

2013-2014 Honours in Mathematical Optimization

Business Specialization Checklist

Contact **Bertrand Guenin** (x33641) for further assistance.

Notational conventions: brackets indicate choice lists; i.e., “1[34]5” is a short-hand for “135 or 145”; indicate requirements.

Disclaimer: In case of discrepancies between the checklist and the University Calendar located at: <http://ugradcalendar.uwaterloo.ca/page/MATH-Mathematical-Optimization> the University Calendar will always take precedence. This checklist does not apply to students in Double Degree plans.

This specialization cannot be combined with any other Business or Accounting plan.

You may replace CS courses with the corresponding courses available to CS Honours Computer Science major students.

<input type="checkbox"/> Minimum 20 course units	MATH	CS
<input type="checkbox"/> Minimum 13 math course units ¹	<input type="checkbox"/> 1[034]6	<input type="checkbox"/> One of: 115, 135, 145
<input type="checkbox"/> Minimum 5 non-math course units ²	<input type="checkbox"/> 1[234]7	<input type="checkbox"/> One of: 116, 136, 146
<input type="checkbox"/> Minimum 60% cumulative and major average	<input type="checkbox"/> 1[234]8	COOP (if applicable)
<input type="checkbox"/> Maximum 3 course units excluded/failed ³	<input type="checkbox"/> 1[34]5	<input type="checkbox"/> 2.5 Coop work-term course units
<input type="checkbox"/> Maximum 25 course units attempted ³	<input type="checkbox"/> 2[34]5	<input type="checkbox"/> 2.5 PD course units
<input type="checkbox"/> Minimum 7 full-time terms (regular), 8 full-time terms (coop)	STAT	<input type="checkbox"/> 4 Work reports
<input type="checkbox"/> English writing skills ⁴	<input type="checkbox"/> 2[34]0	
	<input type="checkbox"/> 2[34]1	

<input type="checkbox"/> MATH 2[34]7	<input type="checkbox"/> CO 370	<input type="checkbox"/> 3 <u>additional</u> courses from
<input type="checkbox"/> MATH 2[34]9	<input type="checkbox"/> STAT 340	CO 342, 351, 353, 367, 372, 450,
<input type="checkbox"/> CO 25[05]	<input type="checkbox"/> AFM 101	452, 453, 454, 456, 463, 466, 471
<input type="checkbox"/> CS 330 or CS 490	<input type="checkbox"/> ECON 101	
<input type="checkbox"/> AMATH 242/CS 371 or CS 370	<input type="checkbox"/> MSCI 211	

None of the courses given above can be used to meet the following requirements:

<input type="checkbox"/> ACTS 371	<input type="checkbox"/> ECON 102
<input type="checkbox"/> AFM 102	<input type="checkbox"/> MSCI 432
<input type="checkbox"/> BUS 111W	<input type="checkbox"/> STAT 371
<input type="checkbox"/> BUS 121W	<input type="checkbox"/> STAT 372
<input type="checkbox"/> BUS 352W	<input type="checkbox"/> 2 <u>additional</u> courses from
<input type="checkbox"/> BUS 481W	AMATH 350, BUS 435W, 445W, 455W, 485W, CS 230, 234,
<input type="checkbox"/> CS 338	MSCI 311, 421, 423, 436, STAT 440, 442, 444

¹**Math courses:**

- Courses/Cross-listed courses with prefixes: ACTSC, AMATH, CO, CM, CS, MATBUS, MATH, PMATH, or STAT
- As well as: ECE 222, 354, 428; SE 212/112, 240, 382, 463, 464, 465

²**Non-math courses:**

- Courses with the prefix COMM, MTHL, and those courses offered by other faculties (excluding courses cross-listed with math courses and courses listed above as math courses)
- Work-term courses (COOP1 to COOP6) and PD courses do not count as math or non-math courses

³Excluding PD courses and co-op work-term courses.

⁴English writing skills requires one of:

- At least 60% on the ELPE
- Successfully complete the study program offered by the UW Writing Centre
- At least 60% on one of the following courses: ENGL 109, ENGL/ESL 129R, ENG 140 R, 210E, 210F, ESL 102R

⁵If CO 255 is taken, one of CO 450-471 may be taken instead of CO 351 or CO 353