UTOPIAN
ACADEMY FOR THE ARTS
HIGH SCHOOL

Course Description
Computer Science Pathway

• **Computer Science Principles** provides scholars with a robust education in coding and technology. The program covers a range of topics, including computing systems, networks, data analysis, algorithms, and programming. Scholars learn to code in Python, a versatile and widely used programming language, which prepares them for advanced studies and careers in technology. The course also emphasizes practical skills through hands-on projects and competitions, allowing scholars to apply their knowledge in real world scenarios. Additionally, the program benefits from national endorsements and partnerships, providing scholars with access to a network of computer science educators and resources.

• **Artificial Intelligence** offers scholars a comprehensive introduction to AI technologies and their applications. This course is designed to provide hands-on learning experiences, enabling scholars to understand and appreciate the impact of AI in various industries. Key components of the course include fundamentals of AI, practical applications and collaboration with industry partnerships. The course aims to prepare scholars for future careers in AI and related fields, fostering both academic and career growth.

• **Game Design** offers scholars a comprehensive introduction to game development and coding, utilizing industry-standard software. Key components of the course include learning coding fundamentals of basic programming languages through visual block coding. Game Development utilizes platforms that allow scholars to design and develop their own games. Emphasizing brainstorming, planning, and executing game projects. Gaining industry opportunities to interact with industry professionals, offering real-world insights and hands-on experiences. By the end of the course, scholars will have a solid foundation in the computer science pathway, ready to pursue further studies or careers in technology and digital arts. Scholars will explore the use of digital tools and industry software in Adobe Suites, Toon Boom Harmony/Pro Suites, Scratch, Code.Org, Unity, Unreal Engine, and Roblox.