



The Master of Science in Visualization integrates art and technology to prepare students to be creative and pragmatic leaders. The program will help you develop focused expertise and a broad foundation of knowledge in the artistic, scientific, cognitive, and technical foundations of the discipline.

ABOUT THE PROGRAM

Our program enhances your artistic and technical skills through creative application. As a master's student, you'll select an area of focus within our curriculum and complete a research thesis or capstone project.

CAREERS

The Master of Science in Visualization prepares students for long-term careers in visualization. On average, our graduates have higher-paying salaries than those with a bachelor's degree. Our former students have gone on to become:

- Animators
- Researchers
- Technical directors
- UX designers
- Product designers

AREAS OF EMPHASIS

- Computer animation
- Gaming
- Interactive design
- User experience design
- Computer graphics
- Virtual reality
- Augmented reality
- Data visualization

CURRICULUM: We offer a thesis and a non-thesis option for the Master of Science in Visualization.

THESIS OPTION: The thesis track requires students to pursue and complete a thesis over a focus topic in significant depth. This track is recommended for students who want to pursue careers in research development or further academic study. It typically requires two semesters to complete.

CURRICULUM DETAILS

Categories	Credits
Prerequisite Courses*	0
Required Courses	4
Selected Core Electives	12
Free Electives	8
Research Hours	8
Total Coursework	32

THESIS

The thesis is the culminating activity of the curriculum. Your research must be documented, written, and presented at a public defense. Thesis research is done under the guidance of your advisory committee and submitted to the Texas A&M thesis office and a competitive venue.

NON-THESIS OPTION: The non-thesis track allows students to tailor the curriculum to their individual career aspirations. In this program, you'll focus on improving your skills and developing a portfolio. You will identify a practical basis for your capstone project in concert with your advisory committee. Capstone projects demonstrate mastery of a known practice, and should be executed in approximately one semester.

CURRICULUM DETAILS

Categories	Credits
Prerequisite Courses*	0
Required Courses	4
Selected Core Electives	12
Free Electives	19
Total Coursework	35

*Prerequisite courses are to be taken as directed on admission. They will not count as credits toward the degree.

PREREQUISITE COURSES

Students admitted into our master's program will receive instruction on which prerequisite courses they must take during their first year. All prerequisite courses must be completed with a grade of "B" or better. These courses will not count for credit toward the degree.

Students with deficiencies not addressed by the prerequisite courses will not be admitted into a master's program.

REQUIRED COURSES

For M.S. Thesis Option

- VIZA : Graduate Seminar (1 hr)
- CARC 601: Foundations of Research (3 hrs)
- VIZA 691: Research (8 hrs)

For M.S. Non-thesis Option

- VIZA : Graduate Seminar (1 hr)
- VIZA 693: Professional Study - Capstone (4 hrs)

Selected Core Courses (12 hrs)

- VIZA 654 Digital Image (4 hrs) or VIZA 656 Image Synthesis (4 hrs)
- VIZA 622: Design Communication I (4 hrs) or VIZA 643: Time-based Media I (4 hrs)
- VIZA 614: Form, Installation, and Environment (3 hrs) or VIZA 684: Professional Internship (3 hrs)

Free Electives

- VIZA 613: 3D Modeling and Animation (4 hrs)
- VIZA 614: Form, Installation, and Environment (3 hrs)*
- VIZA 615: Computer Animation (4 hrs)
- VIZA 616: Rendering and Shading (3 hrs)
- VIZA 617: Advanced Animation (4 hrs)
- VIZA 622: Design Communication I (4 hrs)*
- VIZA 623: Design Communication II (3 hrs)
- VIZA 625: Multi-media Web Design (3 hrs)
- VIZA 626: Generative Art (3 hrs)
- VIZA 627: Design Communication III (3 hrs)
- VIZA 643: Time-based Media I (4 hrs)*
- VIZA 647: Color Photography (3 hrs)
- VIZA 654: Digital Image (4 hrs)*
- VIZA 656: Image Synthesis (4 hrs)*
- VIZA 657: Computer Aided Sculpting (3 hrs)
- VIZA 662: Physical Computing for Art & Design (3 hrs)
- VIZA 665: Digital Compositing (4 hrs)

*If not taken to fulfill one of the specific divided electives listed above.

Students can take undergraduate level courses designated as 300-400 level, with approval of their advisory committee chair.