

505-3-.39 ENGINEERING AND TECHNOLOGY EDUCATION PROGRAM

(1) Purpose. This rule states field-specific content standards for approving programs that prepare individuals to teach engineering and technology education in grades P-12, and supplements requirements in GaPSC Rule [505-3-.01 REQUIREMENTS AND STANDARDS FOR APPROVING EDUCATOR PREPARATION PROVIDERS AND EDUCATOR PREPARATION PROGRAMS](#) and in GaPSC Rule [505-3-.03, FOUNDATIONS OF READING, LITERACY, AND LANGUAGE](#).

(2) Requirements.

- (a) To receive approval, a GaPSC-approved educator preparation provider shall offer a preparation program described in program planning forms, catalogs, and syllabi addressing the following standards adapted from the 2020 Standards for Technological and Engineering Literacy as published by the International Technology and Engineering Educators Association (ITEEA).
1. The program shall prepare candidates who understand the nature of technology within the context of the Designed World as part of Project 2061.
 2. The program shall prepare candidates who understand technology and society within the context of the Designed World as part of Project 2061.
 3. The program shall prepare candidates who understand design and the engineering and design process within the context of the Designed World as part of Project 2061.
 4. The program shall prepare candidates who possess abilities for a technological world within the context of the Designed World as part of Project 2061.
 5. The program shall prepare candidates who understand the Designed World as part of Project 2061.
 6. The program shall prepare candidates who design, implement, and evaluate curricula based upon Standards for Technological and Engineering Literacy.
 7. The program shall prepare candidates who use a variety of effective teaching practices that utilize the engineering design process and engineering notebooks when solving real world design challenges.
 8. The program shall prepare candidates who design, create, and manage learning environments that promote technological and engineering literacy.
 9. The program shall prepare candidates who understand students as learners, and how commonalities and differences affect learning.
 10. The program shall prepare candidates who understand and value the importance of engaging in comprehensive and sustained professional growth to improve the teaching of engineering and technology.
 11. The program shall prepare candidates who understand the organizational structure and historical development of career and technical education and its relationship to American business, industry, and careers.
 12. The program shall prepare candidates who integrate academic and career and technical education content in the curriculum and in implementing interdisciplinary activities through project/problem-based learning.

13. The program shall prepare candidates who organize, manage, plan, and supervise the engineering and technology education classroom and lab.
 14. The program shall prepare candidates who can adapt instruction for special needs students in engineering and technology programs.
 15. The program shall prepare candidates who can interpret, develop, and implement curriculum for engineering and technology education programs, including instructional methods of teaching for the classroom and engineering and technology education lab activities.
 16. The program shall prepare candidates who know and implement correct safety practices and procedures in the engineering and technology education lab.
 17. The program shall prepare candidates who can facilitate co-curricular Career and Technical Student Organizations (CTSOs).
 18. The program shall prepare candidates who are familiar with elementary through secondary school guidance and counseling practices, assessment instruments and procedures, and assisting students in career development and placement activities through work-based learning experiences in the secondary schools.
 19. The program shall prepare candidates to work with business, industry, and labor in establishing school/business/community partnerships and advisory committees.
- (b) The program shall have established procedures for evaluating and assessing work experience to determine eligibility for the program.
- (c) The program shall prepare candidates who meet the P-12 standards for the teaching of reading as specified in GaPSC Rule [505-3-.03 FOUNDATIONS OF READING, LITERACY, AND LANGUAGE](#) (paragraph (3) (g)).