



Department of Education & Workforce

Technology Seal



Guidelines for Schools and Districts

Under Ohio's long-term graduation requirements, students must demonstrate readiness as a part of their pathway to earning a high school diploma. To demonstrate readiness, students must earn at least two seals, one of which must be a state-defined seal.

The Technology Seal is a state-defined seal. Students who earn Ohio's Technology Seal will understand the global impact of technology and use it to design solutions and communicate ideas. Students will earn the Technology Seal by demonstrating knowledge and skills on Advanced Placement and International Baccalaureate courses and tests, through College Credit Plus coursework or by completing a qualifying technology course.

Technical Seal – General Requirements

Ohio Revised Code Section 3313.6114(C)(7) (<http://codes.ohio.gov/orc/3313.6114>).

Download the Technology Seal



[./getattachment/Topics/Ohio-s-Graduation-Requirements/Ohio-s-Graduation-Requirements/Graduation-Seals/Tech-btn.png.aspx](http://getattachment/Topics/Ohio-s-Graduation-Requirements/Ohio-s-Graduation-Requirements/Graduation-Seals/Tech-btn.png.aspx)

[Print Guidelines](#)

To earn Ohio's Technology Seal, students must satisfy at least one of the requirements below:

1. Earn a score equivalent to proficient on an appropriate Advanced Placement or International Baccalaureate test; or
2. Earn a "B" or higher in an appropriate College Credit Plus technology course; or
3. Complete a technology course that meets criteria established by the Ohio Department of Education (below).

Advanced Placement and International Baccalaureate

Students may satisfy the requirements of Ohio's Technology Seal by earning a score that is equivalent to proficient or higher on an appropriate Advanced Placement or International Baccalaureate test. The qualifying Advanced Placement and International Baccalaureate tests that will enable a student to earn the Technology Seal are outlined below.

ADVANCED PLACEMENT COURSES AND TESTS

Ohio Revised Code Section 3301.0712(B)(5)(d) (<http://codes.ohio.gov/orc/3301.0712>).

Students must earn a score of "2" or higher on one of the associated Advanced Placement tests. The qualifying courses include:

Computer Science A; or
Computer Science Principles.

Note: Please be aware that scores for Advanced Placement tests are returned after June 1 of each school year. Districts should consider the Advanced Placement test score return windows for students who would like to use Advanced Placement tests to earn diploma seals.

INTERNATIONAL BACCALAUREATE COURSES AND TESTS

Ohio Revised Code section 3301.0712(B)(5)(d) (<http://codes.ohio.gov/orc/3301.0712>).

Students must earn a score of "3" or higher on ONE of the associated Standard-Level exams or a "2" or higher on ONE of the associated Higher-Level exams. The qualifying courses include:

Computer Science;
Design Technology; or
Information Technology in a Global Society.

COLLEGE CREDIT PLUS

The Ohio Department of Higher Education and Workforce, in coordination with the Department of Education, has developed the High School Graduation Course Substitution Crosswalk (<https://highered.ohio.gov/initiatives/access-acceleration/college-credit-plus/ccp-resources-secondary-schools/ccp-secondary-crosswalk/ccp-hs-graduation-course-substitution-crosswalk>),

which provides guidelines outlining general criteria for determining appropriate courses that satisfy high school graduation requirements.

A student who earns a letter grade of “B” or higher in any three-credit hour College Credit Plus course that meets all the course guidelines below will satisfy the criteria needed to earn Ohio’s Technology Seal.

Districts should use professional discretion in identifying appropriate college level technology courses. The courses should meet the following requirements:

Have a technology focus that engages students in:

- Applying technology tools and processes in real-world situations to effectively design solutions, solve problems and accomplish goals;
- Critical analysis of the impact of technology development and use, including ethical, legal and global impacts.

Address technology knowledge and skills critical to college and workforce readiness

LOCAL TECHNOLOGY COURSE GUIDELINES

A technology course that qualifies students to earn Ohio’s Technology Seal must meet all the following guidelines:

Address content that is at an advanced level (determined locally) and aligned to at least one of the following sets of Ohio high school standards:

- Ohio’s Learning Standards for Technology;
- Ohio’s Learning Standards for Computer Science; or
- Ohio’s Career Field Technical Content Standards.

Have a technology focus that engages students in the following:

- Applying technology tools and processes in real-world situations to effectively design solutions, solve problems and accomplish goals; and
- Critical analysis of the impact of technology development and use, including ethical, legal and global impacts.

Address technology knowledge and skills critical to college and workforce readiness;

Provide a full-year credit or the equivalent (for example, two individual semester courses or credit earned through credit flexibility);

Demonstrate knowledge and skills developed during the course through a culminating product (for example, an electronic portfolio or design brief) that includes:

- Documentation of a student’s learning process with evidence of progress made during the course;
- A final course product of original student work;
- Student reflections; and
- Student self-evaluation and evaluation by the course instructor.

TRANSFER STUDENTS

Transfer students who, prior to enrollment into an Ohio public or chartered nonpublic high school, earned a “B” or higher in an appropriate technology course, may use that grade to satisfy the requirements and earn the state defined Technology Seal. The determination of what courses qualify for this option is left up to the student’s school or district. When determining what courses are “appropriate” districts should use the local technology course guidelines above. If a student, prior to transferring, has completed a portion of a technology course that would be counted as a local technology course at the district into which they are transferring, the receiving school can apply work completed in a previous district toward the completion of their local technology course. It is up to a district’s discretion to determine previously completed coursework that can apply to their local technology courses.

Frequently Asked Questions

GENERAL QUESTIONS

What is the purpose of Ohio’s Technology Seal and what is its value to students? ([#FAQ4699](#)).

Are schools or districts required to offer technology courses students can use to earn the Technology Seal? ([#FAQ4698](#)).

Must the high school technology courses used to earn the Technology Seal be full-year courses? ([#FAQ4697](#)).

Who is responsible for determining the high school technology courses that can be used to earn the Technology Seal? ([#FAQ4696](#)).

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Who is responsible for verifying students have met all requirements for earning the Technology Seal? ([#FAQ4693](#)).

Are students required to earn a certain grade in the technology courses they use to qualify for the Technology Seal? ([#FAQ4692](#)).

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Does the Technology Seal count toward graduation? ([#FAQ4690](#)).

Can students take a middle school-level technology course to satisfy the requirements for earning a Technology Seal? ([#FAQ4689](#)).

ADDITIONAL RESOURCES

What are some additional resources to refer to? ([#FAQ4688](#)).

General Questions

What is the purpose of Ohio’s Technology Seal and what is its value to students?

Ohio law created 12 seals for high school students to demonstrate knowledge and skills that align with their goals and interests and are important to their future success. The Technology Seal enables high school students to document the technology skills and knowledge they have demonstrated that have value and relevance as they pursue their post-high school paths.

Whether students are planning to enter the workforce, apply to college or enlist in the military, Ohio's Technology Seal provides students a mechanism to demonstrate advanced technology skills and knowledge they have developed — knowledge and skills that align to their passions, interests and planned next steps after high school.

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Are schools or districts required to offer technology courses students can use to earn the Technology Seal?

A district or school is not required to offer courses that meet the necessary guidelines established by the Department for a qualifying technology course. However, districts are encouraged to offer programming and support opportunities for students to earn diploma seals under the new requirements provided by state law.

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Must the high school technology courses used to earn the Technology Seal be full-year courses?

High school courses used to earn the Technology Seal need to provide a full year of credit or the equivalent. For example, this guideline could apply to two separate technology courses that meet all other technology course guidelines and, together, provide a full year of credit. Similarly, credit flexibility coursework that is the equivalent of a full year of credit and meets all other course guidelines could be used to earn the Technology Seal.

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Who is responsible for determining the high school technology courses that can be used to earn the Technology Seal?

Schools and districts determine locally which high school courses meet the guidelines for qualifying technology courses that can be used to earn the Technology Seal.

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What kinds of courses qualify for the Technology Seal?

Districts and schools ultimately determine if a local technology course meets the guidelines established for the Technology Seal. Qualifying courses may be content area and career-technical education courses that meet the required course guidelines, including credit earned through credit flexibility. Factors that should be common across all these courses include engaging students in the following:

- Advanced-level content;
- Applying tools and processes in real-world experiences to design solutions;
- Solving problems and accomplishing goals; and
- Examining the impact of technology development and use on the world.

Some *examples* of coursework include:

1. A course that involves engineering design, where students use a design process to develop a solution to a community problem. Using processes and tools involved in technical sketching, 3D modeling and product testing, they develop a solution and then communicate the solution to community members. Students also consider the possible impact of their solution on the community, both intended and unintended.
2. A manufacturing course in a manufacturing career-technical pathway that engages students in the use of tools common to manufacturing and processes, such as fabrication or machining processes, to complete a project.
3. A computer graphics course where students create animations — focusing on story and character, developing scripts and storyboards, and using different animation techniques, including 3D animation.
4. Students using industry-standard software in a computer science course to design and implement a working network.
5. A course involving programming, where students use modern programming tools to create a program that solves an existing problem. Part of this work involves examining how the program impacts its users and considering issues such as accessibility and bias.

These are only a few examples of courses that could be used to earn Ohio's Technology Seal.

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Who is responsible for approving the College Credit Plus courses to be used to earn the Technology Seal?

Approval of the College Credit Plus courses students can use to earn the Technology Seal is a local decision and should meet the criteria established (above) for appropriate technology courses.

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Who is responsible for verifying students have met all requirements for earning the Technology Seal?

Verification that a student has met all requirements for earning the Technology Seal is a local decision. Evaluation of a student's culminating product that demonstrates knowledge and skills gained from a qualifying technology course can be carried out by that course's instructor. Schools and districts can determine whether to include additional participants in the evaluation of the culminating product, such as a school administrator.

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Are students required to earn a certain grade in the technology courses they use to qualify for the Technology Seal?

Schools and districts determine locally the course completion requirements that meet the level of rigor representative of the Technology Seal, promote high-quality work and qualify students to earn this seal. Transfer students are required to have attained a grade of “B” or higher in a qualifying local technology course as determined by the student’s school or district prior to transferring.

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Who determines whether course content is at an advanced level?

Schools and districts determine locally whether a technology course addresses advanced-level content. In the case of computer science courses, qualifying courses should address the advanced section of Ohio’s Learning Standards for Computer Science for grades 9-12. Schools have the option to identify courses as “advanced” in the Education Management Information System (EMIS) Course-Level Element field.

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Does the Technology Seal count toward graduation?

Ohio law enacted new, long-term graduation requirements that are available for the classes of 2021 and beyond. As part of these new graduation requirements, students must demonstrate readiness for their post-high school paths by earning two seals, allowing them to demonstrate critical knowledge and skills essential for their future success. The Technology Seal is one of the twelve possible seals students can earn to demonstrate readiness.

Students in the classes of 2021 and 2022 have the option to meet the new graduation requirements or satisfy the requirements of the original three pathways to graduation. Students in the classes of 2023 and beyond must meet the new graduation requirements.

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Can students take a middle school-level technology course to satisfy the requirements for earning a Technology Seal?

Middle school level courses cannot be used to earn the Technology Seal. Middle school students who take high school level courses that meet all the guidelines for the Technology Seal can use those courses to earn the Technology Seal.

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Additional Resources

What are some additional resources to refer to?

[Benefits of an International Baccalaureate Program - Students](https://www.ibo.org/benefits/benefits-for-students/) (<https://www.ibo.org/benefits/benefits-for-students/>).

[Career-Technical Program Resources](http://education.ohio.gov/Topics/Career-Tech) (<http://education.ohio.gov/Topics/Career-Tech>) – Select a career-technical program to access resources for that program, such as the Career Field Technical Content Standards and course outlines.

[College Board Advanced Placement Computer Science – Computer Science A](https://apstudents.collegeboard.org/courses/ap-computer-science-a/assessment)

(<https://apstudents.collegeboard.org/courses/ap-computer-science-a/assessment>).

[College Board Advanced Placement Computer Science – Computer Science Principles](https://apstudents.collegeboard.org/courses/ap-computer-science-principles/assessment)

(<https://apstudents.collegeboard.org/courses/ap-computer-science-principles/assessment>).

[College Board – What Is Advanced Placement?](https://apstudents.collegeboard.org/what-is-ap) (<https://apstudents.collegeboard.org/what-is-ap>) – The College Board website provides information for each Advanced Placement course and exam.

[Expanding Opportunities for Each Child Grant](http://education.ohio.gov/Topics/District-and-School-Continuous-Improvement/Expanding-Opportunities-for-Each-Child-EOEC-A) (<http://education.ohio.gov/Topics/District-and-School-Continuous-Improvement/Expanding-Opportunities-for-Each-Child-EOEC-A>) – *Expanding Opportunities for Each Child*, a direct student services grant, is designed to give greater access to advanced coursework and career pathways and increase enrollment for low-income students in Advanced Placement and International Baccalaureate opportunities. This grant aligns to local continuous improvement plans. Applicants may request up to three years of funding.

[International Baccalaureate Program - Computer Science](https://www.ibo.org/programmes/diploma-programme/curriculum/sciences/computer-science/) (<https://www.ibo.org/programmes/diploma-programme/curriculum/sciences/computer-science/>).

[International Baccalaureate Program - Design Technology](https://www.ibo.org/programmes/diploma-programme/curriculum/sciences/design-technology/) (<https://www.ibo.org/programmes/diploma-programme/curriculum/sciences/design-technology/>).

[International Baccalaureate Program - Information Technology in a Global Society](https://www.ibo.org/programmes/diploma-programme/curriculum/individuals-and-societies/information-technology-in-a-global-society/)

(<https://www.ibo.org/programmes/diploma-programme/curriculum/individuals-and-societies/information-technology-in-a-global-society/>).

[Ohio's Learning Standards for Technology](http://education.ohio.gov/Topics/Learning-in-Ohio/Technology/Ohios-Learning-Standards-for-Technology) (<http://education.ohio.gov/Topics/Learning-in-Ohio/Technology/Ohios-Learning-Standards-for-Technology>).

[Ohio's Learning Standards for Computer Science and Model Curriculum](http://education.ohio.gov/getattachment/Topics/Learning-in-Ohio/Computer-Science/Model-Curricula-in-Computer-Science/ComputerScienceMC_Gr9-12.pdf.aspx?lang=en-US)

(http://education.ohio.gov/getattachment/Topics/Learning-in-Ohio/Computer-Science/Model-Curricula-in-Computer-Science/ComputerScienceMC_Gr9-12.pdf.aspx?lang=en-US).

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