XRTERRA

AR & VR

VISUAL DESIGN PROGRAM

PROGRAM SYLLABUS
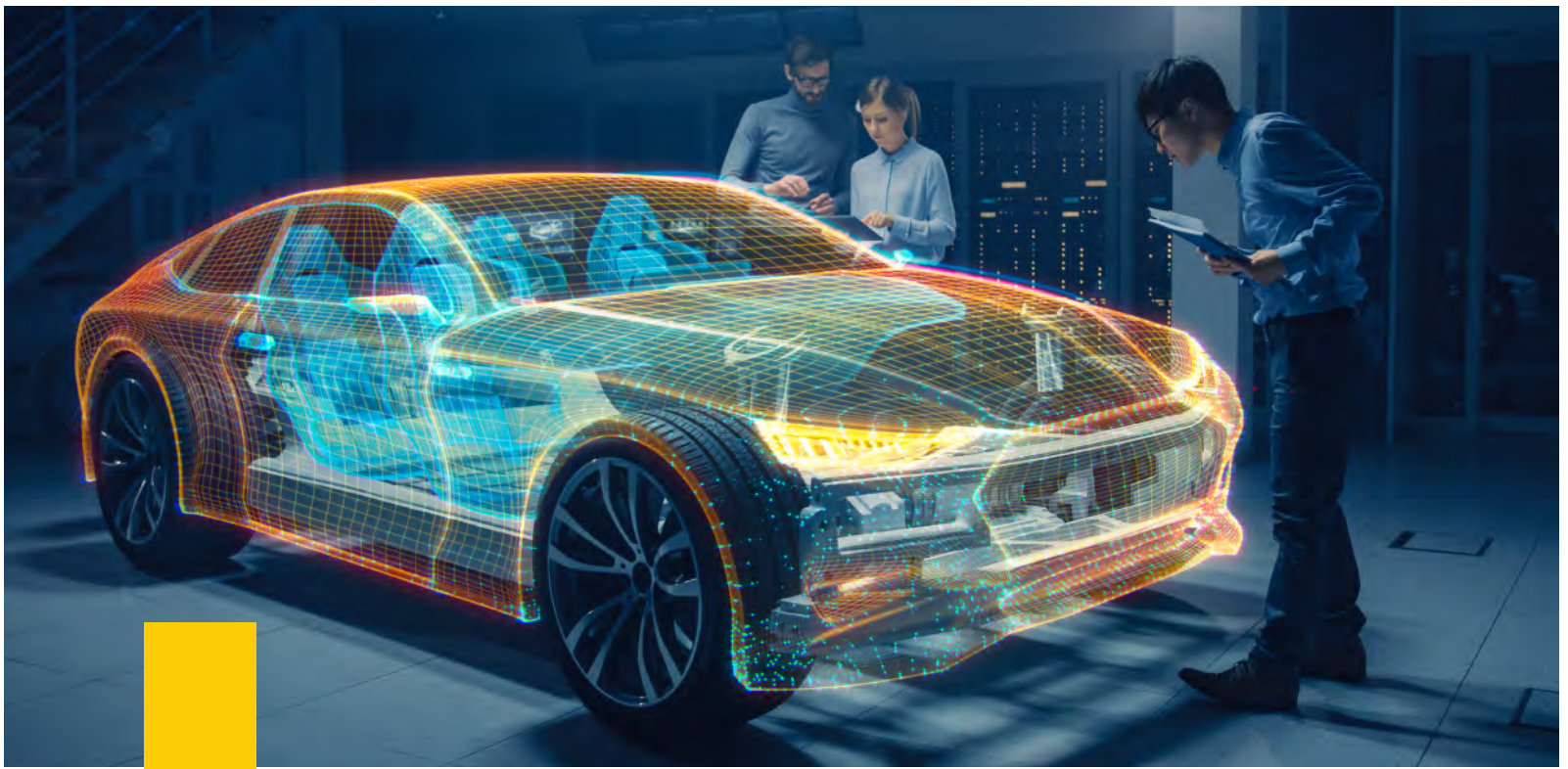
PROGRAM OVERVIEW

AR & VR Visual Design Program from XR Terra

According to Statistica, **the AR & VR industry is expected to exceed $200 billion in market size by 2023.** This growing trend leads to an urgent need for talented XR developers to create applications and experiences in immersive technologies across a variety of industries.

The AR & VR Visual Design Program from XR Terra is a part-time, 12-week program that will equip participants with the knowledge, skills, and experience necessary to develop dynamic virtual reality and augmented reality content and prepare them to be productive members of an XR-focused team.

PROGRAM STRUCTURE

The 12-week program requires a weekly time commitment of

- 7 contact hours of live, online sessions
- 10+ hours of self-study and project time
- Weekly 1-on-1 office hours with teaching staff and community hours as needed

For weekly schedule, refer to upcoming cohort schedule on xrterra.com

Office hours with the program instructor and optional weekly check-ins with our student service team
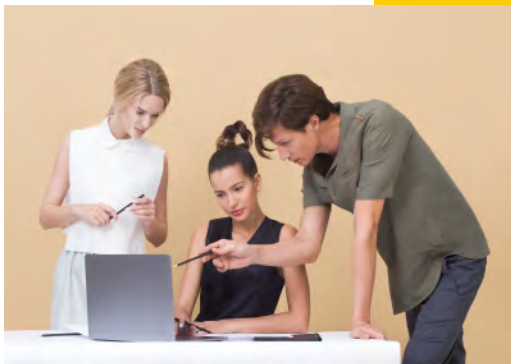
Dedicated career advisor that supports your career development journey from day 1

Discussion forums for questions to instructors and student services advisors

GRADING

This is a Pass / Fail program. In order to pass this program you must complete the following before the end of the program:

- Attend all live online sessions; maximum of 2 excused absences from lab sessions allowed during the 12-week program
- Complete all pre-work and post-work assignments
- Complete all projects in a timely manner following presented guidelines

OUTCOMES

Participants of this program will be able to:

- Understand asset development tools for XR Design

- Apply a rigorous project design and development process including project objectives, storyboarding and wireframing, feedback coordination and final pitch deck

- Construct a project development pipeline to produce and manage XR design assets for a project team

- Understand UI strategies and design hierarchy for XR content

- Explain the foundational knowledge of AR and VR and identify its benefits for real-world applications

- Understand and analyze industry challenges, and propose an appropriate AR and/or VR solution

- Demonstrate design interface skills and apply them to at least 2 industry projects across AR and VR modules

- Effectively communicate proposed AR and/or VR design solution to industry collaborator

Participants will be able to meet some or all qualifications for XR related job titles including:

- AR, VR : UX Designer
- AR, VR : UI Designer
- AR, VR : Product Designer
- AR, VR : Producer
- AR, VR : UX Researcher

PROGRAM PREREQUISITES

Applicants must meet the following program prerequisites to qualify for the program. XR Terra is committed to educating candidates from diverse backgrounds.

Required:

▸ Experience with applications such as Sketch, Figma, Framer, or Adobe Creative Suite programs such as Experience Design, Illustrator, and Photoshop

▸ Experience with design layouts and basic design theory

▸ Experience with a 3D modeling software and material map design

▸ Familiarity with sketching storyboards and design production

▸ Experience understanding Team Development and Project Management

Optional / Preferred:

▸ Experience with 3D modeling materials and software such as Blender, Rhino and ZBrush

▸ Experience with animation

▸ Experience with front end mobile or web design

▸ Experience with JavaScript, Python, or C#

MATERIALS & SUPPLIES

Recommended hardware for the program:

▶ PC (Windows 7 (SP1+) or Windows 10) or Mac (Sierra 10.12+)

▶ An Oculus Quest or Quest 2, or any other 6DoF VR headset (may require VR ready computer)

▶ ARCore compatible Android phone or ARKit iOS device

Please note that iOS development requires a Mac device.

Students are also encouraged to bring the following:

▶ 128GB USB SSD [Portfolio and Project Asset Storage]

▶ Large format sketchbook or Touch screen / tablet and digital pen

▶ 3 Button Computer Mouse

12 WEEK PROGRAM

The 12 week online program will include module topics, learning objectives, and key learning activities.

WEEK 1

MODULE TOPICS

- XR Foundation, Use Cases, and Emerging Trends
- Design strategy for XR applications
- Project management principles and best practices
- Create an XR design package
- Create a pitch deck and project media for web and social media platforms

LEARNING OBJECTIVES

- Evaluate existing AR and VR projects and applications
- Understand Unity's interface and asset management
- Understand Unity's tools including User Interface Systems, Audio, Video, Animation, and Particle Effects.
- Learn Asset Development Tools and Strategies for 2D Design
- Learn the basics of Pitch Deck Design

KEY LEARNING ACTIVITIES

- 2D UX | UI Project : Storyboarding and Wireframing Development
- 2D UX | UI Project : Pitch Deck Design

WEEK 2

MODULE TOPICS

- Storyboarding and Wireframing
- UI Design and Setting Project Precedents
- Evaluate Asset Development Tools and Strategies
- Develop Design Hierarchy and UX/UI for product feedback

LEARNING OBJECTIVES

- Learn the basics of Pitch Design and Presentation
- Learn UI Design Hierarchy
- Understand Lightweight vs Complex UI Strategy
- Understand Storyboarding and Wireframing as an iterative process and implementing feedback

KEY LEARNING ACTIVITIES

- 2D UX | UI Project : Asset Development and Project Integration
- 2D UX | UI Project : Pitch Deck Design [Continued]

WEEK 3

MODULE TOPICS

- Asset Incorporation with Unity Projects
- Deep Dive Unity UI Systems
- Product Testing
- Product Team Integration

LEARNING OBJECTIVES

- Understand Unity UI Systems
- Learn Product Testing
- Learn Asset Incorporation with Unity Projects [Continued]

KEY LEARNING ACTIVITIES

- 2D UX | UI Project : Project Testing
- 2D UX | UI Project : Pitch Deck Design [Continued]

WEEK 4

MODULE TOPICS

- Set Project Objectives and Goals
- Storyboard and Wireframing
- UI Design and Setting Project Precedents
- Evaluate Asset Development Tools and Strategies

LEARNING OBJECTIVES

- Learn how to set Project Objectives and Goals for 3D Design
- Learn how to Storyboard and Wireframe for 3D Content
- Learn Asset Development Tools and Strategies for 3D Design

KEY LEARNING ACTIVITIES

- 3D UX | UI Project : Storyboard and Wireframe Development
- 3D UX | UI Project : Pitch Deck Design

WEEK 5

MODULE TOPICS

- Storyboarding and Wireframing [Internal Presentations]
- Design UX | UI for Product Feedback
- Develop Design Hierarchy
- Unity Audio, Video, Animation, and Particle Effects [Continued]

LEARNING OBJECTIVES

- Learn UI Design Hierarchy for 3D Content
- Learn to design User Interface for product feedback and testing with 3D Content

KEY LEARNING ACTIVITIES

- 3D UX | UI Project : Asset Development and Project Integration
- 3D UX | UI Project : Pitch Deck Design [Continued]

WEEK 6

MODULE TOPICS

- Storyboarding, Wireframing and Interface Design [Internal Presentations]
- Asset Incorporation with Unity Projects
- Product Testing
- Pitch Deck Design
- Product Team Integration

LEARNING OBJECTIVES

- Learn UI Design Hierarchy for 3D Content [Continued]
- Learn to design User Interface for product feedback and test with 3D Content [Continued]
- Learn how to Storyboard and Wireframe for 3D Content [Continued]
- Learn Pitch Design and Presentation [Continued]

KEY LEARNING ACTIVITIES

- 3D UX | UI Project : Project Testing
- 3D UX | UI Project : Pitch Deck Design [Continued]

WEEK 7

MODULE TOPICS

- Set Project Objectives and Goals
- Evaluate existing AR and VR projects and Applications
- Storyboarding and Wireframing
- UI Design and Set Project Precedents
- Evaluate Asset Development Tools and Strategies

LEARNING OBJECTIVES

- Understand Setting Project Objectives and Goals
- Understand Storyboard and Wireframe Development
- Understand UI Design and Setting Project Precedents
- Understand how to evaluate Asset Development Tools and Strategies

KEY LEARNING ACTIVITIES

- Combined 2D/3D UX | UI Project : Storyboard and Wireframe Development
- Combined 2D/3D UX | UI Project : Pitch Deck Design

WEEK 8

MODULE TOPICS

- Storyboarding and Wireframing [Internal Presentations]
- Design UX | UI for Product Feedback
- Develop Design Hierarchy
- Unity Audio, Video, Animation, and Particle Effects [Continued]

LEARNING OBJECTIVES

- Understand UI Design Hierarchy for 3D Content
- Understand how to design User Interface for product feedback and testing
- Learn Unity tools Audio, Video, Animation, and Particle Effects [Continued]

KEY LEARNING ACTIVITIES

- Combined 2D/3D UX | UI Project : Asset Development and Project Integration
- Combined 2D/3D UX | UI Project : Pitch Deck Design [Continued]

WEEK 9

MODULE TOPICS

- Storyboarding, Wireframing and Interface Design [Internal Presentations]
- Asset Incorporation with Unity Projects
- Product Testing
- Pitch Deck Design [Continued]
- Product Team Integration [Continued]

LEARNING OBJECTIVES

- Understand asset Incorporation with Unity Projects
- Understand Unity Audio, Video, Animation, and Particle Effects
- Understand best practices for team workflow
- Learn Pitch Design and Presentation [Continued]

KEY LEARNING ACTIVITIES

- Combined 2D/3D UX | UI Project : Project Testing
- Combined 2D/3D UX | UI Project : Pitch Deck Design [Continued]
- Select Project for Final Product Pitch

WEEK 10

MODULE TOPICS

- Deep Dive : Pitch Deck Design
- Deep Dive : XR Design Package Design
- XR Design Package (UX | UI Portfolio) Wireframe exercise
- Create a showcase and web presence for your work

LEARNING OBJECTIVES

- Learn the goals of the Product Pitch and design a Pitch Deck
- Learn the goals of the XR Design Package (UX | UI Portfolio)
- Learn the goals of publication for accessible web platforms and social platforms

KEY LEARNING ACTIVITIES

- Design a Pitch Deck for key stakeholders
- XR Design Package (UX | UI Portfolio) Wireframe
- Select Social and Web Platforms to host project work

WEEK 11

MODULE TOPICS

- Prepare for Internal Pitch Presentation Prepare for Final XR Design Package
- Review (UX | UI Portfolio)
- Finalize Project Media for Web Platforms and Social Media

LEARNING OBJECTIVES

- Learn the goals of the Product Pitch and design a Pitch Deck [Continued]
- Learn the goals of the XR Design Package (UX | UI Portfolio) [Continued]
- Learn the goals of publication for accessible web platforms and social Platforms [Continued]

KEY LEARNING ACTIVITIES

- Design a Pitch Deck for key stakeholders
- XR Design Package (UX | UI Portfolio) Wireframe
- Select Social and Web Platforms to host project work

WEEK 12

MODULE TOPICS

- Final Internal Pitch Presentation
- Final XR Design Package Review (UX | UI Portfolio)
- Final Project Media for Web Platforms and Social Platforms

LEARNING OBJECTIVES

- Understand the goals of the Product Pitch and design a Pitch Deck
- Understand the goals of the XR Design Package (UX | UI Portfolio)
- Understand the goals of publication for accessible web platforms and social Platforms

KEY LEARNING ACTIVITIES

- Finalize Pitch Presentation
- Finalize XR Product Design Package (UX | UI Portfolio)
- Finalize publication of work on accessible web platforms and social Platforms

XRTERRA
www.xrterra.com