Idyllwild Arts Academy has been offering a STEAM education long before the acronym was even coined. Across arts and academics, our students think critically and holistically and problem solve with agility and imagination. As a community of citizen artists, we approach the world with wonder, critique, inquiry and innovation. From using Auto Cad, to designing the next theater set, to 3d printing a coliseum-themed collar for a Grecian gown, Idyllwild Arts Academy students are living examples of the value of a STEAM education.

Examples of our many STEAM-infused courses include:

**3D MODELING**: Explores the basic concepts, principles, practices, tools, and techniques used in the creation of assets for games, film, and VFX.

**COMPUTER GAME DESIGN**: Introduces students to the fundamentals of game design and programming, with a focus on games as a storytelling medium.

**CREATIVE TECHNOLOGY**: Team-taught by Math and Visual Arts faculty, this class investigates the relationship between technology and art using 3D printers, CNC routers, and laser engraving.

**COMPUTER MUSIC APPLICATIONS**: Explores the use of programs such as Sibelius and Finale and their use in Music Composition and arranging.

**RECORDING AND PRODUCTION**: Introduces students to the fundamentals of audio engineering.

**SOUND SYNTHESIS AND MIDI**: Explores the fundamentals of synthesis and electronic music production.

**DESIGN/TECH LAB**: Offers design and technical production students the opportunity to explore individualized curricula in the area of design and technical theatre.
DRAFTING FOR THEATRE: Explores the fundamentals of drafting, including basic drafting equipment, development of proper technique, and use of scale and industry standards.

PRODUCTION DESIGN SEMINAR: Topics include set design, set construction, and scenic painting, as well as hands-on production and support for campus performances.

DIGITAL ART & DESIGN: Students learn the basics of graphic design and benefit from deep exploration of the vast array of the Adobe Suite’s design capabilities.

DARKROOM & DIGITAL PHOTOGRAPHY: Digital technology, composition, film development, darkroom printing techniques, and presentation build comprehensive understanding of the medium. Advanced students combine photography with mixed media (painting, drawing, three-dimensional, and alternate processes) to expand their ideas.

PRINTMAKING: Explores history, concepts, and techniques of printmaking. Processes covered include woodcut, linoleum cut, drypoint, etching, and lithography.

ARCHITECTURE: Learn the basic principles of design, scale, function and place.

ANATOMY AND KINESIOLOGY: the study of the structure and function of the locomotive system especially as it relates to the art of dance.

PUBLISHING: Students develop a variety of skills necessary for today’s professional writers: editing, web design and management, event coordinating, marketing and publicizing, book reviewing, and interviewing.

VIRTUAL REALITY/360 STORYTELLING: Students master writing, pre-visualization, production, and post production techniques utilized for immersive narrative and documentary creation of virtual reality in a project-based environment.

VISUAL EFFECTS: Basic introductions to Photoshop, After Effects, Maya, and Nuke allow students to continue simple effect creation and image manipulation for artistic enhancement of their projects.

CINEMATOGRAPHY: explores the expressive and technical aspects of cinematography, culminating in a capstone project.

POST PRODUCTION: from foundational to advanced, the post-production modules focus on techniques for picture and sound and introduce students to visual effects in editorial.

ELECTRONICS FOR MUSICIANS: Explores the ways in which discrete components (resistors, capacitors, transistors, etc.) can be combined to perform basic electronic functions, as well as exposure to schematic diagrams of notable electronic musical equipment.