

FAQ on Software Engineering Technology (SET) BS Major

1. Is it true that software engineers only work on software, not hardware at all?

Ans: No, this is not true! Software engineering is applied in a variety of industries as long as software systems are used, and many sectors have software engineers developing software for hardware systems particularly if their final products are hardware. For example, aerospace industry has software engineers to develop and test software for several major subsystems in their aircraft (e.g, flight control, navigation system); robotics and automation industries need software engineers to develop software for the hardware systems; medical instrument companies need software engineers to develop the complicated and advance software for their products (e.g, CT/MRI scanners, dialysis machines).

2. What is Software Engineering?

Ans: Software Engineering is the field that applies engineering principles and systematic and disciplined approaches to the design, development, testing, and maintenance of software systems. The products of software engineering can be pure software (such as mobile apps, web applications) or hardware related software (as examples described in the above).

3. What is the difference between degree programs in Software Engineering and Software Engineering Technology?

Ans: The main difference is that Engineering Technology degree program is more practical and hands-on, while Engineering program is more theoretical and mathematical. In terms of curriculum, Software Engineering Technology major courses will have labs/projects and emphasize more hands-on learning experience than Software Engineering major.

4. Why City Tech offers Software Engineering Technology degree, not Software Engineering?

Ans: It is simply because of City Tech's Charter. City Tech was founded as a technology college, so this is written in its charter. Depending on the job's nature or requirements, an Engineering Technology degree can also help students start and succeed in an engineering career. Through the years, we have been proudly offering Engineering Technology degrees to anyone who do not have strong math interests or background to earn a degree and helped them thrive in engineering and technology fields.

5. What are the career opportunities with a SET BS degree?

Ans: There are many career options for SET BS graduates. Depending on the industry and the stage of software life cycle that one will work on, SET BS graduates can pursue roles such as Software Architecture Analyst, System Solution Architect, Software Developer, Software Engineer (most popular one), Software Quality Assurance Engineer/Technologist, Software Testing Engineer, DevOps Engineer, Firmware Engineer/Developer, and more. The SET BS program also prepares you for further studies in graduate school if you want.

6. What does the salary look like for Software Engineers or Software Developers?

Ans: Software Engineer/Software Developer is a very financially rewarding career. According to glassdoor.com (a major job website), the average annual salary for all Software Engineers in NYC is \$131,309 in 2025 (was \$107,197 in 2019). Even for entry level Software Engineers, average annual salary is \$97,300 in 2025 (was \$86,685 in 2019).

7. How many credits I have to finish and what will I learn in SET BS program?

Ans: 120 credits need to be taken to get the SET BS degree. You will learn 30-credits Computer Essential courses (including Programming Languages, Operating Systems, Computer Architecture, Algorithms, Data Structures, Databases, Cybersecurity, Digital Systems, etc.); 15-credits SET Core (including Software Requirements Engineering, Software Architecture, Software Testing, Cloud Computing), and 15-credits Tech Electives (such as Intro to AI, IoT, Intro to Computer Vision, Digital Image Processing, Applied Deep Learning, ...).

8. What are the admission requirements for the SET BS program?

Ans: The same standards and requirements for admission into a baccalaureate program at City Tech.

9. I am a transfer student from another College, what are the transfer criteria?

Ans: You must have a minimum cumulative GPA of 2.0 in your previous college; must have completed prerequisites for taking MAT 1275 or higher at City Tech; and must be CUNY proficient (reading, writing, and math).

10. How to sign up for the SET major if I am a current student at City Tech?

Ans: If you want to change your current major at City Tech to SET BS, you can make the change anytime and any times you want. You just need to fill out the “**Application for Change of Major**” form (<https://www.citytech.cuny.edu/registrar-forms/Forms/DownloadFile/173>) and submit it via Registrar Portal by using your City Tech email: <https://www.citytech.cuny.edu/registrar-forms/>

11. Will I lose some credits if I change my current major to SET?

Ans: May or may not. Depending on your current major and the courses you have taken, some credits may be kept for SET major, particularly all Gen Ed courses or if your current major is related (such as CET, CST, CS AAS). Please see CET Department and SET BS Program Coordinator for details.

If some credits are really lost, view it as a due for switching investment strategy and look further. The high rewarding of a software engineering career will pay it back shortly.

12. I am currently a freshman in CET Department, and I heard the SET BS is a 1+3 program. How this exactly works?

Ans: Between the two degree programs in CET Department, **SET BS** and **CET BTech**, all students in CET Department take a set of common courses in their first year. This **1+3** structure gives all freshmen time and opportunity to learn more about the majors and fields, explore their interests and make a more knowledgeable and reasonable decision on their major choice.

13. After finishing all the first-year common courses, what courses to start with for SET major?

Ans: At a regular pace, you will finish all the common courses (**CET11** courses**) in the first year; then you will proceed with **SET23**** courses (then SET24** as next) for your SET major. In the major course's number, the first digit (e.g, '2') indicates which year and the second digital (e.g, '3' or '4') indicates which semester to take the course.

14. Can I register SET major courses while staying in my current major?

Ans: Yes, this is absolutely allowed! But be aware that these SET courses could impact your TAP since they will not apply to your current degree.