



ENGINEERING ARCHITECT INITIATIVE

PATHWAY PROGRAM 2024-2025
CURRICULUM - DONATIONS - PARTNER OPPORTUNITIES

OVERVIEW
CURRICULUM - IMPLEMENTATION



ENGINEERING ARCHITECT INITIATIVE

GAMING IS BIG BUSINESS

2023 REVENUE
\$68.3 BILLION

INDUSTRY GROWTH AND INNOVATION

The **RL Carmouche Pathway Program** aims to assist students from economically and socially disadvantaged backgrounds in pursuing careers in **Engineering, Architecture, Film Production AND Gaming Industry**. By leveraging children's enthusiasm for gaming, the program creates a pathway to high-income career opportunities. It strategically groups children with similar interests, guiding them toward the industry that best suits their talents. The ultimate goal is to build a generation of individuals from disadvantaged backgrounds who achieve higher incomes and improved economic stability.

The **RL Carmouche Pathway Program** will guide students from economically and socially disadvantaged backgrounds toward careers in Engineering, Architecture, and the Film Production Industry. Along the way, participants will learn a wide variety of skills, including social skills development, leadership, teamwork, networking, and exploring career paths in Engineering, Architecture, Film, Animation, Advertising, 3D Modeling, and related industries.

The Believe Gaming Center will serve as a safe and engaging space for kids to learn and grow. We will offer workshops and classes focused on logic, top bottom design. Our curriculum will help children understand the principles behind technology and how to apply them in various fields.

In addition to technical skills, we will emphasize developing social skills among our participants. Gaming is a social activity that requires collaboration, communication, and teamwork. We will provide opportunities for children to interact with their peers in a safe and welcoming environment, building relationships that can last a lifetime.

The center will also be a resource for children interested in exploring career paths in Engineering, Architecture, Film, Animation, Advertising, 3D Modeling, and related industries. We will host events and invite guest speakers who work in these fields to share their experiences and offer advice to our participants.

Our vision for the center is to create a community of young people who are passionate about technology, gaming, and innovation. By providing a space for children to explore these interests, we hope to inspire the next generation of leaders in these industries.

We can create a space where children can learn, grow, and develop the skills they need to succeed in the future.

CAREER OPPORTUNITIES

COMMUNITY SOCIAL SKILLS

HEALTHY COMPETITION

TOP 5 REASONS TO IMPLEMENT ENGINEERING ARCHITECT INITIATIVE

1

EMPOWERMENT AND EDUCATION:

Support for Students: Contributions help provide resources and opportunities for aspiring engineers and architects, fostering a new generation of skilled professionals. **Scholarships and Financial Aid:** Donations can fund scholarships, making education accessible to talented students from diverse backgrounds who may not

2

INDUSTRY GROWTH AND INNOVATION

Talent Development: By supporting this program, donors help cultivate a well-trained, innovative workforce that can drive advancements in engineering and architecture.

Research and Development: Funds can be used to support cutting-edge research projects, leading to breakthroughs and technological advancements that benefit

3

CORPORATE SOCIAL RESPONSIBILITY

Enhanced Reputation: Partnering with and donating to educational initiatives demonstrates a company's commitment to social responsibility, improving its public image

4

COMMUNITY AND ECONOMIC IMPACT:

Job Creation: Investing in education and training programs leads to job creation, both directly within the program and indirectly through the success of its gradu-

5

LONG-TERM SUSTAINABILITY:

Sustainable Development Goals (SDGs): Supporting educational programs aligns with several UN SDGs, such as Quality Education, Decent Work and Economic Growth, and Industry, Innovation, and Infrastructure.

DEMOGRAPHIC PROFILE

IMPLEMENTATION

FALL - WINTER 2024 / SPRING 2025

Be one of the first high schools in the United States to take the proactive step to focus specifically on e-sports, with the goal of better supporting the school's mission of offering innovative academic curriculum that encourages critical thinking and collaborative work, thus preparing their student body for the future.

EQUIPMENT

12 Gaming PC Computer	\$1579	12	\$18,948
12 27inGaming Monitors	\$119	12	\$1,428
12 Keyboard/mouse hdst	\$99	12	\$1,188
12 gaming chairs	\$105	12	\$1,260
1 65 in monitor broadcast	\$713	1	\$713
6 Wifi antennas 4 pack	\$10	6	\$60
12 webcam	\$19.99	12	\$239.88
12 desk with cable mangt	\$315	12	\$3,780
Total:			\$27,616.88

INSTALLATION IMPLEMENTATION

Installation Unboxing Setup	\$7,500
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CURRICULUM

FALL - WINTER 2024

Designing a curriculum for a teenage after-school program that covers career development in architecture, film production, product visualization, engineering, and learning Unreal Engine can provide a well-rounded educational experience. Here's a sample curriculum that incorporates these areas:

WEEK 1

- Introduction to Architectural Visualization
- Overview of architectural visualization and its applications
- Understanding the role of Unreal Engine in architectural visualization
- Exploring architectural design principles and terminology
- Importing CAD files and creating basic architectural scenes in Unreal Engine

WEEK 2

- Lighting and Materials in Architectural Visualization
- Importance of lighting in architectural visualization
- Creating realistic lighting setups using Unreal Engine
- Applying materials and textures to architectural elements
- Enhancing visual quality through post-processing effects

WEEK 3

- Virtual Reality for Architecture
- Introduction to virtual reality (VR) in architecture
- Designing interactive and immersive VR experiences in Unreal Engine
- Implementing VR navigation and interaction mechanics
- Optimizing architectural scenes for VR performance

WEEK 4

- Film Production and Pre-visualization
- Overview of film production processes and roles
- Creating virtual sets and environments in Unreal Engine
- Understanding camera techniques and shot composition
- Pre-visualization techniques for planning film scenes

CURRICULUM

FALL - WINTER 2024

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WEEK 5

Real-Time Visual Effects in Film Production

- Utilizing Unreal Engine's real-time rendering for film production
- Creating realistic visual effects, such as explosions or weather effects
- Incorporating particle systems and simulations into film scenes
- Compositing visual effects with live-action footage

WEEK 6

Product Visualization and Marketing

- Introduction to product visualization and marketing
- Creating interactive product demonstrations in Unreal Engine
- Designing virtual showrooms and configurations
- Implementing interactive elements and animations for product visual-

WEEK 7

Engineering Simulations and Training

- Applying Unreal Engine for engineering simulations and training
- Creating interactive training environments for engineering concepts
- Simulating physical phenomena and performing virtual experiments
- Incorporating real-time data visualization and analysis

WEEK 8

Project Development and Showcase

- Working on individual or group projects that combine elements of architecture, film production, product visualization, and engineering
- Applying acquired skills and knowledge to develop a final project using Unreal Engine

SHOWCASE

FALL - WINTER 2024

Showcasing students work. additional Deliverables

Throughout the program, provide opportunities for students to engage in hands-on activities, collaborate in teams, and explore additional resources and tutorials related to their specific interests. Encourage creativity, problem-solving, and critical thinking skills while emphasizing the practical

ARCHITECTURAL VISUALIZATION:

With Unreal Engine, you can take your data from raw CAD, BIM, or DCC files to stunning immersive real-time experiences and offline-rendered-quality linear media in less time than you thought possible. Then, iterate to your heart's content, react to feedback, and see your changes update in the blink of an eye.

FILM, TELEVISION, AND ANIMATION:

Create compelling characters. Tell untold stories. Or let your audience explore a whole new world for themselves. Unreal Engine gives you unprecedented creative control over the entire production process, with 3D assets you can reuse across every phase of production—and beyond.

GAME DEVELOPMENT

The World's Most Advanced Game Creation Software

Level up with Unreal Engine: Everything you need to build and ship successful multi-platform video games
