

CAREER AND TECHNICAL EDUCATION TEACHING CERTIFICATE

Self-Evaluation Guide

ENGINEERING TECHNOLOGY #2545

Prepared by the New Jersey Department of Education

Office Career and Technical Education

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SECTION I: INTRODUCTION AND OVERVIEW OF THE APPLICATION PROCESS

Introduction

The “Career and Technical Education Teaching Certificate Self-Evaluation Guide” (Guide) by the New Jersey Department of Education (NJDOE), Office of Career and Technical Education, was developed to enable individuals to evaluate their education, training, and/or employment experience for a New Jersey Career and Technical Education Teaching Certificate using the Alternate Route Program. The Alternate Route Program is the process by which individuals who have not completed a traditional teaching preparation program may obtain a New Jersey Teaching Certificate based upon their education, training, and/or employment experience.

This Guide is meant to be used for self-evaluation purposes only. It is not meant to determine actual eligibility to apply. The final determination of an applicant’s qualifications will be made by the NJDOE, Office of Licensure and Credentials. **NOTE: Section IV provides specific requirements for applicants using an engineering-related college degree. Section V provides specific requirements for applicants using a technology education degree.**

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Overview of the Application Process

Individuals will apply for an initial “Certificate of Eligibility” (CE), which is a credential issued by the NJDOE with lifetime validity to individuals who have successfully completed the initial requirements of a teaching certificate. In the case of career and technical education certificates, the CE is issued for a particular “endorsement,” which is the subject area the holder of the teaching certificate with that endorsement is authorized to teach. The endorsement name and endorsement number for the career and technical education certificate described in this Guide is identified at the top of each page.

Individuals holding a CE are eligible to be hired to teach the subject area identified in their endorsement in grades 9-12 in any New Jersey comprehensive school districts, county vocational-technical school districts, special services school districts, charter schools, and NJDOE-approved private schools for the disabled. Once hired, the individual becomes a “provisional teacher.” The hiring school will provide the provisional teacher with a school site mentor and will enroll the provisional teacher into a CTE Alternate Route Teacher Preparation Program (CTE Alternate Route Program). A PowerPoint about the CTE Alternate Route Program can be viewed here:

<http://www.brookdalecc.edu/documents/continuinged/career-technical-education-powerpoint-2013.pdf>

Upon successfully completing their provisional teaching and the CTE Alternate Route Program, the hiring school will recommend to the NJDOE that the provisional teacher be issued a “Standard Certificate,” which is a permanent certificate issued by the NJDOE to a person who has met all teacher certification requirements. For more information about this process, view the NJDOE webinar on the Alternate Route licensing process at: <http://www.state.nj.us/education/educators/license/webinar/>

SECTION II: AUTHORIZATION TO TEACH

The holder of a career and technical education (CTE) teaching certificate with the **Engineering Technology #2545 endorsement** is authorized to teach courses, programs, and programs of study in the following subject areas as identified on the National Center for Education Statistics’ Classification of Instructions Programs (CIP) website. Click on the program name to view the program description.

- [Automation Engineer Technology/ Technician, CIP Code: 15.0406](#)
- [Architectural Drafting and Architectural CAD/CADD, CIP Code: 15.1303](#)
- [CAD/CADD Drafting and Design Technology/Technician, CIP Code: 15.1302](#)
- [Civil Drafting and Civil Engineering CAD/CADD, CIP Code: 15.1304](#)
- [Civil Engineering, General, CIP Code: 14.0801](#)
- [Construction Engineering CIP Code: 14.3301](#)
- [Electrical/Electronics Drafting and Electrical/Electronics CAD/CADD, CIP Code: 15.1305](#)
- [Engineering, General, CIP Code: 14.0101](#)
- [Engineering Mechanics, CIP Code: 14.1101](#)
- [Engineering Technology, General, CIP Code: 15.0000](#)
- [Mechanical Drafting and Mechanical Drafting CAD/CADD, CIP Code: 15.1306](#)
- [Mechanical Engineering, CIP Code: 14.1901](#)

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- [Mechatronics, Robotics, and Automation Engineering, CIP Code: 14.4201](#)
- [Transportation and Highway Engineering, CIP Code: 14.0804](#)

Classification of Instructional Programs Website: <http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55>

SECTION III: GENERAL REQUIREMENTS FOR ALL APPLICANTS

All applicants for career and technical education certificates using the Alternate Route Program must meet the following general requirements prior to submitting an application:

1. Complete the NJDOE course, Introduction to the “Teaching Profession -- a 24-hour Pre-service Program*. Click on the following link for a list of colleges offering this course:
<http://www.nj.gov/education/educators/license/advisories/applicant.htm>.

**Individuals who already hold a Standard Teaching Certificate, Certificate of Advanced Standing or Certificate of Eligibility are not required to take this course.*

2. Pass an examination in physiology, hygiene and substance abuse. The examination is administered at the County Office of Education in each county. In lieu of this examination, the applicant may present basic military training or college level study in areas such as biology, health, or nutrition. To obtain details regarding this test, contact a County Office of Education near you at:
<http://www.state.nj.us/education/counties/>.

**Individuals who already hold a Standard Teaching Certificate, Certificate of Advanced Standing or Certificate of Eligibility are not required to take this course.*

3. Complete an Oath of Allegiance/Verification of Accuracy Form, which can be downloaded at:
<http://www.nj.gov/education/educators/license/forms/verify.pdf>
4. Prior to September 2015, all applicants not holding a college degree must complete the Praxis™ Core Academic Skills for Educators (CORE) tests. Starting on September 1, 2015, and afterwards, all applicants must complete the Praxis™ Core Academic Skills for Educators (CORE) tests. For more information, visit <http://www.ets.org/praxis/nj/requirements> and click on Career and Technical Education. **NOTICE:** Applicants required to take the CORE tests have two options, as follows:
 - a) Individuals may take the CORE exams prior to applying for CE and submit the CORE test scores as part of their initial application; or
 - b) Individuals may delay taking the CORE tests until after a CE is issued. However, they must submit passing scores for the CORE tests by the end of their provisional teaching period before the NJDOE will issue a Standard Teaching Certificate.

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SECTION IV: SPECIFIC REQUIREMENTS FOR APPLICANTS USING AN ENGINEERING DEGREE

This section provides detailed information about eligible engineering-related degrees that may be used to apply for the endorsement identified at the top of this Guide. The Guide is to be used for self-evaluation purposes only, and is not meant to determine actual eligibility for a teaching credential. **Individuals holding a technology education degree should skip this section and go to Section V.**

Individuals whose credentials are not identified in this document may request the NJDOE, Office of Licensure and Credentials, to evaluate those credentials. There is a fee for this service. For more information on credential evaluations, see PART E, below.

The final determination of an applicant's qualifications will be made by the Office of Licensure and Credentials prior to issuance of any credentials. For complete application information, visit the Office of Licensure and Credentials website at: <http://www.state.nj.us/education/educators/license/cte/>

PART A: REQUIRED STATE-ISSUED OCCUPATIONAL LICENSE OR CREDENTIAL

Applicants using engineering employment experience under PART C or PART D, below, must hold a current New Jersey State occupational license appropriate for their engineering occupation if required by the New Jersey Board of Professional Engineers and Land Surveyors: <http://www.state.nj.us/lps/ca/nonmedical/pels.htm>.

PART B: REQUIREMENTS FOR USING AN ENGINEERING-RELATED COLLEGE DEGREE

Individuals applying for this endorsement using a Bachelor's degree or higher in an engineering-related subject area must following the requirements below.

1.1 Degree Requirement: Applicants must submit an official, sealed copy of their transcript(s) for a bachelor's degree or higher in an NJDOE-approved subject area for this endorsement. Listed below is the eligible subject area(s). If an applicant holds a degree in a subject area not identified in this list below, see PART E.

- *Civil Engineering*
- *Construction Engineering Technology*
- *Electrical Engineering*
- *Electrical Engineering Technology*
- *Engineer*
- *Engineering Science*
- *Engineering Technology*
- *Industrial Engineering*
- *Mechanical Engineering*
- *Mechanical Engineering Technology*

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1.2 Degree GPA Requirements:

- a) Applicants must have a cumulative GPA of at least **2.75** when a GPA of 4.00 equals an A grade if the applicant graduated **on or after September 1, 2004**, in an eligible baccalaureate degree program or higher degree program; or
- b) Applicants must have a cumulative GPA of at least **3.00** when a GPA of 4.00 equals an A grade for students graduating **on or after September 1, 2016**, in an eligible baccalaureate degree program or higher degree program.

1.3 Flexibility Rule: Applicants graduating on or after **September 1, 2004**, with a bachelor's degree or higher, and a GPA that is below the required applicable GPA identified in Number 1.2, above, but have a GPA of at least 2.50 when a GPA of 4.00 equals an A grade, may meet the requirements Number 1.1, above, by submitting evidence of a minimum of at least 4,000 hours of full-time employment or equivalent part-time eligible employment. The 4,000 hours of eligible employment or self-employment experience must be submitted in accordance with requirements described in PART C or PART D, respectively.

PART C: REQUIRED EMPLOYMENT EXPERIENCE FOR FLEXIBILITY RULE

Applicants who do not meet the GPA requirement in PART B have the option of submitting evidence of a minimum of 4,000 hours of eligible employment or self-employment experience as a flexibility rule, meaning that the minimum GPA requirement may be waived in accordance with PART B. If the applicant has eligible employment experience, follow the requirements below. Self-employment experience requirements can be found under PART D.

1. **Hours Required for Eligible Employment:** Applicants must submit evidence of at least 4,000 hours of eligible full-time and/or part-time employment experience. The following job titles will be accepted as eligible employment experience as identified in the federal Occupational Information Network (O*NET) job descriptions:
 - [17-2051.00 - Civil Engineers](#)
 - [17-2112.00 - Industrial Engineers](#)
 - [17-2199.05 - Mechatronics Engineers](#)
 - [17-2199.08 - Robotics Engineers](#)
2. **Timeframe of Eligible Employment:** The eligible employment experience must be within 10 years of the date of the CE application submitted to the NJDOE. Employment experience that is older than 10 years will not be accepted.
3. **Documentation of Eligible Employment:** The eligible employment experience must be documented by the applicant's employer(s) using the NJDOE Statement of Employment Experience Form. If eligible employment experience was obtained from more than one employer during the period of time for which eligible hours will be calculated, a separate Statement of Employment Experience Form must be completed by each employer. Employment experience submitted in any other format will not be accepted. Applicants can download the Statement of Employment Experience Form from the NJDOE website at the following link:
http://www.nj.gov/education/educators/license/forms/voc_employer_experience.pdf

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- 4. Tasks, Tools & Technology:** Employers completing a Statement of Employment Experience Form should comment on the applicant's work performance and safety practices using general occupational competencies for eligible employment experience as detailed in the federal Occupational Information Network (O*NET) job descriptions. O*NET job descriptions may be obtained by clicking on the links provided in Number 1, above. Print the Tasks list and the Tools & Technology list from the selected O*NET job description and attach them to the Statement of Employment Experience Form prior to submitting to an employer for completion. O*NET Website: <http://www.onetonline.org/>
- 5. Other Employment:** If an applicant has employment experience not identified above, see PART E.

PART D: REQUIRED SELF-EMPLOYMENT EXPERIENCE FOR FLEXIBILITY RULE

Applicants who do not meet the GPA requirement in PART B have the option of submitting evidence of a minimum of 4,000 hours of relevant employment or self-employment experience as a flexibility rule, meaning that the minimum GPA requirement may be waived in accordance with PART B. If the applicant has eligible self-employment experience, follow the requirements below. Employment experience requirements can be found under PART C.

- 1. Hours for Eligible Self-Employment:** Applicants must submit evidence of at least 4,000 hours of eligible self-employment.
- 2. Timeframe of Eligible Self-Employment:** The self-employment experience must be within 10 years of the date of the application submitted to the NJDOE. Self-employment experience that is older than 10 years will not be accepted.
- 3. Documentation of Eligible Self-Employment:** Evidence of eligible self-employment experience must be submitted as a notarized letter from the applicant's accountant or attorney verifying the dates of self-employment and verifying that the applicant has filed for state and/or federal taxes for the self-employment experience. The U.S. Census North American Industry Classification Systems (NAICS) code appropriate used to file federal taxes for eligible self-employment experience is:

➤ [NAICS 541330 Engineering Services](#)

NAICS Website: <http://www.census.gov/eos/www/naics/index.html>

- 4. Other Employment:** If an applicant has employment experience not identified above, see PART E.

PART E: OTHER CREDENTIALS

Individuals who possess a degree, employment experiences or self-employment experience not listed on this worksheet may submit their degree and/or experience along with an application for a CE to the NJDOE, which will review the submission in order to determine eligibility. There is a fee associated with this service. However, the NJDOE does not guarantee that credentials submitted will be accepted as satisfying the

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requirements for this career and technical education certificate endorsement. For more information, visit the Office of Licensure and Credentials homepage at: <http://www.nj.gov/education/educators/license/>

SECTION V: SPECIFIC REQUIREMENTS FOR APPLICANTS USING A TECHNOLOGY EDUCATION DEGREE

This section provides detailed information about using a technology education degree to apply for the endorsement identified at the top of this Guide. The Guide is to be used for self-evaluation purposes only, and is not meant to determine actual eligibility for a teaching credential.

Individuals whose credentials are not identified in this document may request the NJDOE, Office of Licensure and Credentials, to evaluate those credentials. There is a fee for this service. For more information on credential evaluations, see PART E, below.

The final determination of an applicant's qualifications will be made by the Office of Licensure and Credentials prior to issuance of any credentials. For complete application information, visit the Office of Licensure and Credentials website at: <http://www.state.nj.us/education/educators/license/cte/>

PART A: REQUIRED STATE-ISSUED OCCUPATIONAL LICENSE OR CREDENTIAL

Currently, no State-mandated occupational license is required.

PART B: REQUIREMENTS FOR USING A TECHNOLOGY EDUCATION COLLEGE DEGREE

Individuals applying for this endorsement using a Bachelor's degree or higher in technology education must following the requirements below.

- 1.1 **Degree Requirement:** Applicants must submit an official, sealed copy of their transcript(s) for a bachelor's degree or higher in an NJDOE-approved subject area for this endorsement. Listed below is the eligible subject area(s). If an applicant holds a degree in a subject area not identified in this list below, see PART E.

➤ *Technology Education*

1.2 Degree GPA Requirements:

- a) Applicants must have a cumulative GPA of at least **2.75** when a GPA of 4.00 equals an A grade if the applicant graduated **on or after September 1, 2004**, in an eligible baccalaureate degree program or higher degree program; or
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http://www.nj.gov/education/educators/license/forms/voc_employer_experience.pdf
4. **Tasks, Tools & Technology:** Employers completing a Statement of Employment Experience Form should comment on the applicant's work performance and safety practices using general occupational competencies for eligible employment experience as detailed in the federal Occupational Information Network (O*NET) job descriptions. O*NET job descriptions may be obtained by clicking on the links provided in Number 1, above. Print the Tasks list and the Tools & Technology list from the selected

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5. **Other Employment:** If an applicant has employment experience not identified above, see PART E.

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PART E: OTHER CREDENTIALS

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SECTION VI: ADDITIONAL RESOURCES

MILITARY SERVICE/TROOPS TO TEACHERS

Individuals with military service may have obtained qualifying employment experience, education, and/or training during their military service via the New Jersey Troops to Teachers program. The Troops to Teachers program (TTT) assists eligible military personnel with the transition to a new career as public school teachers. The New Jersey TTT office will provide participants with counseling and assistance regarding certification requirements, routes to state teacher certification and employment leads. For information, contact the NJDOE Troops to Teachers office at 800-680-0884 or e-mail tttnj@doe.state.nj.us. Visit the New Jersey Troops to Teachers Website at: www.nj.gov/njded/ttnj

ARE YOU LOOKING FOR A TEACHING JOB IN NEW JERSEY?

Visit NJHire today, the NJDOE's free education recruitment website at: <http://www.njhire.com>

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