# Checklist for the Computer Science Major
— Effective Fall 2022
(This checklist should be used for reference ONLY)

**Student ID:** _____

**Name:** _____

| Course | BA | BS | MIN |
|---|---|---|---|
| **Computer Science – Level 1** | | | |
| CS 111. *Intro to Algo Prob Solv* | | | |
| CS 211. *OOP in C++* | | | |
| CS 212. *OOP in Java* | | | |
| CS 220. *Discrete Structures* | | | |
| CS 240. *Comp Org & Assem Lang* | | | |
| **Computer Science – Level 2** | | | |
| CS 313. *Data Structures* | | | |
| CS 316. *Princ of P Ls* | | | |
| CS 320. *Theory of Computation* | | | |
| CS 323. *D & A of Alg* | | | |
| CS 331. *Database Systems* | | | |
| CS 340. *Operating Systems* | | | |
| CS 343. *Computer Architecture* | | | |
| CS 370. *Software Engineering* | | | |
| **Electives \*\*** | *9 cr* | *21 cr* | |
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| **Mathematics** | | | |
| MATH 120‡. *Discrete Math* | | | |
| MATH 141. *Calc I* / MATH 151 | | | |
| MATH 142. *Calc II* *or* / MATH 151 | | | |
| MATH 143 *Calc III* / MATH 152 | | | |
| MATH 231 or 237. *Linear Algebra* | | | |
| MATH 241‡‡, 611 or 621. *Prob/Stat* | | | |

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 9 credits for the BA and 21 credits for the BS.

One course from the following list may be used for **one elective** for the major:

*Biology* 330;
*Mathematics* 202, 223, 224, 232, 242, 245, 247, 248, 317, 333, 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 student who complete a major or minor in mathematics.

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