



STEM Endorsement

All students can thrive with the proper tools and resources to prepare them for their career paths. The goal of a career endorsement is to equip students for life after high school by ensuring they have everything they need to obtain a postsecondary degree or industry certification that reflects their individual passions and skills.

Career Endorsements help prepare students for high-demand careers. There are many paths to success, and all are worth celebrating.

WHAT IS AN ENDORSEMENT?

An endorsement is an option students can add to their high school diplomas to show knowledge and/or skills gained in one of five broad subject matter areas: STEM, Arts and Humanities, Business and Industry, Public Services, or Aerospace and Defense or in Multidisciplinary Studies. To get an endorsement, students must complete a logical sequence of specific courses and activities approved by their districts. The following are suggestions. Decisions about endorsements are at the determination of the district.

Schools will use this endorsement guide to:

- › Collaborate with industry leaders to build customized pathways so students can earn endorsements from high-demand industries.
 - For example, a district and employer may build an agreement allowing students earning an endorsement to automatically qualify for an internship with their organization.
- › Collaborate with local postsecondary educators to build customized pathways for students to earn endorsements.
 - For example, a district and university may build an agreement allowing students earning an endorsement to opt out of first year academic advising on campus.

Students will use this endorsement guide to:

- › Accompany their ICAP plan and take steps toward gaining meaningful experience in their chosen career pathway.
- › Locate college and career preparation events in their area.
- › Research Oklahoma's fastest growing industries.
- › Participate in career training programs to meet future workforce needs.
- › Connect with community mentors passionate about giving students the opportunity to succeed past high school.

STEM Endorsement

This Career Endorsement prepares learners for careers in numerous fields that relate to sciences, technology, engineering, and mathematics. After learning a student's career interest, these endorsements should serve as a guide for students and families. Take a look at growing careers in the STEM career field here, [Science, Technology, Engineering & Mathematics](#), [Health Science](#), [Finance](#).

To earn the STEM Endorsement, students must compile at least 10 points from across the domains of engagement: Academics, Leadership, Experience, and Service.

	OPTION 1	OPTION 2
Academics	At least 4 points	At least 4 points
Leadership	At least 3 points from two areas	At least 2 points from each area
Experience		
Service		
Total	10 Points	10 Points

Some courses taken during the high school years may be eligible to count toward more than one domain or may only be eligible for domains other than Academics. Please review this table carefully when planning your pathway.

ACADEMICS

Compile at least four points from the Academic domain.

- › **Additional math course:** In addition to the three required mathematics courses, each mathematics course beyond the rigor of Algebra 2 (i.e., Pre-Calculus, Statistics, AP Calculus, etc.) [1 point].
- › **Additional Science Course:** In addition to the three required science courses, each science course beyond the rigor of Biology 1 (i.e., Chemistry, Physics, AP Biology, etc.) [1 point].
- › **Two Computer Science Courses:** Includes all courses addressing the Level 1 Oklahoma Academic Standards for Computer Science (i.e., Computer Science 1 and 2) [1 point].
- › **Additional Computer Science Courses:** In addition to the two Computer Science course, each computer science course addressing the Level 2 Oklahoma Academic Standards for Computer Science (i.e., Cybersecurity, Applied Programming, etc.) [1 point].
- › **Industrial Arts Course:** Complete any course under the Industrial Arts course category [1 point].
- › **Career Technology Course:** Complete any Career Technology course under the STEM category [1 point].
- › **Career Technology Academy Programs:** Complete a Career Technology Biomedical Science and Medicine, Pre-Engineering, Biotechnology and Computer Science Academy. [2 points per completed year].
- › **Internship Experience:** Completing Internship I or II (course codes 2790 or 2791) may provide either one point in Academics or one point in Experience, but not both [1 point].
- › **Concurrent enrollment:** Any concurrent enrollment course related to a STEM degree.

LEADERSHIP

- › **Leadership in clubs:** Hold an elected position in STEM-related clubs (i.e., Robotics, Science Fair, Science Olympiad, etc.) [1 point per club].
- › **School clubs:** Participate as an active member in STEM-related clubs (i.e., Robotics, Science Fair, Science Olympiad, Mathematics, Career Technology student group, etc.) [1 point per club].
- › **Community clubs:** Boy/Girl Scouts (if certain level/number of badges is reached) or other non-school organizations such as athletics Boys & Girls Club or Junior Achievement as long as they're STEM focused [1 point per club].

EXPERIENCE

- › **Service Learning:** Service-learning experience in STEM field [1 point].
- › **Job Shadow:** Job shadow experience in a STEM field (in person or virtual) [1 point].
- › **Career Technology program of study:** Participate in a Career Technology STEM-related program of study [2 points].
- › **Internship or pre-apprenticeship:** Internship experience in a STEM field (in person or virtual) [2 points].
- › **Summer academies:** STEM Summer Academies or other summer camps [2 points].

SERVICE

- › **Community service:** Community Service project related to solving a STEM related problem [1 point].
- › **Tutoring:** Volunteer as a tutor (district determines minimum amount of time) [1 point].
- › **Service organizations:** Boy/Girl Scouts (if certain level/number of badges is reached) or other non-school organizations such as athletics Boys & Girls Club or Junior Achievement as long as they're STEM focused [1 point per club].

For a full list of service or work-based learning activities, [click here](#).

CAREERS BY PATHWAYS

Oklahoma's [Critical Occupations](#) include jobs that are in-demand and make high wages. Many of these occupations have skills that translate to other similar jobs and industries. Explore how you can use experiences gained from your endorsement to enter and advance in these careers in industries that are vital to growing our state's economy.

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SCIENCE

- › [Aerospace and Defense](#)
- › [Energy](#)

MATHEMATICS

- › [Financial Services](#)
- › [Information Services](#)

CAREER TRAINING / COLLEGE READINESS RESOURCES

[Career Technology Programs Map](#)

- › The map is meant to help students and families locate Career Technology Programs of Study available in their counties. Using this map students and families can begin making postsecondary plans while connecting their career interests to high-demand careers by career cluster.

[Advanced Placement Opportunities](#)

- › Advanced Placement courses can be an excellent opportunity to prepare students for college courses.

CAREER PLANNING RESOURCES

[OK College Start](#)

- › OK College Start is a free online tool that provides career interest quizzes, career information, growing occupation trends, scholarship and financial aid resources, and information about programs of study in Oklahoma. This is a perfect tool to pair with career curriculum in the classroom, as well as financial aid presentations.

[OK Career Guide](#)

- › The OK Career Guide is a free online tool to provide students free career-interest assessments, information about career expectations, growing trends in occupations, and information on programs of study available in Oklahoma. This interactive tool can be used in the classroom during career lessons and while at home with parents.

To view a list of Oklahoma University programs click the links below:

- › [Bacon College](#)
- › [Cameron University](#)
- › [Carl Albert State College](#)
- › [Connors State College](#)
- › [East Central University](#)
- › [Eastern Oklahoma State College](#)
- › [Langston University](#)
- › [Mid-American Christian University](#)
- › [Murray State College](#)
- › [Northeastern Oklahoma A&M College](#)
- › [Northeastern State University](#)
- › [Northern Oklahoma College](#)
- › [Northwestern Oklahoma State University](#)
- › [Oklahoma Baptist University](#)
- › [Oklahoma Christian University](#)
- › [Oklahoma City Community College](#)
- › [Oklahoma City University](#)
- › [Oklahoma Panhandle State University](#)
- › [Oklahoma State University](#)
- › [Oklahoma State University - Institute of Technology](#)
- › [Oklahoma State University - OKC](#)
- › [Oklahoma Wesleyan University](#)
- › [Oral Roberts University](#)
- › [Redlands Community College](#)
- › [Rogers State University](#)
- › [Rose State Community College](#)
- › [Seminole State College](#)
- › [Southeastern Oklahoma State University](#)
- › [Southern Nazarene University](#)
- › [Southwestern Christian University](#)
- › [Southwestern Oklahoma State University](#)
- › [Tulsa Community College](#)
- › [University of Central Oklahoma](#)
- › [University of Oklahoma](#)
- › [University of Science and Arts of Oklahoma](#)
- › [University of Tulsa](#)
- › [Western Oklahoma State College](#)



OKLAHOMA
Education

