

Background Information

University partners have historically provided college credit for PLTW courses for many years. In September 2023, Project Lead The Way partnered with the American Council on Education (ACE) for the purposes of conducting a Learning Evaluation on seven PLTW courses: Civil Engineering and Architecture, Cybersecurity, Digital Electronics, Human Body Systems, Principles of Biomedical Science, Medical Interventions, and Principles of Engineering.

ACE represents more than 1,600 colleges and universities nationwide, providing college credit recommendations for higher education institutions after conducting a thorough review of the course and coordinating assessments. ACE completed the evaluation and recommended 3 credit hours for each course with a passing score of 370 or above on the End-of-Course Assessment. The scaled score of 370 represents a passing rate of 70% on the assessment, which is the required minimum from ACE to award credit. All seven courses are listed on the ACE National Guide. <https://www.pltw.org/ace>

ACE Recommendations		
Course Title	Credit-Granting EOC Score	Semester Hours
Civil Engineering and Architecture	370	3
Cybersecurity	370	3
Digital Electronics	370	3
Human Body Systems	370	3
Medical Interventions	370	3
Principles of Biomedical Science	370	3
Principles of Engineering	370	3

While the decision to honor the ACE recommendation ultimately lies with the university partner, PLTW works collaboratively with researchers to examine coursework and relative assessments, ensuring a high level of rigor and relevant content that aligns with college and career readiness. PLTW is committed to increasing equitable access to all students and wishes to build partnerships with universities that share our equity-minded principle to honor student learning and achievement. Recently, two specific studies confirmed that PLTW courses provide students with the relevant skills and experiences for college and career readiness.

Missouri PLTW Study: In a recent study ([CLICK HERE](#)) conducted and presented to the KC STEM Alliance (led by Urban Education Research Center at University of Missouri Kansas City, Sinquefield Center for Applied Economic Research, and University of Missouri Columbia), findings suggest that PLTW students who take at least two PLTW courses:

- Accumulate more college credits than their non-PLTW peers or students who only take one PLTW course

- Score higher on the ACT than their non-PLTW peers or students who only take one PLTW course
- Have higher high school graduation rates than their non-PLTW peers or students who only take one PLTW course
- Enroll in a post-secondary program at a higher rate than their non-PLTW peers or students who only take one PLTW course
- Declare a STEM major at a high rate their non-PLTW peers or students who only take one PLTW course

EdImagine Comparability Study: Conducted by Dr. Conley and Dr. Seburn from EdImagine, this comparison study of PLTW's high school courses and their associated end-of-course assessments validates PLTW's assertion that students who participate in PLTW courses are well-prepared and well-equipped for college and careers after high school. This comparison study of PLTW's high school courses and their associated End-of-Course Assessments validates PLTW's assertion that students who participate in PLTW courses are well-prepared and well-equipped for college and careers after high school.

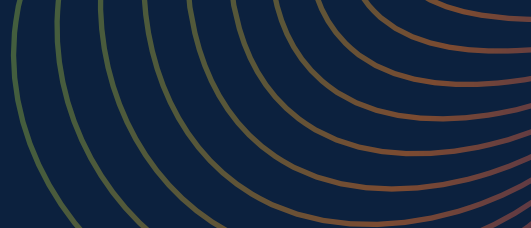
In 2021, the Council for Higher Education Accreditation (CHEA), the American Council on Education (ACE), and the American Association of Collegiate Registrars and Admissions Officers (AACRAO) developed a joint statement regarding the transfer and award of college credit. Collectively, they agree that, "failure to award credit for learning already acquired doesn't just increase the cost of a degree in terms of time and money, but it can also end the student's pursuit of postsecondary education entirely, with lifelong ramifications." The statement suggests three factors in decision-making regarding college credit; PLTW addresses all three factors to aid in the decision-making process. The completed ACE review and aforementioned research has proven to address all three factors:

1. Educational quality of the acquired learning
2. Comparability of the content, scope, and rigor of learning
3. The appropriateness and applicability of the learning experience

Additionally, the collective group states that the "denial of credit without a reasonable basis and clear rationale undermines both students' and the public's trust in our systems of higher education as a societal good and driver of upward mobility."

Project Lead The Way is committed to creating transformative learning experiences so that students can develop in-demand knowledge and skills necessary to thrive in an evolving world. PLTW wishes to expand partnerships with universities so that students can access post-secondary opportunities through college credit.

PLTW encourages universities to consider the following when determining college credit awards for PLTW courses:



- **Evaluation and Award Process** – All PLTW teachers must undergo 80 hours of training per high school course, which includes deepening course content knowledge as well as expanding the pedagogical understanding of PLTW’s activity-, project-, problem- based approach to learning. Depending upon the university policies and procedures, PLTW offers a course review for any and all courses with a signed non-disclosure agreement whereby university faculty can access the PLTW platform to view all activities, projects, and problems as evidence of acquired course content, rigor, skills, and knowledge. PLTW and ACE both recommend that universities utilize the End-of-Course assessment (EoC) score of 370 and above as a metric of success to award college credit.
- **Course Credit Decisions** – During the course reviews, the decision to award credit should be aligned to ACE recommendation of lower division courses in the student’s area of study. While electives are helpful in some situations, PLTW courses have proven to fulfill requirements of introductory courses within the student’s intended degree or credential pathway. The ACE recommendation is meant to provide students with transfer credit. Based on the joint statement above, the collective group suggests that in order to maximize equity for all students, the award decision should extend to the receiving institution.
- **Transparency** – Once the decision is made, we ask universities to provide a detailed webpage outlining the specific courses, requirements, and process and/or cost to access the award. PLTW will link to this detailed webpage and share with schools and students.

Universities interested in becoming STEM allies with us are encouraged to contact PLTW at community@pltw.org. To explore how other universities have successfully partnered with PLTW, please visit our [Student Opportunities](#) page.