



Expanded Learning Opportunities (ELO)

Digital Careers Course Catalog

For 4th to 12th grades

High-Interest electives | After School | Enrichment | Summer | Self-paced

Course Catalog
School Year 2024-25



YaizY ELO Programs



The most exciting way to explore digital careers for students



Uncover your passion by exploring diverse careers



Ignite curiosity and motivation through interactive learning



Experiment with professional tools and create unique projects



Receive dedicated support and guidance from YaizY teachers

Transferable skills

Industry credentials

Real-world tools

Project-based

Superstory design

93%

Increase in Social Emotional Learning (SEL) competencies

90%

Student Satisfaction

87%

Understanding of Future Professions



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Explore YaizY ELO courses in digital-careers clusters



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Intro to Coding with Scratch

Course Summary

The course introduces students to the basics of Scratch programming. Students start the course by working with the fundamentals of sprites, costumes, and backdrops. They then learn core programming concepts from sequencing and repetition to selection and variables. They also use various coding tools to strengthen their core computer science skills.

Key skills

PC Settings & Operations

Scratch Programming

Presentation Software

Storyboarding

Collaboration

Pattern Recognition

Animation

Logical Reasoning

Main project: Scratch Mini-Game:
Exhibition of Computer Games

 Google Workspace tools, Scratch

Google Workspace

SCRATCH

Intro to Coding with Python

Course Summary

The course introduces students to the basics of Python programming. Students use the Turtle library to create graphics, manage variables, and construct control flows. They develop foundational coding skills to create capstone projects with personalized art and interactive stories.

Key skills

Python syntax

Control Structures

Variable Manipulation

User Interaction

Debugging Techniques

Creative Coding

Algorithmic Thinking

Problem-solving

Main project: A user-driven narrative
program combining Turtle graphics,
decision-making, and input

 Google Workspace tools, coding tools

Google Workspace

 replit

AI Pioneers: Foundations of Data Analytics


Course Summary

This course introduces students to data analytics, including an understanding of AI's role in the field. Students will organize and analyze data in Google Sheets, visualize findings in Tableau, and interpret statistical data. They'll explore how AI can enhance data analysis while maintaining a strong commitment to ethical data practices.

Key skills

- Data Structuring
- AI Applications
- SQL Data Retrieval
- Visualization with Tableau
- Statistical Interpretation
- Ethical Data Handling
- Machine Learning Basics
- Analysis in Google Sheets

Main project: GreenSight - City Eco-Revival Plan

 Google Workspace tools, Tableau, AI tools



Advanced Python Coding


Course Summary

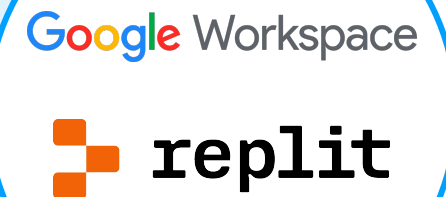
This advanced course helps students with prior exposure to Python and fundamental mathematics into the realm of machine learning and AI. It's designed for those who are eager to explore the sophisticated use of Python libraries like pandas and matplotlib for data science, coupled with learning about AI ethics.

Key skills

- Advanced Python Programming
- Mathematical Modeling
- Data Preprocessing
- Ethical AI
- Project Deployment
- Machine Learning Algorithms
- Natural Language Processing
- Deep Learning Fundamentals

Main project: AI Market Forecaster

 Google Workspace tools, coding tools, AI tools



Rise of the Robot

Available in
AY 24/25


Course Summary

Jumpstart your engineering journey with a hands-on course that fuses 3D design, robotics, and electronics. Through project-based learning in Tinkercad, students develop skills needed for STEM careers and learn to craft innovative solutions to real-world problems.

Key skills

Safety Procedures and Protocols Engineering Design Process
Robotics Fundamentals Technical Drawing and Drafting
Circuit Design and Prototyping 3D CAD Design

Main project: Automated miniature smart greenhouse: A Tinkercad design project

 Tinkercad, Google Workspace

Google Workspace



Cyber Defenders


Course Summary

Embark on an immersive journey into the fast-evolving world of cybersecurity. This hands-on course covers core concepts of digital safety, data protection, and cyber ethics. It leverages the capabilities of Scratch, Google Spreadsheets and tools associated with cybersecurity.

Key skills

Programming Foundations
Cyber Literacy Data Analysis Problem-Solving
Cyber Ethics and Law Security Awareness

Main project: Cyber Defender's Toolkit on Cyber Safety Practices

 Google Workspace tools, coding tools

Google Workspace



WebCraft

Available in
AY 24/25

Course Summary

In this course, students learn HTML and CSS to build and style their own websites. From structuring content with HTML to adding flair with CSS, students gain the tools needed to bring their creative visions to life in the digital world.

Key skills

HTML Fluency

CSS styling

UI Principles

Design Principles

Problem-Solving

Critical-thinking

Collaboration

Main project: My Digital Canvas:
Crafting a Personal Portfolio Website



Google Workspace tools, coding tools,
graphic design tools

Google Workspace



Mobile App Architects

Available in
AY 24/25

Course Summary

In this course, students elevate their web-design skills to create mobile apps using JavaScript with React Native. They learn to design, code, and deploy apps for iOS and Android, gaining practical experience in mobile development.

Key skills

JavaScript Programming

App Deployment

React Native Framework

Prototyping & Wireframing

Debugging and Testing

User-Centered Design

Main project: Create a functional,
user-friendly mobile app



Google Workspace tools, coding tools,
graphic design tools

Google Workspace



Marketing Kickstart

Course Summary

This course covers marketing and sales fundamentals. Students build job-ready skills by creating their own marketing campaigns. With a strong focus on core marketing functions, they explore marketing planning (target audience analysis), market research, pricing, service management, promotion (ways to get people to know your product), channel management (ways the product reaches the user) and sales.

Key skills

Target Audience Analysis

Teamwork

Goal-setting

Market Research

Promotion

Pricing

Main project: A detailed marketing plan for a new product or service of the student's choosing



Google Analytics, Canva, ClipChamp, Wix



Digital Marketing Wizards

Course Summary

In this course, students learn how to create effective, high-impact website landing pages. Utilizing real-world case studies, students create a website for their chosen social issue. They gain practical experience in using Wix and understanding key elements of web design.

Key skills

Impact marketing


Landing page design in Wix

UX & UI design

Digital analytics

Data analysis

Main project: website landing page

 Wix ADI and Analytics, Google Analytics



Digital Marketing All-Stars

Course Summary

Students explore the landscape of content creation for impact marketing. They learn the essentials of social media; design Instagram posts for promoting social topics; create engaging short videos (e.g., TikTok); and write compelling emails. Students ultimately launch their own marketing campaigns.

Key skills

Impact marketing

Video Production


Copywriting

Graphic design

Social Media Management

Content Creation

Main project: impact marketing campaign for social media

 Canva, ClipChamp



eSports Business Lab

Course Summary

This course lays the foundation for a student to understand the basics of leadership and business management through an eSports organization. Students acquire management experience and leadership skills, including creating a startup business plan, financial model, and company “pitch” presentation.

Key skills

Business plan development

Business Model Canvas creation

Team Formation & Identity

Business idea development

Main project: Business Plan Presentation

 Google Slides, Docs, Strategizer, Canva

Google Workspace

Managing eSports Organizations

Course Summary

In this course, students learn how to create and grow a startup in the thriving eSports industry. Students explore and develop management skills in strategic planning, organizational design, talent development, effective leadership, operations, and finance. In the process, they also gain experience in trade-off analysis, decision-making, and presenting results.

Key skills


Hiring & Talent Acquisition

Financial Analysis & Projections

Quality Control

Organization Strategy & Structure

Main project: eSports organization presentation

 Google Slides, Docs, Strategizer, Canva

Google Workspace

Startup IdeaLab

Course Summary

In this course, students learn the fundamentals of building a successful startup. Students delve into market research to identify their target market; evaluate competition; create a compelling value proposition; and develop a minimum viable product (MVP). By the end of the course, they develop the tools and strategies to kickstart their own startup journey and thrive in the dynamic world of entrepreneurship.

Key skills

Market Research

Target Market Definition


Business Modeling

MVP Development

Sales Channels Strategies

Competitor Analysis

Main project: Business Plan
Presentation

 Google Slides, Docs, Canva

Google Workspace

From Startup to Unicorn

Course Summary

In this course, students learn how to plan and implement proven growth strategies by exploring characteristics of real-world high-growth companies. Students learn how to catalyze organizational growth with appropriate investment and resourcing. As a capstone, they present their company growth plan to showcase their business approach and operational plans to create the next 'unicorn'.

Key skills


Operational Processes Building

Financial Analysis & Projections

Exiting a Startup

International Expansion Strategy Development

Main project: Company presentation

 Google Slides, Docs, Canva

Google Workspace

Digital Comics Storytelling

Course Summary

Students envision and create digital comics -- from idea generation to story scripting to page designs. They apply storytelling and visual communications techniques to create their own comic universe that includes characters, rules, and environment. The course also builds core art skills in graphic design, aesthetic visuals, color theory, and comics history.

Key skills

Storytelling


Visual Communication

Scriptwriting

Character Development

Sketching, Color, Texture Techniques

Main project: Comic pages with a focus on character design, world-building, and storytelling

 Pixton, Canva



Designing Comics Bestsellers

Course Summary

Students learn essential techniques to create compelling and visually-captivating comics from the comic panels to the final stages of publishing. They gain insights into the diverse ecosystem of comic publishing, marketing strategies, and distribution channels. Students develop the knowledge and tools to transform their comic panels into professionally published comics that elevate their stories to a wide audience.

Key skills

Panel Layout Development

Marketing & Promotion

Publishing

Main project: Comic book published on different resources

 Pixton, Canva



Available in
AY 24/25

Perfecting UX Design

Course Summary

In this course, students delve into the fundamentals of the exciting field of User Experience (UX) design. Students learn to identify product pain points, generate innovative design solutions, wireframes, prototypes, and mockups. They also engage in best practices for testing designs with valuable user feedback.

Key skills

Wireframing

Prototyping

Customer Development

Visual Design

Information Architecture

Main project: User-friendly interface for website



UXPressia, Figma

UXPRESSIA



Animation Universe

Course Summary

In this course, students learn about a spectrum of fundamental animation techniques. They create short animated GIFs using various style techniques - 2D, 3D and stop motion. Students also learn how to combine their work into a compelling showreel to demonstrate their new skills.

Key skills

2D Animation


3D Animation

Stop Motion Animation

Video Editing

Giving Feedback on Creative Work

Main project: Animated showreel

 BrushNinja, CloudStopMotion, MonsterMash



12 Principles of Animation

Course Summary

This course covers an array of foundational principles that drive animation. During the course, students apply these principles to create dynamic and engaging animations, refining their animation skills and artistic understanding to create an animated showreel as the capstone project.

Key skills

Impact Marketing

Video Production


Copywriting

Graphic Design

Social Media Management

Content Creation

Main project: Animated showreel

 BrushNinja, CloudStopMotion



Stop-Motion Movie Studio

Course Summary

In this course, students learn how to create impactful animated films using stop-motion animation techniques. Students explore how animation can be employed as a powerful tool for raising awareness and sparking conversation on social topics. They learn the intricacies of stop-motion animation and stages of production from scriptwriting and storyboarding to character design and post-production.

Key skills

Sound Design

Set Construction

Storytelling

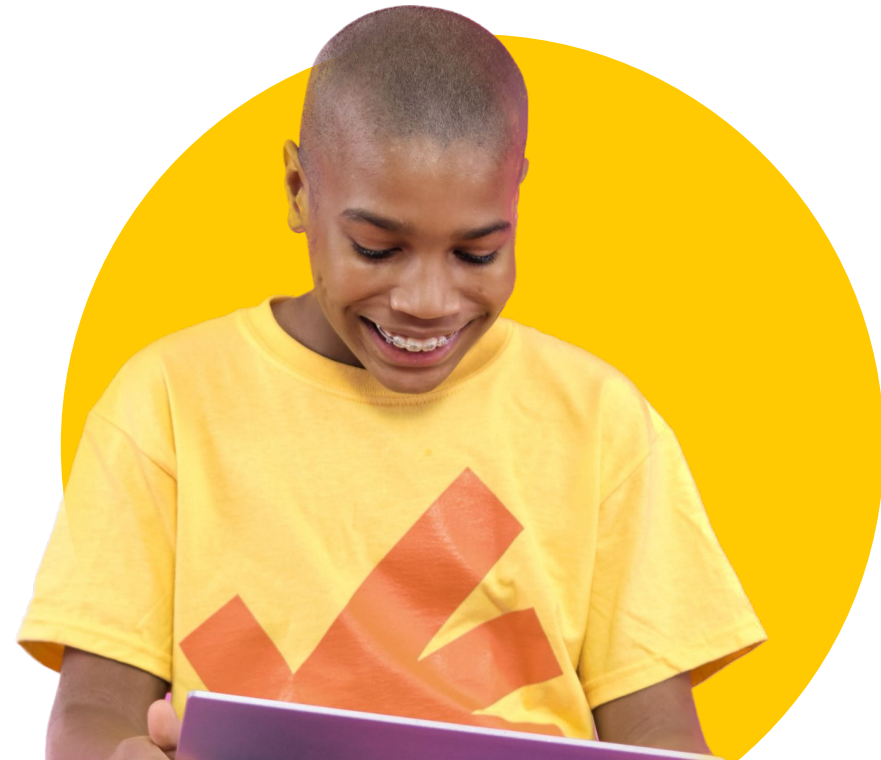
Video Editing

Prop Manipulation

Main project: Two short animated films on social topics



CloudStopMotion



Intro to Game Design


Course Summary

Students explore the dynamic world of game design, transitioning from paper-based game concepts, delving into digital text narratives, and concluding with video game development. This blend of theory and varied practical projects equips them with a comprehensive skill set, positioning them to innovate in the gaming arena.

Key skills



Main project: A GDevelop game of a chosen genre with a Game Design Document, interface, and UI design

 GDevelop, Twine, Canva, Google Workspace, Neural networks tools

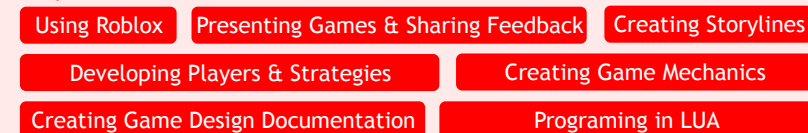


Roblox Game Design

Course Summary

Students develop projects and games using the Roblox Studio engine. After learning the basics of game design and game promotion, students develop the skills to launch their own game by the end of the course.

Key skills



Main project: A multiplayer cross platform Roblox game from scratch and it's promotion strategy

 Roblox, Google Workspace



Creative Video Production

Available in
AY 24/25

Course Summary

Students gain hands-on experience in capturing visuals and recording audio to create integrated multimedia projects. They garner hands-on experience in capturing visuals, recording audio, and combining them to craft immersive multimedia projects. Students learn diverse skills as content creators, filmmakers, and multimedia enthusiasts to create compelling digital content.

Key skills


Scriptwriting

Digital Filmmaking & Editing

Artistic Research

Sound Design

Digital Filmmaking & Editing

 ClipChamp, Canva

clipchamp

AI Video Editing

Available in
AY 24/25

Course Summary

In this course students learn the art of video editing using cutting-edge AI technology. They explore core concepts of video editing while harnessing the power of AI to streamline their workflow. With the introduction of AI tools and techniques, they learn to create captivating videos for artistic, creative, and professional endeavors. Students also gain knowledge about the safe use of AI and ethical considerations surrounding its implementation in video editing.

Key skills

Filmmaking


Video Editing

Creative Thinking

Sound Design

Storytelling

Pitching a Creative Product

 ClipChamp, Canva, Synthesia, Vidyo.ai

clipchamp

Thank you!

** IBC is ~75% integrated in the course
*** IBC is approved, but for other course

Visit our website!

