

## ICS3U\_Computer Careers

1. Provide a description of each of the following computer related careers:
  - a. Software Engineer
    - a. Software engineering is a branch of computer science that applies math to the development of computer programs.
  - b. Database administrator
    - a. Database administrators make sure that data analysts can easily use the database to find the information they need and that the system performs as it should. These programmers use special software to store data.
  - c. Systems Analyst
    - a. A system analyst is a person who ensures that infrastructure, systems, and computer systems function effectively and efficiently.
  - d. Network Administrator
    - a. network administrators manage servers, computers, and equipment in an organization. These people ensure that everything in their organization is functioning properly and employees are working efficiently.
  - e. Web Developer
    - a. A web developer designs, maintains, or creates websites for their client or organization's vision.
  - f. Computer Programmer
    - a. Computer programmers create software programs!!!!!!!!!!!!!!
2. What are the admission requirements for computer science at Waterloo University? Make sure to include the admission average as well.
  - a. Ontario Secondary School Diploma (OSSD)
  - b. Grade 12 English (ENG4U)
  - c. Grade 12 Advanced Functions (MHF4U)
  - d. Grade 12 Calculus and Vectors (MCV4U)
  - e. One other Grade 12 university-level course
  - f. Two additional Grade 12 university-level or university/college-level courses
  - g. Minimum low 90s to high 90s
3. Describe the Co-op feature of the computer science program at Waterloo.
  - a.
4. List at least three different example co-op positions you may be involved in if you enter into this program.
  - a. Software engineer.
  - b. web developer
  - c. architect
  - d. mobile cloud dev
  - e. bioinformatic
  - f. data management
  - g. software design
5. List at least three types of careers, graduates of this program have entered into.
  - a. BMO
  - b. Google
  - c. Microsoft

6. What is CIPS?
  - a. Canadian information processing society
7. What are the key differences between the admission requirements for entry to the software engineering program at Waterloo as opposed to those for computer science?
  - a. Physics and Chemistry
8. What are the requirements for entry into the Computer Programmer College Diploma program at Seneca?
  - a. English and M/U/C math
9. How long is this program?
  - a. 2 years/3 years
10. How long is the Computer Engineering program at Ryerson University?
  - a. 4-5 years
11. What are the high school courses you would need to take to apply to this program?
  - a. Ontario Secondary School Diploma (OSSD)
  - b. Grade 12 English (ENG4U)
  - c. Grade 12 Advanced Functions (MHF4U)
  - d. Grade 12 Calculus and Vectors (MCV4U)
  - e. Grade 12 Physics and Chemistry
12. List at least 5 companies hiring computer science graduates.
  - a. Google
  - b. Microsoft
  - c. Activision
  - d. BMO
  - e. Toshiba
13. Find and summarize an article (include URL) describing the future employment opportunities for computer science graduates.
  - a.
14. Find and summarize an article (include URL) describing the working conditions of most computer programmers.
  - a. bad eye sight lol
  - b. lots of benefits