2012-2013 Honours in Combinatorics & Optimization 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-Combinatorics-and-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.

- Minimum 20 course units
- Minimum 5 non-math course units²
- Minimum 60% cumulative and major average
- Maximum 3 course units excluded/failed¹
- Maximum 25 course units attempted³
- Minimum 7 full-time terms (regular), 8 full-time terms (co-op)
- English writing skills⁴

<table>
<thead>
<tr>
<th>MATH</th>
<th>CS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1[034]6</td>
<td>One of: 115, 135, 145</td>
</tr>
<tr>
<td>1[234]7</td>
<td>One of: 116, 136, 146</td>
</tr>
<tr>
<td>1[234]8</td>
<td>COOP (if applicable)</td>
</tr>
<tr>
<td>1[34]5</td>
<td>2.5 Coop work-term course units</td>
</tr>
<tr>
<td>2[34]5</td>
<td>2.5 PD course units</td>
</tr>
<tr>
<td>2[34]0</td>
<td>4 Work reports</td>
</tr>
</tbody>
</table>

- MATH 2[34]9
- CO 25[05]
- CO 330 or CO 342
- CO 351 or CO 353 or CO 367⁵
- 3 additional courses from
  - CO 330, 331, 342, 351, 353, 367, CO 430-487 (excluding 480)
  | 2 additional 300/400 level Math courses, non-CO prefix¹ |
  | 1 additional 300/400 level Math course¹ |
  | 3 additional Math courses¹ |
- PMATH 336
- 3 courses from
  - MATH 2[34]7
  - AMATH/PMATH 331, 332
  - CS 462⁶, 466⁶, 487
  - PMATH 334, 340

¹Math 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

²Non-math courses:
- 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:
- 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, this requirement can be satisfied by taking one of CO 450-471

⁶These courses are only open to CS majors