

SCRANTON STEMM ACADEMY

What is it?

Location

Course Offerings

Technologies

Application Process

¿Qué es?

Ubicación

Ofertas de cursos

Tecnologías

Proceso de solicitud





STEMM Academy

Science, Technology, Engineering,
Mathematics, and Medical

Ciencia, Tecnología, Ingeniería,
Matemáticas y Medicina

Pathways in / Carreras en:

- Computer Science / Ciencias de la Computación
- Engineering / Ingeniería
- Medical / Médico

More About the STEMM Academy

- It is an **all day program** for students in Scranton, PA
Es un programa de todo el día para estudiantes en Scranton, PA.
- There is an **application process** as space is limited
Hay un proceso de solicitud ya que el espacio es limitado.
 - **Applications are due Friday, February 16th, 2024**
Las solicitudes deben presentarse el viernes 16 de febrero de 2024.
- The STEMM Academy is **located at Scranton High School**
La Academia STEMM está ubicada en Scranton High School
- STEMM Academy will follow the **high school bell schedule**
La Academia STEMM seguirá el horario de clases de la escuela secundaria

More About the STEMM Academy

- **Transportation** available - must meet district requirements
Transporte disponible: debe cumplir con los requisitos del distrito
- Participate in sports/ activities at their **home school**
Participar en deportes/actividades en su escuela de origen
 - The STEMM Academy plans to offer after school clubs and activities
La Academia STEMM planea ofrecer clubes y actividades extracurriculares

Goals for the Program

1. Offer the strongest possible academic background through a stimulating academic environment and a challenging, rigorous curriculum that is **student-centered** and focused on **project-based learning**

Ofrecer la formación académica más sólida posible a través de un entorno académico estimulante y un plan de estudios exigente y riguroso centrado en el estudiante y centrado en el aprendizaje basado en proyectos.

2. To be the regional leader in STEMM education by offering **cutting edge technology, flexible learning spaces,** and student engagement through community outreach projects

Ser el líder regional en educación STEMM al ofrecer tecnología de vanguardia, espacios de aprendizaje flexibles y participación de los estudiantes a través de proyectos comunitarios.

STEMM Offers / STEMM OFRECE

Technology Skills
Habilidades tecnológicas

Problem Solving & Innovation
Resolución de problemas e innovación

Unique Opportunities for Teamwork
Oportunidades únicas para el trabajo en equipo

Project Management Skills
Habilidades de administración de proyectos

Project Based Learning / Aprendizaje basado en proyectos

Students are presented with real-world problems and through the process of questioning, research, and iteration, students develop skills in critical thinking, collaboration, and leadership that are necessary for success beyond the classroom.

A los estudiantes se les presentan problemas del mundo real y, a través del proceso de cuestionamiento, investigación e iteración, los estudiantes desarrollan habilidades de pensamiento crítico, colaboración y liderazgo que son necesarias para el éxito más allá del salón de clases.



7th/ 8th Grade STEM ELA

STEM ELA de 7.º/ 8.º grado



- Larger Focus on:
Mayor enfoque en:
 - Soft Skills such as Communication
Habilidades sociales como la comunicación
 - Research / Investigar
 - Comparative Analysis / Análisis comparativo
 - Proposal Writing / Redacción de propuestas
 - Peer Review / Revisión por pares

STEM Lab

- Grades 7-12
 - Project Based Learning
 - Cross-Curricular Lessons
 - Real Life Connections
 - Career Exploration
-
- Grados 7-12
 - Aprendizaje a base de proyectos
 - Lecciones intercurriculares
 - Conexiones de la vida real
 - Exploración de carreras

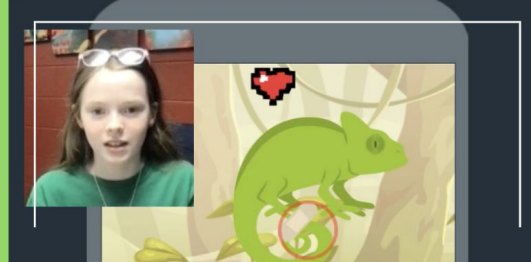
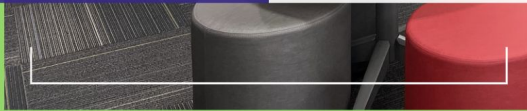


7th Grade STEMM Exploration Courses



ELECTRICAL 3D ARTISTS

ELECTRICITY & CIRCUITRY
SPATIAL VISUALIZATION
3D MODELING & PRINTING



VIDEO GAME DEVS

COMPUTING LOGIC
CODING & CONDITIONALS
GAME MECHANICS DEVELOPMENT



How It Works



SPORTS MEDICINE

EXERCISE PHYSIOLOGY
NUTRITION
INJURY PREVENTION

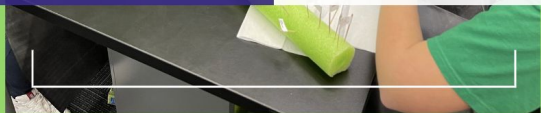


8th Grade STEMM Exploration Courses



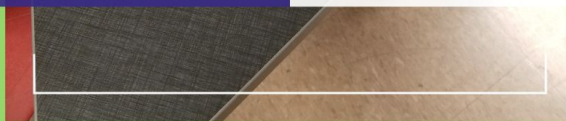
MEDICAL DETECTIVES

PROJECT LEAD THE WAY
DISEASE DETECTIVES
MYSTERIES OF THE HUMAN BODY



APP PROGRAMMING

CODING / PROGRAMMING
DEBUGGING
PROTOTYPE DEVELOPMENT



GREEN ARCHITECTURE

PROJECT LEAD THE WAY
ARCHITECTURAL BASICS
SUSTAINABLE ARCHITECTURE



School Year 2022-2023 / Año Escolar 2022-2023

7th Grade / Séptimo grado

STEM ELA 7

Pre-Algebra/ Accelerated Math

Science 7 / Ciencia 7

STEM Lab / Laboratorio STEM

Lunch / Almuerzo

World Cultures & Geography II / Culturas del Mundo y Geografía II

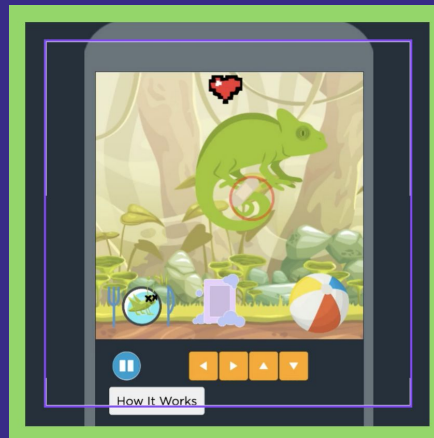
Sports Medicine / Medicina deportiva

Physical Education / Educación Física

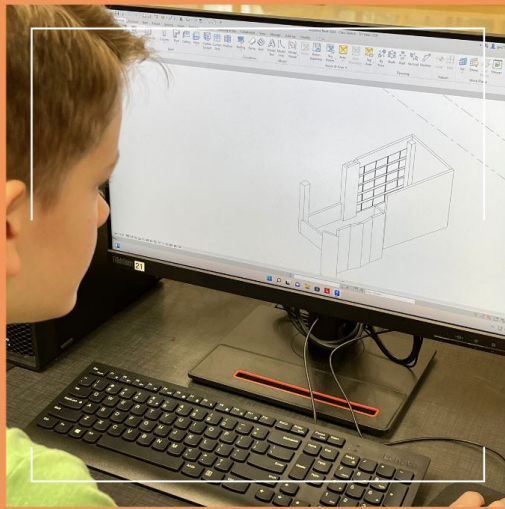
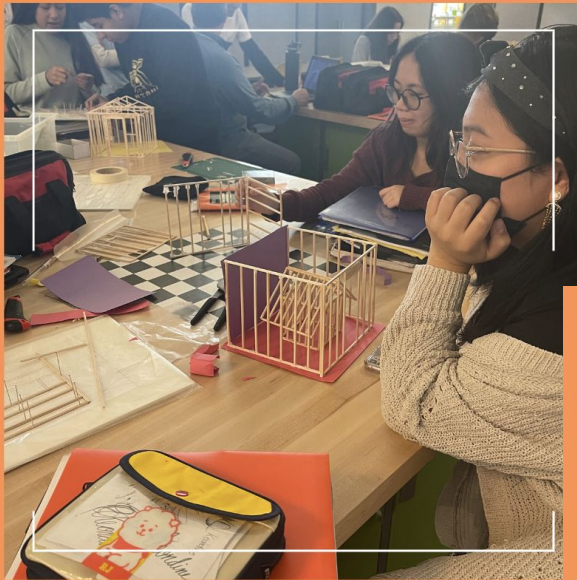
Video Game Devs / Desarrolladores de videojuegos

3D Artists / Artistas 3D

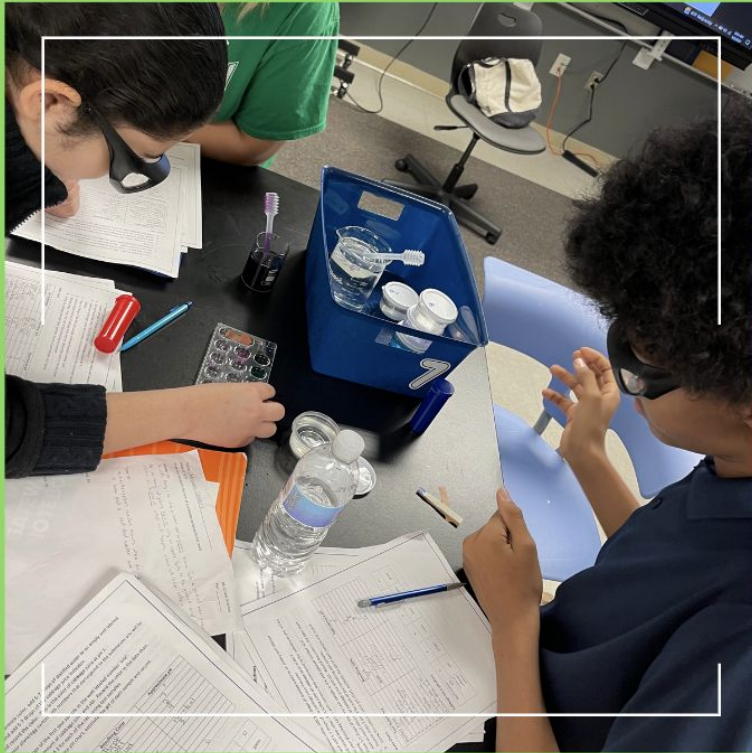
Project Based Learning



Project Based Learning



Project Based Learning



Project Based Learning



Some of our “other” STEMM Students...



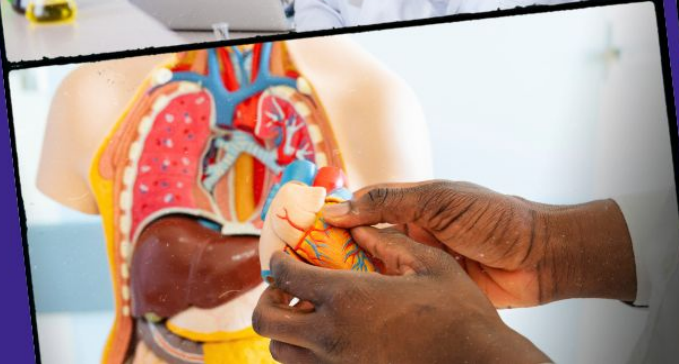
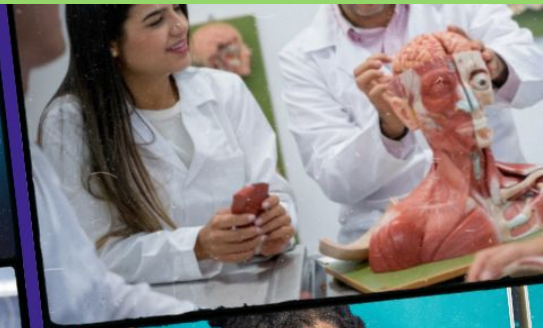
MEDICAL ELECTIVES

***PLTW PRINCIPLES OF
BIOMEDICAL SCIENCE***

***PLTW MEDICAL
INTERVENTIONS***

HUMAN PHYSIOLOGY

AP PSYCHOLOGY



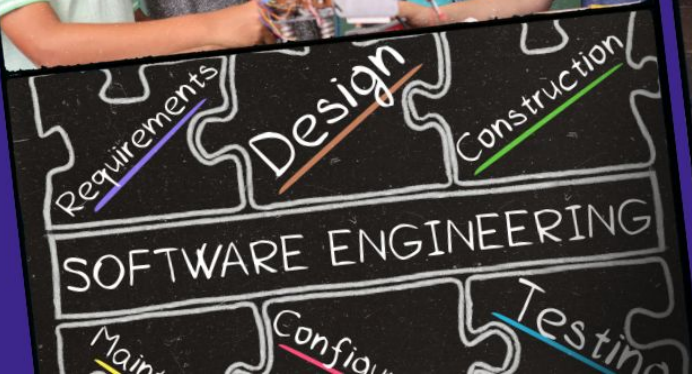
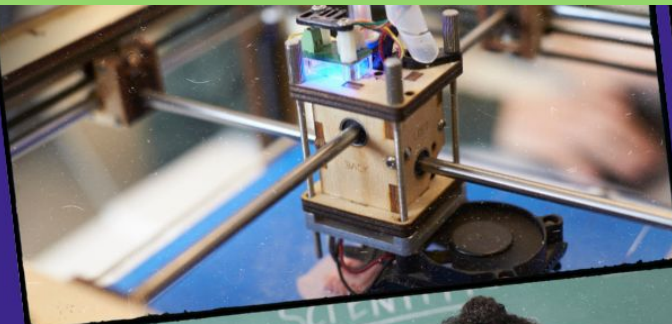
ENGINEERING ELECTIVES

*PLTW INTRODUCTION TO
ENGINEERING*

PLTW PRINCIPLES OF ENGINEERING

*INTRODUCTION TO
ARCHITECTURE/ CAD*

PLTW DIGITAL ELECTRONICS



COMPUTER SCIENCE ELECTIVES

WEB DEVELOPMENT

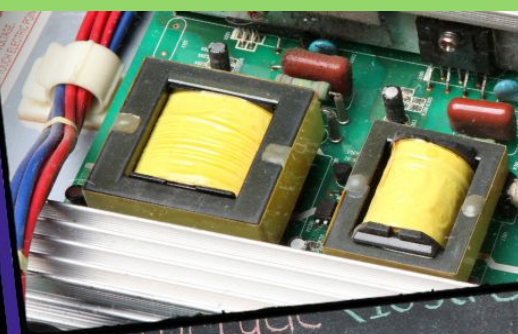
COMPUTER LANGUAGES

AP COMPUTER SCIENCE A

**INFORMATION AND
CYBERSECURITY**

Programming
Languages

C++
Assembly
C
Objective-C
Java



```
#include <string>  
using namespace std;  
  
int main()  
{  
    cout << "Hello!  
    cin.get();
```



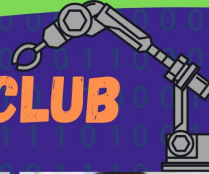
After School Programs

Pennsylvania Junior Academy of Science
Bookworms
Girls in STEM

DIGITAL ART



ROBOTICS CLUB



Vex Robotics and RADC Drone
Competitions

GAMING CLUB



Modding, Challenges, Speed Runs,
Survival & Creative Modes



Application Process

Prerequisites:

- Recommended for Pre-Algebra in 7th Grade (Strongly Recommended)
All students who are interested are encouraged to apply!

Students who do not get accepted may be placed on a waitlist based on total score. Pending availability, those on the waitlist may be offered an opening prior to the first day of school each year.

STEM Application Rating System*

QUALIFIER	POINTS
STEM Teacher Recommendation/ Evaluation	10
5th Grade's PSSA Math and Reading Scores	20
Project Based Assessment	20
School Attendance	10
Discipline History	10
Interview or Essay**	10

**Scores will not be released and only used in the event there are more applicants than enrollment openings.*

***To be used only in the event of a tie for acceptance*



Website
stemm.scrsd.org

Thank You!!!

