



P.K. Pathways: Engineering





LEIGH ANNE BREWSTER

PLTW/Engineering
Instructor



CHRISTIE MCELROY

11th-12th Grade
School Counselor



CHRISTY GABBARD

Director of
Secondary Programs



EMILY EUBANKS

Communications Director



Our School. Your Future.

P.K. Pathways
provides purposeful, in-depth
focus for how a student spends
their *elective*
time in high school.



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P A T H W A Y S

BAND

Engaging students through creativity and disciplined coursework in Band

CAPSTONE

Prepping students through additional Advanced Placement coursework

COMPUTER SCIENCE WITH AI (CTE)

Preparing students for a career in Computer science and Artificial intelligence

DESIGN & ENTREPRENEURSHIP (CTE)

Certifying students for a career in Design and Entrepreneurship

ENGINEERING (CTE)

Developing students for a career in engineering

HEALTH & HUMAN PERFORMANCE

Developing students through health and human performance coursework

PERFORMING ARTS

Engaging students through creative coursework in Musical Theater or Theater



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What is Career & Technical Education (CTE)?

Career and Technical Education provides:

- Coherent and Rigorous Content
- Technical Skills
- Transportable Skills
- Industry Certifications
- Opportunities for Bright Futures Gold Seal Scholarship



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Why Choose the Engineering Pathway?

- Pre-Engineering curriculum to prepare for engineering careers in all fields
- Develop in-demand knowledge and transportable skills
- Engaging hands-on classroom experiences with real-world applications
- Opportunities for both collaborative work and independent work
- Ability to create products to solve real-world problems in the local community or your area of interest
- Potential career paths include: mechanical, civil, electrical, biomedical, and other engineering fields.
- A recent study shows PLTW students outperform their peers in school, are better prepared for post-secondary studies, and are more likely to consider STEM careers, compared to their non-PLTW peers.
- Students find PLTW programs relevant, inspiring, engaging, and foundational to their future success.



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Engineering Pathway

- Basic knowledge of Engineering Design Process
- Learn and develop computer-aided design background to build, test, and further develop ideas into real-world, prototyped designs
- Real-world problems often have many solutions, with many pathways to achieve success.
- Be empowered to explore possibilities, experiment, learn from failure, adopt a problem-solving mindset, and engage in challenges that build collaboration and design thinking skills
- Build a foundation for in-demand knowledge that you'll use in high school and for the any career path you may take



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Engineering Pathway

About This Pathway

- 4 Years of Engineering focused coursework
- Physics Honors
- 5 AP Courses
- 5 additional electives

Potential Certifications (in review)

- Florida Core Engineering Certification
- Computer-Aided Design
- Autodesk Revit
- Autodesk Inventor
- Project Management
- RECF Pre-Engineering Certification
- RECF Robotics



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Engineering Pathway

- Introduction to Engineering
- Principles of Engineering
- Digital Electronics (year long)
 - and/or Civil Engineering and Architecture
- Physics Honors
- Engineering Design and Development (year long)



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Example Pathway Progression



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Engineering Pathway for 9th Graders 2023-2024

Pathway Progression: Engineering

9th	Introduction to Engineering
10th	Principles of Engineering
11th	Digital Electronics <i>and/or</i> Civil Engineering Architecture
12th	Physics Honors Engineering Design and Development

Enter Questions in Chat or Scan



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