Certification in Computer Science

NYSUT
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T he NYS Board of Regents adopted regulations in March 2018 that created a classroom teaching certificate in computer science and a corresponding tenure area. The regulations designate the computer science certificate as part of the 'special subjects' tenure area. There are multiple pathways to obtaining the computer science certificate that include course work, course work and/or work experience, and also a 'grandfathering' provision for those teachers currently teaching computer science courses. Teachers who are currently teaching computer science courses can apply for a Statement of Continuing Eligibility (SOCE) up to September 1, 2022.

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What is Computer Science?

The State Education Department (SED) has not yet developed learning standards to accompany this new teaching certificate and tenure area. In terms of the 'content core' in computer science, SED referenced the K-12 Computer Science Framework to identify five computer science concepts: 1) algorithms and programming, 2) computing systems, 3) data and analysis, 4) impacts of computing, and 5) networks and the internet.

As per the March 2018 Regents item: "Through these concepts, students [will] engage in a variety of activities including: creating prototypes that use algorithms to solve computational programs; comparing interactions between application software, system software, and hardware layers; refining computational models based on data; evaluating the ways that computing impacts social and economic practices; and comparing various security measures of a computing system. These types of activities immerse students in creative problem solving where they learn how to identify and present problems that computers can solve and how computers can solve them."

The computer science certificate does not prevent teachers who hold other certificates from teaching aspects of these concepts in other subject area courses and in elementary schools. In addition, career and technology education (CTE) teachers will continue to be able to teach computer-related and technology courses in CTE programs.

Transition to the Computer Science Certificate

SED policy regarding the teaching of computer literacy (computer science) prior to these new regulations has been that teachers holding a valid teaching certificate could teach computer science courses based on local determinations regarding their expertise in computer science. The new regulations outline a process for "grandfathering" teachers currently teaching computer science courses, as well as those who begin teaching computer science courses between now and September 1, 2022.

Currently certified teachers who are or will be teaching computer science courses within the 5 years prior to September 1, 2022 can apply using TEACH for the Statement of Continuing Eligibility (SOCE) in Computer Science. The SOCE allows the teacher to continue to teach computer science courses in the same school district, board of cooperative educational services, or other school that employed such individual when the statement of continued eligibility was issued. The SOCE is valid for a period of 10 years from the date it is issued. Applications for the Statement of Continued Eligibility must be filed with SED on or before September 1, 2022.

NOTE: As of April 2018 the TEACH system is not set up to accept applications for the SOCE.

Changes to Part 30 Tenure Rules

Computer science will be considered a "special subject" across all grades. After September 1, 2022 an educator who was previously appointed tenure in a different tenure area may choose to continue to receive credit toward tenure and seniority rights in their previous tenure area while devoting a substantial portion of their time to teaching computer science courses, or they may choose to change their tenure area to receive credit and accrue seniority rights in the special subject tenure area of computer science.

For educators assigned/appointed on or after September 1, 2022, who are devoting a substantial portion (40% or more) of their time teaching computer science, probationary appointments and appointments in tenure will be made in accordance with normal tenure rules. Specifically, these teachers must be appointed tenure in the special subject tenure area: computer science.

Pathways to Computer Science Certification

For individuals who seek an initial certificate in computer science the regulations provide multiple pathways that include course work and/or experience.

NYS institutions of higher education may develop teacher education programs that lead to certification in computer science. Individuals possessing a bachelor's degree or higher may pursue certification in computer science through a combination of course work and experience working as a computer scientist. Currently certified teachers seeking a computer science certificate would need to complete 12 credits in computer science and pass the Content Specialty Test in Computer Science once it is available. If the Content Specialty Test is not available at the time of application, past SED practice has been to waive the requirement.

NOTE: As of April 2018 SED's 'Search Certification Requirements' web page has not been updated to reflect these pathways to certification. In addition, there are no state-approved teacher preparation programs in computer science at this time.

ATTACHMENT A
REGULATIONS

AMENDMENT TO THE RULES OF THE BOARD OF REGENTS
AND THE REGULATIONS OF THE COMMISSIONER OF EDUCATION

Pursuant to Education Law sections 101, 207, 210, 215, 305, 3001, 3004 and 3009.

1. Subdivisions (d) and (e) of Section 30-1.2 of the Rules of the Board of Regents shall be renumbered as subdivisions (e) and (f) and the renumbered subdivision (e) shall be amended to read as follows:
(e) Except as otherwise provided in subdivisions (b) [and], (c) and (d) of this section, each board of education or board of cooperative educational services shall on and after the effective date of this Subpart make probationary appointments and appointments on tenure in accordance with the provisions of this Subpart.
2. A new subdivision (d) shall be added to section 30-1.2 of the Rules of the Board of Regents to read as follows:

(d) The provisions of this Subpart shall apply to a professional educator employed by a school district or board of cooperative educational services to devote a substantial portion of his or her time to the provision of instruction in computer science, on or after August 1, 1975, as follows:

(1) A professional educator employed by a school district or board of cooperative educational services on September 1, 2022 who was previously appointed by the board to tenure or a probationary period in a tenure area identified in this Subpart shall either:
(i) continue to receive credit toward tenure and/or accrue tenure and seniority rights in his or her previous tenure area from the initial date of his or her assignment and continue to receive tenure and/or seniority rights in his or her previous tenure area while assigned to devote a substantial portion of his or her time to the provision of instruction in computer science; or
(ii) if the professional educator provides knowing consent to the school district or board of cooperative educational services to change his or her tenure area pursuant to section 30- 1.9 of this Subpart by September 1, 2022, he or she may receive credit toward tenure and/or accrue tenure and seniority rights in the special subject tenure area of computer science, established in section 30-1.8 of this Subpart, from the date of his or her initial assignment to a position where he or she devoted a substantial portion of his or her time to the provision of instruction in computer science and he or she shall continue to receive tenure and seniority rights in that tenure area while assigned to a position where he or she devotes a substantial portion of his or her time to the provision of computer science instruction appropriate for such tenure area.

(2) Any school district or board of cooperative educational services that appoints or assigns a professional educator on or after September 1, 2022 to devote a substantial portion of his or her time to the provision of computer science instruction shall make probationary appointments and appointments on tenure in accordance with section 30-1.8(e) of this Subpart.

(3) Any board of cooperative educational services that appoints a professional educator on or after September 1, 2022 to devote a substantial portion of his or her time to computer science instruction as a result of a board of cooperative educational services taking over a program formerly operated by a school district or a county vocational education and extension board pursuant to section 3014-a of the Education Law, shall credit the professional educator with tenure and seniority rights in the special subject tenure area for computer science instruction established in section 30-1.8(e) of this Subpart from the initial date of his or her assignment to the performance of computer science instruction in the school district or county vocational education and extension board and shall continue to credit the professional educator with

tenure and/or seniority rights in such tenure area while he or she is assigned to devote a substantial portion of his or her time to the performance of computer science instruction in such tenure area at the board of cooperative educational services.

(4) Any board of education that appoints a professional educator on or after September 1, 2022 to devote a substantial portion of his or her time to computer science instruction as a result of a school district taking over a program formerly operated by a board of cooperative educational services pursuant to section 3014-b of the Education Law, where the professional educator is serving in a computer science instruction tenure area pursuant to section 30-1.9(b) of this Subpart, shall credit the professional educator with tenure and seniority rights in a tenure area for which he or she holds the proper certification as described in section 30-1.9(b) of this Subpart, from the initial date of his or her assignment to the performance of computer science instruction in the board of cooperative educational services and shall continue to credit such professional educator with tenure and/or seniority rights in such tenure area while he or she is assigned to devote a substantial portion of his or her time to the performance of computer science instruction provided that he or she holds the proper certification for such tenure area.

3. Paragraphs (14) through (16) of subdivision (a) of section 30-1.8 of the Rules of the Board of Regents shall be amended to read as follows:
(14) speech—remedial; [and]
(15) English as a second language[.]; and
(16) Computer science.

4. Subdivision (d) in section 30-1.9 of the Rules of the Board of Regents is amended to read as follows:

(d) If a professional educator possesses certification appropriate to more than a single tenure area and the board of education or board of cooperative educational services proposes at the time of initial appointment to assign such individual in such a manner that he will devote a substantial portion of his time during each of the school years constituting the probationary period in more than one of the tenure areas established by this Subpart, the board shall in its resolution of appointment designate such tenure area and shall thereafter separately confer or deny tenure to such individual in the manner prescribed by statute in each designated tenure area, except that individuals accruing tenure and/or seniority rights in their previous tenure area for the performance of duties in instructional support services or computer science as provided for in [section] sections 30-1.2(c)(1)(i) and (d)(1)(i) of this Subpart as applicable, shall only accrue tenure and/or seniority rights in their previous tenure area and not in one of the instructional support services tenure areas or the computer science tenure area [prescribed] described in section 30-1.8(a) and (e) of this Subpart as applicable.

§80-3.14 Statement of continued eligibility for teachers of computer science.

(i) Upon application, any person holding a valid certificate in the classroom teaching service and employed within the five years immediately preceding September 1, 2022, as a teacher of computer science courses in a New York State public school or board of cooperative educational services or any other school where teacher certification is required, may be issued a statement of continued eligibility so that such person may continue to teach computer science courses in the employing school district, school or board of cooperative educational services. The statement of continued eligibility shall be valid for ten years from the date the statement of continued eligibility is issued and the candidate shall not be required to hold a computer science certificate as prescribed in section 80-3.2 of this Title, provided such person holds a permanent or professional certificate in another certification area in the classroom teaching service.

(ii) A statement of continued eligibility shall only be valid for service in the school district, board of cooperative educational services, or other school that employed such individual when the statement of continued eligibility was issued.

(iii) Applications for the statement of continued eligibility must be filed with the department on or before September 1, 2022.