Karen B. Salmon, Ph.D.
State Superintendent of Schools

TO: Local School System Superintendents

FROM: Karen B. Salmon, Ph.D.
State Superintendents of Schools

DATE: June 18, 2021

SUBJECT: Graduation Requirement Revisions to Advanced Technology Education, Computer Science, Engineering, and Technology Education

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On May 25, 2021, the Maryland Board of Education adopted revisions to Code of Maryland Regulations (COMAR) 13A.03.02 *Graduation Requirements* and COMAR 13A.04.01 *Programs in Computer Science Engineering, or Technology Education*. The revised regulations remove advanced technology education as a graduation pathway and expand options for students to earn a graduation credit in computer science, engineering, or technology education. This memo provides clarification on the implementation of the revised regulation.

Advanced Technology Education
The new graduation requirements go into effect in the 2021-2022 school year. However, students who are currently enrolled in advanced technology education courses can continue to use this option to graduate. This includes students who enrolled in the program for the first time for the 2021-2022 school year. They would be the last cohort of students who are eligible to graduate as an advanced technology education completer.

Any student wanting to take advanced technology education after the 2021-2022 school year would be able to do so through a career and technical education (CTE) program of study. The Division of College and Career Readiness staff convened a design team comprised of secondary, postsecondary, and business representatives to develop a CTE program of study for advanced technology education. The program of study will be available for local adoption on July 1, 2021. The program of study is a three course/three credit program that leads to industry-recognized credentials and allows students to meet their graduation requirements as a CTE completer. For additional information on transitioning advanced technology education to a CTE program of study, please contact Scott Nichols, Coordinator of Career Programs, STEM, and Computer Science, at charles.nichols@maryland.gov.

Computer Science, Engineering, or Technology Education Graduation Requirement
There are two approaches school systems can use to identify courses that will allow students to fulfill the revised graduation requirement.

1. School systems can offer students any of the pre-approved computer science, engineering, or technology education courses listed in the table on page two. All courses have been vetted for alignment to standards.

Computer Science Courses	Engineering Courses	Technology Education Courses
• Advanced Placement Computer Science A • Advanced Placement Computer Science Principles • Beauty and Joy of Computing • Foundations of Computer Science • Computer Science Discoveries • Computer Science Principles • International Baccalaureate Computer Science • ITEEA Advanced Placement Computer Science Principles by Design	Project Lead the Way: • Engineering Essentials • Introduction to Engineering Design • Principles of Engineering	International Technology Engineers and Educators Association (ITEEA): • Advanced Design Applications • Advanced Technological Applications • Engineering Design (Capstone) • Foundations of Technology • Technological Design International Baccalaureate • Diploma Program (Design Technology)

2. School system leaders may identify additional courses that meet requirements by completing the MSDE standards alignment review process for computer science, engineering, or technology education courses. The process includes submission of the MSDE standards alignment rubric and associated documents to the Division of Career and College Readiness. This process ensures course content aligns with Maryland Computer Science Standards or Standards for Technological and Engineering Literacy. The alignment rubrics and submission requirements will be available on Division of Career and College Readiness webpage by July 1, 2021.

If you have any questions about advanced technology education, computer science, engineering, or technology education, please contact Scott Nichols, Coordinator of Career Programs, STEM, and Computer Science, at charles.nichols@maryland.gov, or Elissa Hozore, Computer Science Specialist, at elissa.hozore2@maryland.gov. They would be happy to provide assistance.

cc: Assistant Superintendents of Instruction
         Local Directors of Career and Technical Education
         Computer Science Supervisors
         Technology and Engineering Education Supervisors
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