



## STATE OF NEW JERSEY DEPARTMENT OF EDUCATION

### Computer Science FAQ

On January 16, 2018, a state law was enacted ([P.L. 2017 Chapter 303](#), N.J.S.A. 18A:7C-1.1) that requires each public school serving students in grades 9-12, other than a county vocational school district, to offer a course in computer science beginning in the 2018-2019 school year. The following information is designed to provide guidance regarding the requirement.

#### What is Computer Science?

Computer Science (CS) is best described as “the study of computers and algorithmic processes, including their principles, their hardware and software designs, their applications, and their impact on society” (Tucker et. al, 2006, p. 2). The national [K-12 Computer Science Framework](#) identifies the following as the five CS core concept areas: Computing Systems, Networks and the Internet, Data and Analysis, Algorithms and Programming, and Impacts of Computing.

#### What are the requirements regarding Computer Science?

[P.L. 2017 Chapter 303](#), signed into law on January 16, 2018, requires each public school enrolling students in grades nine through 12 (excluding county vocational school districts) to offer a course in computer science beginning in the 2018-2019 school year. The law states that the course shall include, but need not be limited to, instruction in computational thinking, computer programming, the appropriate use of the Internet and development of Internet web pages, data security and the prevention of data breaches, ethical matters in computer science, and the global impact of advancements in computer science.

Another recently enacted law allows for an Advanced Placement computer science course to satisfy a part of the mathematics credit requirements for high school graduation, beginning with the 2016-2017 grade nine class. (P.L.2015, Chapter 274, N.J.S.A. 18A:7C-2.1). When this law went into effect, there was only one Advanced Placement computer science course, AP Computer Science A. Since then, a new course, [AP Computer Science Principles](#), was developed as an introductory CS course. The New Jersey Department of Education (NJDOE) recommends that mathematics credit awarded pursuant to [N.J.S.A. 7C-2.1](#) this law be limited to just [AP Computer Science A](#). Consistent with [N.J.A.C. 6A:9B-9.3\(a\)4](#), AP Computer Science offered for math credits contributing to graduation requirements must be taught by a certificated math teacher. The NJDOE further recommends school counselors verify the requirements for admission into relevant institutions of higher education prior to recommending that a student take an AP Computer Science to satisfy a part of the total credit requirement for mathematics.

#### Who can teach Computer Science in New Jersey?

While there is currently no Computer Science endorsement or certification, NJDOE regulations state, “the chief school administrator or his or her designee may assign an individual to provide instruction in the use of educational technologies, computers, and other digital tools if the individual:

1. Demonstrates proficiency in the uses of educational technologies, computers, and other digital tools, and understands their common applications in an educational setting;
2. Demonstrates knowledge and understanding of the integration in the curriculum of such technologies and digital tools;
3. Demonstrates understanding of the legal and ethical issues surrounding the use of educational technologies and digital tools in preschool through grade 12 schools; and
4. Holds a CE, CEAS, or standard certificate in an instructional field.” *N.J.A.C. 6A:9B-5.17*

The above regulation does not eliminate the need to have appropriately certificated individuals teaching courses covered by the Career and Technical Education Information Technology endorsement.

### **Which NJ Student Learning Standards contain Computer Science strands?**

New Jersey incorporated computer science/computational thinking into the state’s student learning standards in 2014 through [New Jersey Student Learning Standard 8.2: Technology Education, Engineering, Design and Computational Thinking – Programming \(NJSL 8.2\)](#). To ensure that students in New Jersey are receiving instruction that mirrors modern computer science, the NJDOE has welcomed feedback from a group of stakeholders representing educators, administrators, higher education, and organizations such as the Computer Science Teacher Association of New Jersey and the New Jersey Technology and Engineering Educators Association.

### **Where can I find Computer Science Education resources?**

This document can be found on the [NJDOE Office of Educational Technology website](#). Code.org and CSforALL are two national organizations that promote access to Computer Science in all schools. The following are some resources that New Jersey schools may find useful:

- [Code.org Computer Science Resources for Schools and Districts](#)
- [CSforALL SCRIPT: School CSforALL Resource & Implementation Planning Tool](#)
- [CSforALL K-12 List of Computer Science Tools and Resources](#)
- [CS4NJ Information Portal](#)

For further information on this topic, please contact the NJDOE’s Office of Educational Technology at [computerscience@doe.nj.gov](mailto:computerscience@doe.nj.gov).

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