## **Software Engineering Track:**

Note: Courses are listed in order. I recommend going from top to bottom as that will make your foundation strong. Some of these course contents are old and you might be able to find more recent courses in coursera, udemy, udacity and other online learning platforms. If you find newer contents, go with those.

- 1. Introduction to computer science:
  - Basic + Intermediate + Advanced Java
    - Website: https://ocw.mit.edu/courses/electrical-engineering-andcomputer-science/6-092-introduction-to-programming-in-javajanuary-iap-2010/
  - Or
  - Introduction to computer science and Programming in Python: (I suggest doing this course since you will learn Python at the same time and then learn Java later if you want)
    - Website: https://ocw.mit.edu/courses/electrical-engineering-andcomputer-science/6-0001-introduction-to-computer-science-andprogramming-in-python-fall-2016/
- 2. Introduction to Algorithms and Data Structures:
  - Website: https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-006-introduction-to-algorithms-fall-2011/
- 3. Computer Architecture
  - Website: https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-004-computation-structures-spring-2017/
- 4. Operating Systems:
  - Website: https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-828-operating-system-engineering-fall-2012/
- 5. Database Systems:
  - Website: https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-830-database-systems-fall-2010/

Math for Computer Science (Basic):

https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-042j-mathematics-for-computer-science-spring-2015/

I would also recommend the following courses since Software Engineering is very involved and the future will probably move towards more machine learning and artificial intelligence:

- 1. Artificial Intelligence:
  - Website: https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-034-artificial-intelligence-fall-2010/
- 2. Data Science:
  - Website: https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-034-artificial-intelligence-fall-2010/