

# Checklist for the Computer Science Major

— Effective Fall 2018

(This checklist should be used for reference ONLY)



**Student ID:** \_\_\_\_\_

**Name:** \_\_\_\_\_

| Course  | BA          | BS           | MIN |
|---|-------------|--------------|-----|
| <b>Computer Science – Level 1</b>                     |             |              |     |
| CS 111. <i>Intro to Algo Prob Solv</i>                |             |              |     |
| CS 211. <i>OOP in C++</i>                             |             |              |     |
| CS 212. <i>OOP in Java</i>                            |             |              |     |
| CS 220. <i>Discrete Structures</i>                    |             |              |     |
| CS 240. <i>Comp Org &amp; Assem Lang</i>              |             |              |     |
| <b>Computer Science – Level 2</b>                     |             |              |     |
| CS 313. <i>Data Structures</i>                        |             |              |     |
| CS 316. <i>Princ of P Ls</i>                          |             |              |     |
| CS 320. <i>Theory of Computation</i>                  |             |              |     |
| CS 323. <i>Design &amp; Analysis of Algorithms</i>    |             |              |     |
| CS 331. <i>Database Systems</i>                       |             |              |     |
| CS 340. <i>Operating Systems</i>                      |             |              |     |
| CS 343. <i>Computer Architecture</i>                  |             |              |     |
| CS 355. <i>Internet &amp; Web Tech</i>                |             |              |     |
| CS 370. <i>Software Engineering</i>                   |             |              |     |
| <b>Electives **</b>                                   | <b>6 cr</b> | <b>18 cr</b> |     |
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| <b>Mathematics</b>                                    |             |              |     |
| MATH 120 <sup>‡</sup> . <i>Discrete Math</i>          |             |              |     |
| MATH 151. <i>Calculus I</i>                           |             |              |     |
| MATH 152. <i>Calculus II</i>                          |             |              |     |
| MATH 231 or 237. <i>Linear Algebra</i>                |             |              |     |
| MATH 241 <sup>‡‡</sup> , 611 or 621. <i>Prob/Stat</i> |             |              |     |

Notes:

- All CS courses must be completed with a grade of C or better.
- All non-CS courses must be completed with a grade of C- or better.
- No courses required for the major or minor may be taken P/NC. This is a College policy.
- No course may be taken until all prerequisite courses are completed with a minimum passing grade.
- 50% of the courses required for the major or minor must be completed at Queens College.
- 50% of the computer science courses must be completed at Queens Colleges.
- Courses may be taken on permit only at senior (four-year) colleges.

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\*\* Electives chosen from Computer Science courses numbered 300-396 totaling 6 credits for the BA and 18 credits for the BS.

One course from the following list may be used for **one elective** for the major unless it has been applied towards the fulfillment of the math requirements:

- Biology* 330;  
*Mathematics* 202, 223, 224, 232, 242, 245, 247, 248, 301, 317, 337, 341, 342, 609, 613, 619, 621, 623, 624, 625, 626, 633, 634, 635, 636;  
*Physics* 225, 227, 265, or 311.

Transfer blanket credit courses (499) may **not** be used as electives.

- ‡ Mathematics 220 is acceptable **only** for students who complete a major or minor in mathematics.
- ‡‡ Economics 249 is acceptable **only** for students who complete a major or minor in economics.