

2013-2014 Honours in Mathematical Optimization

Operations Research 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.

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

<input type="checkbox"/> Minimum 20 course units <input type="checkbox"/> Minimum 5 non-math course units ² <input type="checkbox"/> Minimum 60% cumulative and major average <input type="checkbox"/> Maximum 3 course units excluded/failed³ <input type="checkbox"/> Maximum 25 course units attempted ³ <input type="checkbox"/> Minimum 7 full-time terms (regular), 8 full-time terms (coop) <input type="checkbox"/> English writing skills ⁴	MATH <input type="checkbox"/> 1[034]6 <input type="checkbox"/> 1[234]7 <input type="checkbox"/> 1[234]8 <input type="checkbox"/> 1[34]5 <input type="checkbox"/> 2[34]5 STAT <input type="checkbox"/> 2[34]0 <input type="checkbox"/> 2[34]1	CS <input type="checkbox"/> One of: 115, 135, 145 <input type="checkbox"/> One of: 116, 136, 146 COOP (if applicable) <input type="checkbox"/> 2.5 Coop work-term course units <input type="checkbox"/> 2.5 PD course units <input type="checkbox"/> 4 Work reports
<input type="checkbox"/> MATH 2[34]7 <input type="checkbox"/> MATH 2[34]9 <input type="checkbox"/> CO 25[05] <input type="checkbox"/> CS 330 or CS 490 <input type="checkbox"/> AMATH 242/CS 371 or CS 370	<input type="checkbox"/> CO 370 <input type="checkbox"/> STAT 340 <input type="checkbox"/> AFM 101 <input type="checkbox"/> ECON 101 <input type="checkbox"/> MSCI 211	<input type="checkbox"/> 3 <u>additional</u> courses from CO 342, 351, 353, 367, 372, 450, 452, 453, 454, 456, 463, 466, 471
None of the courses given above can be used to meet the following requirements:		
<input type="checkbox"/> CO 351 or CO 353 ⁵ <input type="checkbox"/> CS 234 <input type="checkbox"/> STAT 331 <input type="checkbox"/> STAT 333 <input type="checkbox"/> Two courses from AFM 102, ECON 102, MSCI 311, 432	<input type="checkbox"/> 1 <u>additional</u> course from AMATH 250, CO 487, CS 338, 430, STAT 332, 433, 435, 443 <input type="checkbox"/> 2 <u>additional</u> Math courses ¹ _____ _____	
¹Math courses: <ul style="list-style-type: none"> • 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 		
²Non-math courses: <ul style="list-style-type: none"> • Courses with the prefix COMM, MTHEL, 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: <ul style="list-style-type: none"> • 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		