommended), with the obvious exception of courses that involve duplication of material.

Alternatively, up to six credits may be allowed for appropriate courses from other departments. These include MGSC 630, MGSC 632 (if MATH 425 is not taken), MGSC 633, MGSC 671, MGSC 675, MGSC 678, MGSC 679, MGSC 680.

All courses counted towards the Minor must be passed with a grade of C or better. No more than six credits of overlap are permitted between the Minor and the primary program.

8.7.1 Minor in Mathematics (18 credits)

(Program prerequisites: MATH 133, MATH 140, and MATH 141 or their equivalents.)

Required courses (12 credits)

- MATH 222 (3) Calculus 3
- MATH 223 (3) Linear Algebra
- MATH 315 (3) Ordinary Differential Equations
- MGSC 373 (3) Operations Research 1

Complementary Courses (6 credits)

At most 3 credits from the list

- MGSC 372 (3) Advanced Business Statistics
- MGSC 479 (3) Applied Optimization
- MGSC 578 (3) Simulation of Management Systems
- MGSC 575 (3) Applied Time Series Analysis

The remaining credits selected from

- MATH 316 (3) Complex Variables
- MATH 317 (3) Numerical Analysis
- MATH 319 (3) Partial Differential Equations
- MATH 323 (3) Probability
- MATH 326 (3) Nonlinear Dynamics and Chaos
- MATH 340 (3) Discrete Structures 2
- MATH 407 (3) Dynamic Programming
- MATH 417 (3) Mathematical Programming

8.0 Consultation with
Related Units

Yes No

Financial Consult Yes No

Attach list of consultations

9. Approvals

Routing Sequence	Name	Signature	Date
Department	D. Wolfson		
Curric/Acad Committee			
Faculty 1			
Faculty 2			
Faculty 3			
SCTP			
GS			
APPC			
Senate			

Submitted by

Name
Phone
Email
Submission Date

To be completed by ARR:

CIP Code