PART_4_Five_Learning_Tracks _Curriculum

PART 4: Five Career-Focused Learning Tracks

Comprehensive Curriculum Design with 4-Year Pathways (Grades 9-12)

Design Philosophy: Progressive skill-building from foundational

to portfolio-ready mastery

Structure: Each track builds from exploration → skill development → specialization → portfolio/capstone

Flexibility: Students can take courses from multiple tracks or

focus deeply in one area

Track Design Framework

Common Elements Across All Tracks

Year 1 (9th Grade): Foundation & Exploration - Introduce fundamental concepts and tools - Broad exposure to career possibilities - Build basic technical skills - Low-pressure experimentation

Year 2 (10th Grade): Skill Development - Develop intermediate technical proficiency - Begin portfolio-quality work - First industry certification(s) - Collaborative projects

Year 3 (11th Grade): Specialization & Advanced Work - Master advanced techniques - Earn additional industry certifications - Build substantial portfolio pieces - Client work or real-world projects

Year 4 (12th Grade): Capstone & Career Readiness - Senior capstone project or portfolio - Professional-quality work for college applications or career entry - Internship or mentorship opportunities - College/career pathway planning

TRACK 1: Digital Media Production & Broadcasting

Target Careers

- **Primary:** Video Producer, Broadcast Journalist, Content Creator, Documentary Filmmaker, Social Media Video Producer
- **Secondary:** News Producer, Sports Broadcaster, Video Editor, Cinematographer, Streaming Producer

Career Outlook (from Part 1 Research)

- Video Production Specialist: \$60K-\$90K (mid-level), 15-18% growth
- Broadcast Journalist: \$55K-\$85K (local), 5-8% traditional / 15% + digital growth
- Content Creator: \$52K-\$81K, 20-30% growth
- Video Editor: \$55K-\$85K, 12-15% growth

Core Competencies

Technical Skills: - Camera operation and cinematography - Video editing (Adobe Premiere Pro, DaVinci Resolve) - Lighting design and execution - Audio capture and mixing - Multi-camera production and live switching - Motion graphics (After Effects basics)

Creative Skills: - Visual storytelling and narrative structure - Interview techniques - Scriptwriting and storyboarding - Documentary research and production - Broadcast journalism standards and ethics

Soft Skills: - Collaboration (crew-based work) - Time management and deadlines - Client communication - Problem-solving under pressure - Attention to detail

4-Year Curriculum Pathway: Track 1

9th Grade: Introduction to Digital Media

Course: Fundamentals of Digital Media Production

Credits: 1.0 (year-long) or 0.5 (semester)

Learning Objectives: - Understand basic principles of visual storytelling - Learn camera operation fundamentals (exposure, focus, composition) - Master basic video editing in Adobe Premiere Pro - Capture quality audio for video - Complete 3-5 short video projects

Key Projects: 1. "About Me" video (1-2 minutes) - learn camera basics and editing 2. Short narrative film (3-5 minutes, scripted) 3. Interview/profile documentary (5-7 minutes) 4. Public Service Announcement (30-60 seconds)

Tools/Software: - Adobe Premiere Pro (editing) - DSLR/mirrorless cameras - Basic lighting kit - Lavalier and shotgun microphones - Tripods and basic camera support

Assessments: - Portfolio of 3-5 completed videos - Technical skills demonstrations (camera operation, lighting setup) - Peer critique and revision process - Final project presentation

10th Grade: Intermediate Production & Broadcast Journalism

Courses: Video Production II + Introduction to Broadcast

Iournalism

Credits: 1.0-1.5 total

Learning Objectives: - Develop advanced camera techniques (camera movement, complex lighting) - Learn multi-camera production and live switching - Master broadcast journalism storytelling (packages, live shots, anchoring) - Understand journalistic ethics and standards - Begin building professional portfolio - Earn first certification

Key Projects: 1. News package (1:30-2:00, field reporting + editing) 2. Multi-camera interview or panel discussion (liveswitched) 3. Short documentary (8-12 minutes) with substantial research 4. Live news broadcast (student-produced weekly or monthly show)

Tools/Software: - Multi-camera setups with video switcher (ATEM) - Teleprompter - Adobe Premiere Pro (advanced techniques) - DaVinci Resolve (introduction to color grading) - Adobe Audition (audio post-production)

Industry Certifications: - Adobe Certified Professional:

Premiere Pro (target: spring of 10th grade)

Assessments: - Professional demo reel (2-3 minutes) - News package portfolio (3-5 packages) - Live broadcast performance evaluation - Certification exam

11th Grade: Advanced Production & Specialization

Courses: Advanced Video Production + Documentary Filmmaking

OR Sports Broadcasting **Credits:** 1.0-2.0 total

Learning Objectives: - Master cinematography and lighting design - Develop advanced editing and color grading skills - Specialize in documentary OR sports production - Produce portfolio-quality work for college applications - Complete client or community projects

Specialization Option A: Documentary Filmmaking -

Research-based documentary production - Interview techniques and B-roll strategies - Narrative structure for nonfiction storytelling - Social issue exploration through film

Specialization Option B: Sports Broadcasting - Live sports production (multi-camera) - Play-by-play and color commentary - Highlight package creation - Graphics and statistics integration

Key Projects: 1. Passion project: 15-20 minute documentary OR sports season recap 2. Client work: Promotional video for school or community organization 3. Advanced lighting/cinematography showcase reel 4. Weekly live broadcast (more responsibility - student producers/directors)

Tools/Software: - Full access to all video production equipment - DaVinci Resolve (advanced color grading) - Adobe After Effects (motion graphics for titles/graphics) - Advanced camera techniques (gimbals, sliders, drones - if available)

Industry Certifications: - Adobe Certified Professional: After Effects (optional but recommended) - FAA Part 107 Remote Pilot Certificate (if drone cinematography interest)

Assessments: - Professional portfolio website with demo reel - Completed documentary or sports production - Client satisfaction (for community projects) - Festival submissions and competition entries

12th Grade: Senior Capstone & Career Preparation

Courses: Media Arts Capstone + Content Creation & Social

Media OR Streaming & Live Production

Credits: 1.0-2.0 total

Learning Objectives: - Produce senior capstone project (thesis film or portfolio) - Develop professional online presence (website, reel, social media) - Build skills in emerging formats (social media video, streaming) - Prepare for college film/media programs OR entry-level career work - Potential internship with local media company or production house

Key Projects: 1. **Senior Capstone Film:** 20-30 minute documentary, narrative short, or episodic series - Pre-production: Pitch, script, storyboards, shot list, production plan - Production: Principal photography with full crew - Post-production: Editing, color, sound design, music - Presentation: Public screening and Q&A

- 1. **Social Media Content Series:** Create consistent content for platform (YouTube, TikTok, Instagram)
 - 10-15 pieces of platform-optimized content
 - Analytics tracking and audience growth
 - Brand partnership or sponsorship (if applicable)
- 2. Professional Portfolio & Reel:
 - Updated demo reel (3-5 minutes of best work)
 - Portfolio website showcasing all work from 4 years
 - Resume and artist statement
 - Festival submissions

Tools/Software: - All video production equipment available - Adobe Creative Cloud suite (full utilization) - Streaming software (OBS Studio, Streamlabs) - Portfolio platforms (Adobe Portfolio, Wix, Squarespace)

Industry Certifications: - Any additional Adobe certifications (Photoshop, Audition if not yet earned)

Career Preparation: - Internship placement (local news station, production company, marketing agency) - College portfolio reviews and feedback - Film festival submissions (student film festivals, regional competitions) - Guest speakers from industry (cinematographers, directors, producers)

Assessments: - Capstone project presentation and screening - Portfolio quality review (by faculty + industry professionals if possible) - College application outcomes (film school acceptances) - Post-graduation tracking (college major, career path)

Portfolio Requirements for Track 1 Graduation

Minimum Requirements: 1. Demo Reel: 3-5 minute video showcasing best work across multiple formats 2. Portfolio Website: Professional online portfolio with: -8-10 video projects (variety: narrative, documentary, commercial, news, etc.) - About/Bio page - Resume - Contact information 3. Certifications: Minimum of Adobe Premiere Pro certification; After Effects recommended 4. Capstone Project: Completed senior film ready for festival submission

Optional but Highly Encouraged: - Film festival laurels or competition wins - Published work (school broadcasts, community clients, online platforms) - Internship experience - Social media following demonstrating content creation success

College Pathways from Track 1

Aligned Majors: - Film Production / Cinema - Broadcast Journalism - Digital Media / Media Studies - Communications - Documentary Studies - Cinematography

Target Schools (Examples): - USC School of Cinematic Arts - UCLA School of Theater, Film and Television - NYU Tisch School of the Arts - Chapman University Dodge College of Film - Emerson College - UT Austin Radio-Television-Film - Loyola Marymount University School of Film and Television Arts - Cal State Northridge (CSUN) - Cinema and Television Arts

TRACK 2: Creative Technology & Design

Target Careers

- **Primary:** UX/UI Designer, Graphic Designer, Motion Graphics Artist, Brand Designer, Web Designer
- **Secondary:** 3D Modeler, Product Designer, Creative Technologist, Visual Effects Artist, Art Director

Career Outlook (from Part 1 Research)

- UX Designer: \$98K-\$130K, 15-20% growth
- UI Designer: \$85K-\$115K, 12-18% growth
- Motion Graphics Designer: \$77,700 median, 15-18% growth
- 3D Modeler: \$60K-\$95K, 12-15% growth
- Graphic Designer: \$60K-\$85K, steady demand

Core Competencies

Technical Skills: - Adobe Creative Suite mastery (Photoshop, Illustrator, InDesign, After Effects) - UI/UX design tools (Figma, Adobe XD) - 3D software (Blender, Cinema 4D) - Web design fundamentals (HTML, CSS basics) - Typography, color theory, composition - Motion graphics and animation

Creative Skills: - Visual problem-solving - User-centered design thinking - Brand strategy and identity development - Prototyping and iteration - Design systems thinking

Soft Skills: - Client communication and feedback integration - Presentation and articulation of design decisions - Collaboration with developers and stakeholders - Time management with multiple projects - Attention to detail and craftsmanship

4-Year Curriculum Pathway: Track 2

9th Grade: Design Foundations

Course: Introduction to Digital Design

Credits: 1.0

Learning Objectives: - Learn fundamental design principles (typography, color, composition, hierarchy) - Master Adobe Photoshop and Illustrator basics - Understand design thinking and creative process - Create first portfolio pieces

Key Projects: 1. Typography poster series (3-5 posters exploring type as design element) 2. Logo design project (design identity for fictional company) 3. Photo manipulation and digital art piece 4. Icon set design (20-30 icons in consistent style) 5. Personal brand identity (logo, color palette, type system for self)

Tools/Software: - Adobe Photoshop - Adobe Illustrator - Figma (introduction) - Drawing tablets (Wacom/Huion)

Assessments: - Design portfolio with 8-10 pieces - Design process documentation (sketches, iterations, final) - Peer critique participation - Final project presentation

10th Grade: Digital Design & Motion Graphics

Courses: Graphic Design II + Introduction to Motion Graphics

Credits: 1.5-2.0

Learning Objectives: - Advanced Photoshop and Illustrator techniques - Master Adobe After Effects for motion graphics - Design for print and digital (InDesign layouts) - Understand animation principles - Earn first certification

Key Projects: 1. Brand identity system (logo + color + type + applications: business cards, letterhead, social media templates) 2. Magazine layout design (8-12 page spread in InDesign) 3. Motion graphics title sequence (60-90 seconds for fictional film/show) 4. Animated infographic (data visualization in motion) 5. Social media content templates (Instagram, TikTok, YouTube)

Tools/Software: - Adobe Photoshop (advanced) - Adobe Illustrator (advanced) - Adobe InDesign - Adobe After Effects - Figma

Industry Certifications: - Adobe Certified Professional: Photoshop (fall/winter) - Adobe Certified Professional: Illustrator (spring)

Assessments: - Expanded portfolio (15-20 pieces) - Motion graphics reel (2-3 minutes) - Certification exams - Client project (design work for school organization or local nonprofit)

11th Grade: UX/UI Design & Advanced 3D

Courses: UX/UI Design + 3D Modeling & Animation OR

Advanced Motion Graphics

Credits: 1.5-2.0

Learning Objectives: - Master Figma for UI design and prototyping - Learn user research and usability testing - Develop 3D modeling skills (Blender or Cinema 4D) - Create professional case studies - Specialize in digital product design OR 3D/motion work

Specialization Option A: UX/UI Design - User research methodologies - Wireframing and information architecture - Interactive prototyping - Usability testing and iteration - Design systems and component libraries

Specialization Option B: 3D & Advanced Motion - 3D modeling, texturing, and rendering - Character design or product visualization - 3D motion graphics (Cinema 4D + After Effects workflow) - Simulation and particle effects

Key Projects: 1. **UX Case Study:** Design complete mobile app or website - User research (interviews, surveys, personas) - Wireframes and user flows - High-fidelity mockups - Interactive prototype in Figma - Usability testing and iteration - Professional case study documentation

- 1. **3D Project:** Product visualization, character design, or motion graphics integration
 - Model complex 3D object or character
 - Texture and light realistically
 - Render high-quality images or animation
 - Integrate with 2D motion graphics (for motion track students)
- Portfolio Website Redesign: Design and build personal portfolio site
 - Custom design in Figma
 - Basic HTML/CSS implementation (or no-code builder like Webflow)
 - Showcase all work from 9th-11th grade

Tools/Software: - Figma (mastery level) - Adobe XD (alternative) - Blender (free, powerful 3D software) - OR Cinema 4D (if budget allows) - Basic HTML/CSS (for web design context) - Webflow or similar (no-code web building)

Industry Certifications: - Google UX Design Certificate (comprehensive, free via Google Career Certificates) - Adobe Certified Professional: After Effects (for motion graphics specialization)

Assessments: - UX case study portfolio (2-3 complete projects with research documentation) - 3D portfolio or motion graphics reel - Portfolio website (live and functional) - Presentation of design process to panel (faculty + industry professionals if possible)

12th Grade: Senior Portfolio & Professional Practice

Courses: Design Capstone + Creative Technology OR Web Design **Credits:** 1.5-2.0

Learning Objectives: - Produce senior capstone project (complete brand, app, or design system) - Build professional-quality portfolio for college applications or job seeking - Learn freelance/client management basics - Develop specialization (web, 3D, motion, UX, branding) - Potential internship with design agency or in-house design team

Key Projects: 1. **Senior Capstone Project** (choose one): - **Option A:** Complete brand identity system for real or fictional company (logo, brand guidelines, applications across digital and

print) - **Option B:** Design and prototype complete mobile app or web app (UX research through high-fidelity prototype) - **Option C:** Create 3D animated short film or motion graphics reel (60-90 seconds of professional-quality work) - **Option D:** Build comprehensive design system for digital product

- 1. **Client Work:** Take on 2-3 real client projects (school organizations, local businesses, nonprofits)
 - Practice client communication
 - Scope, contracts, timelines
 - Revisions and feedback incorporation
 - Professional delivery

2. Professional Portfolio:

- Polished portfolio website showcasing 12-20 best pieces
- Case studies with process documentation for top 3-5 projects
- Resume, bio, contact info
- Social media presence (Behance, Dribbble, Instagram design account)

Tools/Software: - Full Adobe Creative Cloud utilization - Figma advanced features - Webflow or custom code for portfolio site - Any specialized software relevant to chosen specialization

Industry Certifications: - Adobe Certified Professional: InDesign (if not yet earned) - Any remaining Adobe certifications of interest

Career Preparation: - Internship with design agency, startup, or marketing department - Design competitions (AIGA, Adobe Creative Jam, etc.) - Behance/Dribbble portfolio development - College portfolio reviews (for design school applications) - Freelance platform setup (Fiverr, Upwork) if interested in side income

Assessments: - Capstone project quality and presentation - Portfolio review by industry professionals - Client satisfaction on real projects - College application outcomes (design school acceptances) - Competition results

Portfolio Requirements for Track 2 Graduation

Minimum Requirements: 1. Portfolio Website: Professional, custom-designed site with: - 12-20 design projects across multiple disciplines (branding, UI/UX, print, motion, 3D) - 3-5 detailed case studies showing process (research, ideation, iterations, final) - About page, resume, contact 2. Certifications: Minimum of 2 Adobe Certified Professional credentials (Photoshop + Illustrator); Google UX Design Certificate recommended 3. Capstone Project: Professional-quality brand, app design, or motion/3D work 4. Client Work: At least 2 completed client projects

Optional but Highly Encouraged: - Behance or Dribbble profile with featured work - Design competition entries or awards - Internship experience - Freelance work and testimonials

College Pathways from Track 2

Aligned Majors: - Graphic Design - UX/UI Design / Interaction Design - Motion Graphics / Motion Design - Visual Communication Design - 3D Animation / Computer Animation - Product Design - Game Art / Game Design (crossover with Track 4)

Target Schools (Examples): - Rhode Island School of Design (RISD) - Parsons School of Design - ArtCenter College of Design - Pratt Institute - School of Visual Arts (SVA) - Carnegie Mellon School of Design - UC San Diego (Design) - Cal State Long Beach (Design)

TRACK 3: Audio Production & Podcasting

Target Careers

- **Primary:** Podcast Producer, Audio Engineer, Sound Designer, Music Producer, Voiceover Artist
- **Secondary:** Audio Post-Production Specialist, Broadcast Audio Engineer, Foley Artist, Audiobook Producer

Career Outlook

- Podcast Producer: \$55K-\$75K, 25-35% growth
- Audio Engineer: \$60K-\$95K, 8-12% growth
- Sound Designer: \$65K-\$90K, steady demand in games/film
- Music Producer: \$45K-\$85K (highly variable)

Core Competencies

Technical Skills: - Digital Audio Workstation (DAW) mastery (Pro Tools, Logic Pro, Audition, or Ableton) - Microphone selection, placement, and recording techniques - Audio editing, mixing, and mastering - Sound design and Foley creation - Podcast production workflow (recording, editing, publishing) - Acoustics and studio design basics

Creative Skills: - Audio storytelling and narrative structure - Music composition and arrangement (basic) - Interview techniques (for podcasting) - Soundscape creation and atmosphere - Voice direction

Soft Skills: - Attention to detail (audio requires precision) - Problem-solving (troubleshooting technical issues) - Collaboration with creators and talent - Time management and workflow efficiency

4-Year Curriculum Pathway: Track 3

9th Grade: Introduction to Audio Production

Course: Fundamentals of Audio & Podcast Production

Credits: 0.5-1.0

Learning Objectives: - Understand basic audio principles (frequency, amplitude, acoustics) - Learn microphone types and proper recording techniques - Master audio editing in Adobe Audition or Audacity - Produce first podcast episodes - Record and edit voice and music

Key Projects: 1. Audio autobiography (5-7 minute narrative podcast about self) 2. Interview podcast episode (15-20 minutes with guest) 3. Soundscape composition (3-5 minutes of layered ambient sound) 4. Music remix or mashup (introduction to music editing)

Tools/Software: - Adobe Audition (preferred) or Audacity (free) - Podcast microphones (Shure SM7B, Rode PodMic) - Headphones for monitoring - Portable recorders (Zoom H5, H6)

Assessments: - Portfolio of 3-5 audio projects - Technical demonstration (mic setup, recording quality check) - Published podcast episode (Spotify, Apple Podcasts, or school platform)

10th Grade: Advanced Podcast Production & Audio Storytelling

Courses: Podcast Production II + Audio Storytelling

Credits: 1.0-1.5

Learning Objectives: - Develop advanced podcast editing (multitrack, sound design, music integration) - Learn audio storytelling techniques (NPR-style narrative podcasting) - Understand podcast audience growth and distribution - Produce serialized podcast content - Master interview techniques

Key Projects: 1. Narrative podcast series (4-6 episodes, 20-30 min each, research-based storytelling) 2. Weekly podcast (ongoing throughout semester) 3. Audio documentary (15-20 minutes on social issue or local story) 4. Podcast trailer/promo (marketing and audio branding)

Tools/Software: - Adobe Audition (advanced techniques) - Pro Tools (introduction, if available) - Podcast hosting platforms (Anchor, Libsyn, Buzzsprout) - Music libraries (Epidemic Sound, Artlist) - Remote recording tools (Zoom, SquadCast, Riverside.fm)

Industry Certifications: - No formal audio certifications widely available for high school; focus on portfolio

Assessments: - Published podcast series with consistent audience growth - Narrative audio documentary - Podcast analytics review (listenership, engagement)

11th Grade: Music Production & Sound Design

Courses: Music Production OR Sound Design for Media

Credits: 1.0-1.5

Learning Objectives: - Learn Digital Audio Workstation for music creation (Logic Pro, Ableton Live, or FL Studio) - Master MIDI programming and synthesis - Understand mixing and mastering techniques - Specialize in music production OR sound design for film/games - Build advanced technical audio skills

Specialization Option A: Music Production - Beat making and music composition - Synthesis and sampling - Arrangement and song structure - Mixing for music (EQ, compression, effects) - Collaboration with artists/musicians

Specialization Option B: Sound Design for Media - Foley recording and creation - Sound effects design - Dialogue editing and ADR - Mixing for film and games (5.1 surround, spatial audio) - Sync sound design with picture

Key Projects: 1. **Music Production Students:** - Produce 5-8 original tracks (beats, instrumentals, or full songs) - Remix existing song professionally - Collaborate with vocalist or musician to produce track - Release music on streaming platforms (SoundCloud, Spotify)

1. Sound Design Students:

- Create sound design for short film or game (sync sound with picture)
- Build sound effects library (100+ custom sounds)
- Design audio for VR experience or interactive media
- Dialogue editing and mixing for video project

Tools/Software: - Logic Pro X (Mac) or Ableton Live Suite or FL Studio (PC) - Pro Tools (for sound design/post-production) - Plugin bundles (Waves, iZotope, Fabfilter) - Synthesizers and MIDI controllers - Field recording equipment (for sound design)

Assessments: - Music portfolio (8-10 tracks) OR sound design reel - Published music OR completed film/game audio projects - Mixing/mastering demonstration

12th Grade: Professional Audio Production & Capstone

Courses: Audio Production Capstone + Voiceover & Performance

OR Advanced Music Production

Credits: 1.0-2.0

Learning Objectives: - Produce senior capstone podcast series or music album - Develop professional audio portfolio for college or career - Learn voiceover performance and direction (optional) - Pursue internship with podcast network, recording studio, or post-production house - Prepare for audio engineering or music production college programs

Key Projects: 1. **Senior Capstone:** - **Option A (Podcast):** Produce 8-12 episode narrative or investigative podcast series (20-40 min/episode) ready for wide release - **Option B (Music):** Produce full album or EP (6-10 tracks) released on streaming platforms - **Option C (Sound Design):** Complete sound design for feature-length student film or game

1. Professional Demo Reel:

- Audio engineer demo reel (3-5 minutes showcasing mixing, mastering, sound design)
- OR music producer beat tape/portfolio (10-15 minutes of best music)

2. Voice Acting / Voiceover Work:

- Create voiceover demo reel (commercial, narration, character)
- Record audiobook chapter or narration project
- Voice acting for student animations or games

Tools/Software: - Full access to all audio production equipment and software - Professional studio sessions for capstone recording - Mastering software (iZotope Ozone, etc.)

Career Preparation: - Internship at local recording studio, podcast network, radio station, or post-production house - Guest speakers from audio industry (sound designers, engineers, producers) - College audition portfolio preparation (for audio engineering or music production programs) - Industry networking (Audio Engineering Society student chapter, if available)

Assessments: - Capstone project quality (podcast series, album, or sound design work) - Professional demo reel - Published work (streaming platforms, festival submissions) - College application outcomes

Portfolio Requirements for Track 3 Graduation

Minimum Requirements: 1. Published Podcast: Minimum 6-8 episode podcast series available on major platforms 2. Audio Demo Reel: 3-5 minute reel showcasing audio engineering, mixing, and sound design skills 3. Music Portfolio: 8-10 original music tracks (if music production focus) OR sound design reel 4. Capstone Project: Completed senior project (podcast series, album, or film/game audio)

Optional but Encouraged: - Voiceover demo reel - Audience growth metrics (podcast downloads, music streams) - Client work (audio for video producers, game designers) - Live sound experience (school events, concerts)

College Pathways from Track 3

Aligned Majors: - Audio Engineering / Sound Engineering - Music Production - Sound Design - Recording Arts - Music Technology - Audio Post-Production

Target Schools (Examples): - Berklee College of Music (Production & Engineering) - Full Sail University (Recording Arts) - Middle Tennessee State University (Audio Production) - University of Southern California (Music Production) - Belmont University (Audio Engineering Technology) - SAE Institute

TRACK 4: Game Design & Interactive Media

Target Careers

- **Primary:** Game Designer, Unity/Unreal Developer, Level Designer, Game Artist, Esports Broadcaster
- **Secondary:** Interactive Media Designer, VR/AR Developer, Technical Artist, Game Producer

Career Outlook

• Game Designer: \$65K-\$110K, 15-20% growth

- Unity/Unreal Developer: \$80K-\$130K, 18-22% growth
- Esports Broadcaster: \$54K-\$80K, 25-40% growth
- Level Designer: \$60K-\$100K, 12-18% growth

Core Competencies

Technical Skills: - Unity or Unreal Engine proficiency - C# (Unity) or C++/Blueprint (Unreal) programming - Game design theory (mechanics, dynamics, aesthetics) - Level design and environment creation - 3D modeling basics (for game assets) - Version control (Git, Perforce)

Creative Skills: - Game mechanics and systems design - Player psychology and engagement - Narrative design for interactive media - UI/UX for games - Playtesting and iteration

Soft Skills: - Collaboration (game development is team-based) - Problem-solving and debugging - Iterative design mindset - Project management (game dev has many moving parts)

4-Year Curriculum Pathway: Track 4

9th Grade: Introduction to Game Design

Course: Fundamentals of Game Design

Credits: 1.0

Learning Objectives: - Understand core game design principles (MDA framework: mechanics, dynamics, aesthetics) - Learn Unity basics and C# programming fundamentals - Analyze games critically (mechanics, level design, player experience) - Create first playable games

Key Projects: 1. 2D platformer game (learn Unity basics, physics, controls) 2. Puzzle game (design puzzles, test player experience) 3. Game mechanics prototype (design and test single mechanic) 4. Tabletop game design (understand mechanics without technology)

Tools/Software: - Unity (free for education) - Visual Studio Code or similar for C# scripting - Version control (GitHub) - Game analysis (play diverse games critically)

Assessments: - Portfolio of 3-4 playable games - Game design document for capstone project - Playtesting reports and iteration documentation

10th Grade: Intermediate Game Development & Programming

Courses: Game Development II + Programming for Games

Credits: 1.5-2.0

Learning Objectives: - Develop C# programming proficiency - Learn 3D game development in Unity - Understand game feel (animation, sound, feedback, juice) - Design and balance game systems - Participate in game jams - Earn certification

Key Projects: 1. 3D action or adventure game (more complex mechanics and 3D environments) 2. Multiplayer game (local or online) 3. Game jam entry (48-hour game creation challenge) 4. Polished game for portfolio (revise earlier project to portfolio quality)

Tools/Software: - Unity (intermediate to advanced features) - C# programming (object-oriented principles) - Blender (for creating game assets) - Sound design tools (for game audio)

Industry Certifications: - Unity Certified User: Programmer

Assessments: - Published games (itch.io or similar platforms) - Certification exam - Game jam participation - Code review and programming assessment

11th Grade: Advanced Game Development & Specialization

Courses: Advanced Game Development + Esports Broadcasting

OR VR/AR Development

Credits: 1.5-2.0

Learning Objectives: - Master Unity or begin Unreal Engine - Specialize in game design, programming, art, or esports - Create substantial portfolio game (capstone-quality) - Understand game industry pipelines and roles - Network with game developers

Specialization Option A: Esports Broadcasting & Content Creation - Learn OBS and streaming production - Develop shoutcasting and commentary skills - Create gaming content for YouTube/Twitch - Build personal brand in gaming

Specialization Option B: VR/AR Game Development - Unity XR Toolkit or Unreal VR development - Design for spatial interaction - Optimize for VR performance - Create immersive experiences

Key Projects: 1. **Major Game Project:** Develop substantial game over full year (solo or small team) - Pre-production: Game design document, prototypes, art direction - Production: Build core mechanics, levels, art, audio - Polish: Playtesting, balancing, bug fixing - Release: Publish on Steam, itch.io, or mobile

- 1. **Esports Students:** Launch and grow Twitch/YouTube gaming channel
 - Consistent streaming schedule (2-3x/week)
 - Commentary and analysis content
 - Community building
 - Broadcast school esports matches
- 2. VR/AR Students: Create VR game or experience
 - Design for VR interaction
 - Optimize for performance and comfort
 - Playtest with VR users

Tools/Software: - Unity (advanced) or Unreal Engine - Blender for asset creation - OBS Studio for streaming (esports students) - Meta Quest or other VR headset (VR students)

Industry Certifications: - Unity Certified Programmer (advanced certification)

Assessments: - Released game with player feedback - Streaming/content channel growth (esports students) - VR experience demo (VR students) - Portfolio website with playable games

12th Grade: Senior Game Capstone & Professional Preparation

Courses: Game Design Capstone + Game Industry & Careers

Credits: 1.5-2.0

Learning Objectives: - Complete senior capstone game (portfolio centerpiece) - Build professional game development portfolio - Understand game industry career paths (AAA, indie, mobile, etc.) - Prepare for game design or computer science college programs - Potential internship with game studio or esports organization

Key Projects: 1. **Senior Capstone Game:** - Full game development cycle (pre-production through release) - Team-based development (programmers, artists, designers collaborate across tracks) - Professional-quality game ready for Steam release or festival submission - Marketing and community building

1. Portfolio & Demo Reel:

- Itch.io or personal website with 5-8 playable games
- Game design portfolio showing process (GDDs, prototypes, playtesting)
- Trailer and marketing materials for capstone game

2. Industry Engagement:

- Attend game development conference (GDC, IndieCade, etc. - if possible)
- Submit to game festivals and competitions (IGF Student Showcase, etc.)
- Game jam participation (Global Game Jam, Ludum Dare)

Tools/Software: - Unity or Unreal (full utilization) - All necessary game development tools - Marketing and analytics platforms (Steam, itch.io analytics)

Career Preparation: - Internship with indie game studio, AAA studio QA department, or esports org - Guest speakers from game industry (designers, programmers, producers) - College portfolio reviews (for game design programs) - Networking with local game dev community (IGDA chapter, game dev meetups)

Assessments: - Capstone game quality and release - Portfolio review by industry professionals - Festival submissions and competition results - College application outcomes

Portfolio Requirements for Track 4 Graduation

Minimum Requirements: 1. Playable Games: 5-8 games published on itch.io, Steam, or mobile stores 2. Capstone Game: Polished, complete game ready for public release 3. Portfolio Website: Site showcasing games with gameplay videos, descriptions, download links 4. Certifications: Unity Certified User at minimum; Unity Certified Programmer recommended 5. Game Design Documents: Documentation showing design process for major projects

Optional but Encouraged: - Festival submissions or awards - Active streaming/content channel (for esports students) - VR/AR portfolio (for VR students) - Team collaboration experience (worked on games with other students) - Game jam participation and results

College Pathways from Track 4

Aligned Majors: - Game Design - Computer Science (Game Development concentration) - Interactive Media - Game Programming - Game Art - Esports Management

Target Schools (Examples): - USC Games (University of Southern California) - DigiPen Institute of Technology - NYU Game Center - UC Santa Cruz (Games and Playable Media) - Rochester

Institute of Technology (Game Design) - Savannah College of Art and Design (SCAD) - Interactive Design - University of Utah (Entertainment Arts & Engineering)

TRACK 5: Digital Marketing & Social Media

Target Careers

- **Primary:** Social Media Manager, Digital Marketing Strategist, Content Strategist, SEO Specialist, Growth Hacker
- **Secondary:** Brand Strategist, Community Manager, Email Marketing Specialist, Marketing Analyst, Influencer/Creator

Career Outlook

- Digital Marketing Manager: \$104,723 avg, 15-20% growth
- Social Media Manager: \$54K-\$85K, 18-25% growth
- SEO Specialist: \$60K-\$90K, 12-18% growth
- Growth Hacker: \$70K-\$110K, 20-25% growth

Core Competencies

Technical Skills: - Social media platform expertise (Instagram, TikTok, LinkedIn, YouTube, Facebook, Twitter/X) - Content creation (photography, videography, graphic design, copywriting) - Analytics and data interpretation (Google Analytics, social media insights) - SEO and SEM (search engine optimization and marketing) - Email marketing and marketing automation - Paid advertising (Google Ads, Meta Ads)

Creative Skills: - Copywriting and storytelling - Visual content creation - Brand voice development - Campaign strategy and planning - Trend identification and responsiveness

Soft Skills: - Communication and community management - Datadriven decision making - Adaptability (platforms and algorithms change constantly) - Client management and stakeholder communication - Crisis management

4-Year Curriculum Pathway: Track 5

9th Grade: Introduction to Digital Marketing & Social Media

Course: Fundamentals of Digital Marketing

Credits: 0.5-1.0

Learning Objectives: - Understand digital marketing landscape (channels, strategies, metrics) - Learn social media platform best practices - Create content for multiple platforms - Build personal brand - Understand basic analytics

Key Projects: 1. Personal brand development (create consistent presence across 2-3 platforms) 2. Social media content calendar (plan and execute 1 month of consistent posting) 3. Brand analysis project (analyze marketing strategy of favorite brand) 4. Campaign creation (design marketing campaign for school event or club)

Tools/Software: - Social media platforms (Instagram, TikTok, YouTube, LinkedIn) - Canva or Adobe Spark (for quick content creation) - Google Analytics (introduction) - Basic photo editing (Lightroom Mobile, VSCO, etc.)

Assessments: - Personal social media growth (followers, engagement) - Content portfolio (20-30 pieces across platforms) - Campaign presentation and results - Analytics reporting

10th Grade: Content Creation & Social Media Management

Courses: Social Media Content Creation + Digital Marketing

Strategy

Credits: 1.0-1.5

Learning Objectives: - Master content creation for social platforms (video, photo, graphics, copy) - Learn community management and engagement strategies - Understand paid social advertising basics - Develop campaign planning skills - Manage social media accounts for real organizations - Earn certifications

Key Projects: 1. Manage social media for school organization or local business (3-6 month engagement) - Content strategy and calendar - Consistent posting and community management - Growth and engagement metrics - Reporting and optimization

- 1. Platform-specific content series (30-day challenge on TikTok, Instagram Reels, or YouTube Shorts)
 - Daily posting with consistent theme
 - Optimize for platform algorithm
 - Track performance and iterate

- 2. Paid advertising campaign (Google Ads or Meta Ads with small budget)
 - Define objectives and target audience
 - Create ads (copy + creative)
 - Launch, monitor, optimize
 - Report on ROI

Tools/Software: - Adobe Creative Cloud (Photoshop, Premiere Pro for social content) - Canva Pro - Social media management tools (Later, Hootsuite, Buffer - free versions) - Google Ads, Meta Business Suite - Google Analytics

Industry Certifications: - Google Digital Marketing & E-commerce Certificate (comprehensive, free) - Google Analytics Certification - HubSpot Social Media Marketing Certification (free)

Assessments: - Client satisfaction (for managed accounts) - Account growth metrics (followers, engagement rate, reach) - Campaign results and ROI - Certification completion

11th Grade: Advanced Digital Marketing & Specialization

Courses: SEO & Content Marketing + Brand Strategy OR

Influencer Marketing & Creator Economy

Credits: 1.5-2.0

Learning Objectives: - Master SEO and content marketing - Learn brand strategy and positioning - Specialize in content marketing OR influencer/creator path - Build advanced analytics and reporting skills - Manage multiple client accounts or grow personal brand significantly

Specialization Option A: SEO & Content Marketing - Keyword research and content optimization - Technical SEO (site structure, speed, mobile optimization) - Link building and backlink strategies - Content strategy for long-term organic growth - Blog and website content creation

Specialization Option B: Influencer Marketing & Creator Economy - Build substantial following on primary platform
(1K-10K+ followers goal) - Brand partnerships and sponsored content - Content monetization strategies - Personal branding and audience development - Creator tools and platforms (Patreon, YouTube Partner Program, etc.)

Key Projects: 1. **SEO Students:** - Complete website SEO audit and optimization - Content marketing plan for business (blog strategy, keyword targeting) - Build backlinks and measure ranking improvements - Case study showing SEO growth over time

1. Influencer/Creator Students:

- Grow social media to 1K+ followers with consistent content
- Secure brand partnership or sponsored post
- Launch merch or digital product (optional)
- Diversify across 2-3 platforms

2. All Students:

- Comprehensive marketing campaign for real client
- Portfolio website showcasing marketing work

Tools/Software: - SEO tools (SEMrush, Ahrefs, Moz - free/trial versions) - Google Search Console, Google Analytics (advanced) - WordPress or website builder (for content marketing) - Email marketing platforms (Mailchimp, ConvertKit) - Adobe Creative Cloud (for content creation)

Industry Certifications: - HubSpot Content Marketing Certification - Google Ads Search Certification - Additional platform-specific certifications (Meta Blueprint, YouTube Creator, etc.)

Assessments: - SEO case studies with ranking improvements - Influencer growth metrics and brand partnerships - Client work portfolio with results - Analytics and reporting proficiency

12th Grade: Marketing Capstone & Professional Practice

Courses: Digital Marketing Capstone + Marketing Analytics &

Strategy

Credits: 1.0-2.0

Learning Objectives: - Execute senior capstone marketing campaign - Build professional marketing portfolio for college or career - Master data analysis and strategic decision-making - Prepare for marketing, communications, or business college programs - Potential internship with marketing agency, brand, or as influencer/creator

Key Projects: 1. **Senior Capstone Campaign:** - Lead comprehensive digital marketing campaign for real client (school, local business, nonprofit) - Strategy development (objectives, audience, channels, budget) - Execution across multiple channels

(social, email, SEO, paid ads, content) - Measurement and optimization throughout campaign - Final presentation with ROI analysis

1. Marketing Portfolio:

- Portfolio website showcasing 10-15 campaigns and projects
- Case studies with strategy, execution, and results
- Metrics and analytics dashboards
- Client testimonials
- Personal brand presence

2. Professional Development:

- Build LinkedIn profile and network
- Create marketing resume and cover letter
- Develop elevator pitch and interview skills
- Apply for internships or part-time marketing roles

Tools/Software: - Full marketing tech stack (CRM, email, analytics, SEO, social media management) - Data visualization (Google Data Studio, Tableau Public) - Project management tools (Asana, Trello, Monday.com)

Industry Certifications: - Any remaining Google, HubSpot, or platform certifications - **Meta Certified Digital Marketing Associate** (if available)

Career Preparation: - Internship with marketing agency, brand marketing team, or startup - Guest speakers from marketing industry (CMOs, agency leaders, successful creators) - College application support (marketing/business programs) - Freelance marketing client acquisition

Assessments: - Capstone campaign success (measurable results) - Portfolio quality and presentation - Client satisfaction and testimonials - College application outcomes or job offers

Portfolio Requirements for Track 5 Graduation

Minimum Requirements: 1. Marketing Portfolio Website: Showcasing 10-15 campaigns/projects with case studies and results 2. Social Media Presence: Active, professional presence on 2-3 platforms with demonstrated growth 3. Certifications: Google Digital Marketing & E-commerce, Google Analytics, + 2-3 additional platform certifications 4. Client Work: Managed social media or marketing for at least 3 real clients/organizations 5. Analytics Reports: Portfolio of data-driven marketing reports and insights

Optional but Encouraged: - Influencer status (1K+ followers) with brand partnerships - Freelance clients and revenue - Published content marketing (blog posts, videos) with traffic metrics - Paid advertising campaigns with ROI documentation

College Pathways from Track 5

Aligned Majors: - Marketing - Digital Marketing - Communications - Advertising - Public Relations - Business Administration (Marketing concentration) - Media Studies

Target Schools (Examples): - USC Marshall School of Business - NYU Stern School of Business - University of Texas Austin (McCombs) - Indiana University (Kelley School) - University of Florida (Marketing) - Syracuse University (Newhouse Communications) - Cal Poly San Luis Obispo (Business)

Cross-Track Integration & Collaboration

Multi-Track Projects (Encouraged)

Example 1: Student Film Production - Track 1 (Video): Director, cinematographer, editor - Track 2 (Design): Poster design, title graphics, color grading support - Track 3 (Audio): Sound design, music composition, audio post - Track 5 (Marketing): Social media campaign for film release, audience building

Example 2: Game Development - Track 4 (Game Design): Game designer, programmer - Track 2 (Design): UI/UX design, character/environment art - Track 3 (Audio): Music and sound effects - Track 5 (Marketing): Launch campaign, community building, streamer outreach

Example 3: Podcast with Social Campaign - Track 3 (Audio): Podcast production and editing - Track 1 (Video): Video podcast version, promotional content - Track 2 (Design): Podcast artwork, website design - Track 5 (Marketing): Social media strategy, audience growth, sponsorships

Benefits of Cross-Track Collaboration:

- Real-world simulation: Professional media projects are team-based
- **Portfolio enhancement:** Larger-scale projects impress colleges and employers
- Skill diversification: Students learn adjacent disciplines
- **Community building:** Cross-track friendships and networks
- **Efficiency:** Students support each other's capstone projects

Faculty & Instruction Model

Recommended Faculty for Tracks

Full-Time Faculty (3-4 positions): 1. Video Production & Broadcasting Instructor (Track 1 lead) - Background in film production, journalism, or video editing - Industry experience preferred - Teaches video courses across all levels

- 1. **Digital Design & Creative Technology Instructor** (Track 2 lead)
 - Background in graphic design, UX/UI, or motion graphics
 - Adobe expertise essential
 - Teaches design and creative software courses
- 2. Audio Production / Game Design Instructor (Track 3 & 4 lead)
 - Background in audio engineering, music production, OR game development
 - Can cover both audio and game design, or hire two specialists
 - Teaches audio or game development courses
- 3. **Digital Marketing / Business Technology Instructor** (Track 5 lead)
 - Background in digital marketing, social media, or communications
 - $\,{}^{\circ}$ Industry experience in marketing agencies or brand teams
 - Teaches marketing and entrepreneurship courses

Part-Time / Adjunct Faculty (2-3 positions): - Specialized instructors for advanced courses (e.g., VR/AR, virtual production, esports) - Industry professionals teaching one course - Lab monitors / teaching assistants (potentially advanced students in paid TA roles)

Professional Development: - Annual conference attendance (NAB Show, Adobe MAX, GDC, Content Marketing World) - Certification training (Adobe Certified Instructor, Unity certification) - Summer workshops and industry training

Assessment & Grading Philosophy

Project-Based Assessment (Primary)

- 80% of grade: Quality of projects and portfolio work
- Rubrics for technical proficiency, creativity, effort, and polish
- Revision and iteration encouraged (real-world work is iterative)

Industry Certifications (Secondary)

- 10% of grade or bonus: Earning certifications demonstrates mastery
- Some certifications required (e.g., Adobe for Track 1/2), others optional

Participation & Professionalism (Ongoing)

- 10% of grade: Class participation, collaboration, meeting deadlines, equipment care
- Simulates workplace professionalism

Portfolio Reviews (Semester/Annual)

- Formal portfolio review each semester (like design critiques)
- Students present work to panel (teachers + guest industry professionals if possible)
- · Feedback for improvement and goal-setting

Conclusion: Preparing Students for 2030 Careers

These five tracks position Bishop Diego students to: 1. Graduate with professional portfolios that differentiate them in college admissions and job markets 2. Earn industry-recognized certifications that validate skills and demonstrate initiative 3. Master tools and technologies used by professionals in high-demand careers 4. Build networks through internships, mentorships, and industry connections 5. Develop adaptability through project-based, iterative learning that mirrors real-world work

The curriculum is designed to be: - Future-proof: Focus on foundational skills and adaptability, not just current tools - Portfolio-driven: Tangible work products matter more than grades alone - Industry-aligned: Tools, workflows, and standards match professional expectations - Flexible: Students can explore multiple tracks or specialize deeply - Collaborative: Cross-track projects mirror real media production teams

Next Steps: 1. Finalize course descriptions and credit requirements 2. Develop detailed syllabi for Year 1 courses 3. Create assessment rubrics and portfolio standards 4. Hire faculty with industry experience 5. Launch with Tracks 1 & 2 in Year 1; expand to all five tracks by Year 3

The vision is clear. The pathways are defined. The careers of 2030 are waiting.