



Curriculum Framework for Project Lead the Way: Engineering Track

CIP Code: 14.0101

Initial Review Date: 01/10/2025

Eligibility Dates: 01/01/2024 through 01/31/2030

Credit Award: 24 Credits

Course Equivalencies:

PLTW Engineering	Credits	TESU Course Equivalent	Effective Dates	For Staff Use
Engineering Essentials ¹ , Introduction to Engineering Design ¹	3	EGM-1010	01/01/2024 - 01/31/2030	PLTW.ENG3
Principles of Engineering ¹	3	ELT-1999	01/01/2024 - 01/31/2030	PLTW.ENG3
Aerospace Engineering	3	AVF-1999	01/01/2024 - 01/31/2030	PLTW.AENG
Civil Engineering & Architecture	3	CET-1010	01/01/2024 - 01/31/2030	PLTW.CENA
Computer Integrated Manufacturing	3	ITS-1500	01/01/2024 - 01/31/2030	PLTW.CIMF
Computer Science Principles (Engineering Track)	3	EGM-1999	01/01/2024 - 01/31/2030	PLTW.ENCP
Digital Electronics	3	ELD-2010	01/01/2024 - 01/31/2030	PLTW.DIEL
Environmental Sustainability	3	ENS-1600	01/01/2024 - 01/31/2030	PLTW.ENSU

¹ Student must complete 2 of 3 of these courses.

NOTE: *Students must earn a grade of "B" or higher in Project Lead the Way courses to earn the credits.

Gaining Access to the Evaluated Credit Award

The following curriculum was evaluated by Thomas Edison State University (TESU) through its Professional Learning Review (PLR) Process to determine college-credit equivalency for the training program.

The current state approved Career and Technical Education (CTE) programs in New Jersey that have been verified to follow this curriculum, and to be eligible to receive TESU credit upon completion can be found on the [Verification Letter](#).

Question: How does your CTE program become eligible for this credit award for your students?

Answer: To become eligible, and to have your school's name listed on the [Verification Letter](#), please follow these instructions:

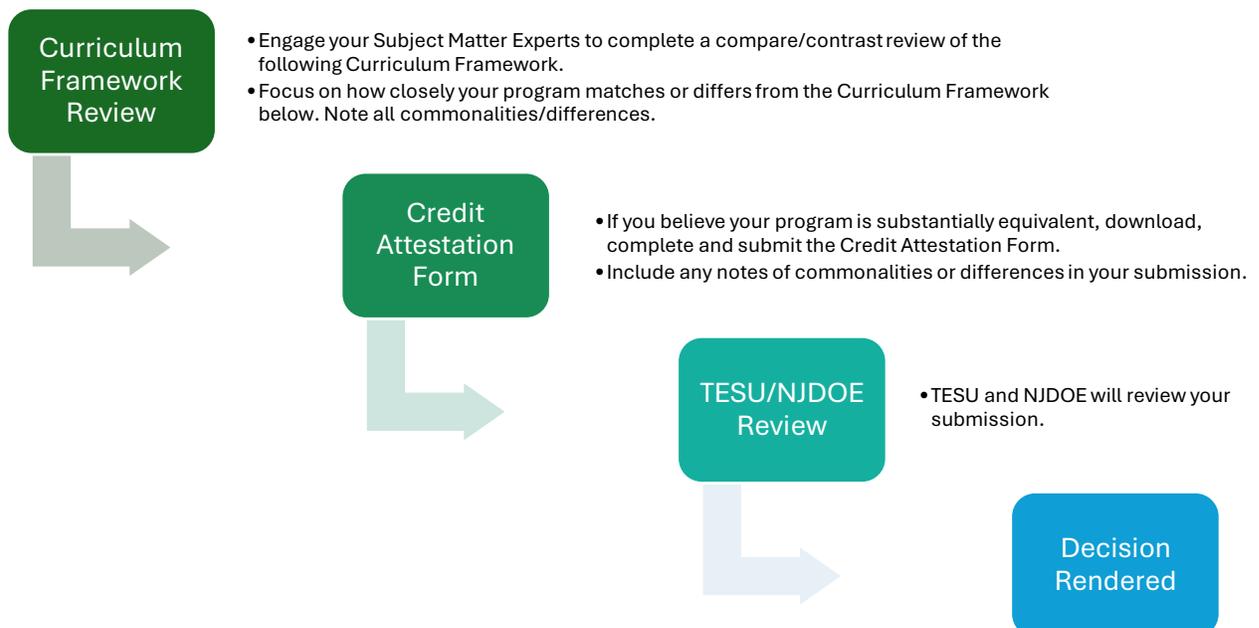
Step 1. Review the following Curriculum Framework and compare it against your school's current state approved CTE program. TESU suggests utilizing your school's subject matter experts for this compare/contrast review. The GOAL of your review is to ensure that the training program in place at your school matches the evaluated program.

Step 2. Complete/Download the [Credit Attestation Form](#) for this program on TESU's website.

Step 3. Complete the [Credit Attestation Form](#) and email it to plr@tesu.edu.

Step 4. TESU will review the contents and share the attestation form information with the New Jersey Department of Education (NJDOE) for approval.

Step 5. Once approved by TESU and the NJDOE, you will be notified and an updated Verification Letter will be added to the TESU website for this program.



If you have any questions, or if your compare/contrast review is close but off a little, please contact us at plr@tesu.edu.

Curriculum Framework

Approved Program Name: Project Lead the Way Engineering Track

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PLTW Information:

Project Lead the Way is a nonprofit organization that provides a transformative learning experience for PreK-12 students and teachers across the U.S. PLTW empowers students to develop and apply in-demand, transportable skills by exploring real-world challenges. Through their pathways in computer science, engineering, and biomedical science, students not only learn technical skills, but also learn to solve problems, think critically and creatively, communicate, and collaborate.

PLTW classes are nationally standardized, project-based courses that prepare students for college-level work and culminate with a student assessment, which colleges and universities can use to determine if a student earns college credit: Course Substitution Credit, Advanced Standing Credit, Partial Course Credit, Bridge Courses, or Test-Out/Challenge Exam

Engineering Track:

The Engineering Track as reviewed by TESU includes the following PLTW Courses:

- Engineering Essentials, Introduction to Engineering Design, and Principles of Engineering (students must take at least two of these three courses)
- Aerospace Engineering
- Civil Engineering and Architecture
- Computer Integrated Manufacturing
- Computer Science Principles (Engineering Track)
- Digital Electronics
- Environmental Sustainability

TESU is aware that different schools may use course titles that differ from the PLTW course titles. This is acceptable as long as the course is materially the same. When students submit their transcripts for credit, TESU will ask for alternate course titles in order to ensure that the appropriate credits are awarded.

Please also note that students must earn a grade “B” or higher in each PLTW course to receive credit.

End of Curriculum Framework

Suggested Degree Programs at TESU

- [Associate in Applied Science \(AAS\) in Electrical-Mechanical Systems and Maintenance](#)
- [Bachelor of Science \(B.S.\) in Technical Studies](#)

For more information, please contact Thomas Edison State University's Professional Learning Review Office via email at plr@tesu.edu.