

Digital Design Graduate Program

Department of Design and Merchandising | Oklahoma State University

(Please refer to the DM Graduate Handbook for additional information)

Introduction

Welcome to the Digital Design Graduate Program at Oklahoma State University, where innovation meets expertise in immersive technologies and design. This comprehensive program is designed to empower students and professionals alike with advanced knowledge in Virtual Reality (VR), Augmented Reality (AR), and Artificial Intelligence (AI), equipping them to thrive in a rapidly evolving digital landscape.

Our program offers flexible options tailored to diverse academic and professional goals: Master of Science in Design and Merchandising, option in Digital Design

- **Digital Design Research Thesis** track, ideal for those pursuing scholarly research or academic careers, and a **Design Thesis** track, perfect for students seeking to hone creative and practical design skills. Both tracks are offered online or onsite.
- Accelerated Master's (4+1): A unique opportunity for undergraduate students to earn both a bachelor's and master's degree in just five years, combining foundational studies with advanced coursework. The last year of this degree is offered online or onsite.
- **Graduate Certificate in Digital Design**: Specifically crafted for working professionals, this program allows participants to enhance their qualifications while balancing their careers. This certificate is offered online or onsite.
- **Undergraduate Certificate in Digital Design**: Provides foundational skills for undergraduate students interested in immersive technologies and design communication. This certificate is offered onsite only.

At the heart of our program is a focus on integrating cutting-edge technologies with design principles to address real-world challenges. Whether students aspire to develop advanced VR applications, design AR experiences, or explore AI's potential in design, this program prepares them for leadership roles in academia, industry, and beyond.

Join us in shaping the future of design through innovation, creativity, and a commitment to excellence. Let this handbook be your guide as you navigate the pathways to achieving your academic and professional aspirations in the dynamic field of digital design.

Master of Science in Design and Merchandising with an Option in Digital Design

Obtaining a graduate degree in Interior Design differentiates an individual as a professional with advanced critical thinking, research, and specialized design skills. According to the ASID Outlook Brief (2019), only a small percentage (6%) of design practitioners hold a master's degree, making this credential indicative of exceptional commitment and capability. This can enhance a designer's competitiveness and potential for leadership, as well as increase earning potential.

The Master of Science in Design and Merchandising degree with an option in Digital Design, provides two main tracks:

MS Research Thesis track: This choice supports the goal of conducting evidence-based design research or teaching in interior design and is the recognized path to ultimately complete a Ph.D. degree. Students conduct original research in this track and complete a thesis. This degree typically requires 2 years of course work with the final semester focusing on thesis writing and defense.

MS Design Thesis (Creative Component) track: This choice supports the goal of interior design practice and provides extended design process and project knowledge. Students undertake extensive programming research and related tasks and produce a comprehensive design project of their choice and present it through a gallery exhibition completed over a two-semester period. The entire duration of the degree is two years.

MS Research Thesis Track

The graduate school at Oklahoma State University offers two options for the culminating experience in the master's degree program: a thesis or a creative component. The MS Research Thesis track supports the objective of conducting evidence-based design research or preparing for a career in academia, serving as the recognized pathway for students intending to pursue a Ph.D. degree. This track emphasizes the development of original research, critical analysis, and scholarly contribution to the field of interior design.

The MS Research Thesis consists of three main components:

1. Research Project:

• Topic Selection:

Students begin by selecting a research topic that aligns with their academic interests and professional aspirations within interior design. Potential areas of research include sustainable design practices, human-environment interaction, design psychology, educational methodologies in interior design, and more.

• Literature Review:

Conducting a comprehensive literature review is essential to establish the current state of knowledge in the chosen area. This process helps identify gaps in existing research and positions the proposed study within the broader academic discourse.

• Research Methodology:

Students design an appropriate research methodology, which may involve

qualitative, quantitative, or mixed methods approaches. This includes defining research questions or hypotheses, selecting data collection instruments, and outlining data analysis procedures.

• Proposal Approval:

A detailed research proposal must be submitted to and approved by the student's Research Thesis Committee before any data collection begins. This ensures the feasibility, academic merit, and ethical standards of the proposed research.

2. Thesis Development:

• Data Collection:

Following proposal approval, students engage in the systematic collection of data as outlined in their research methodology. This may involve surveys, interviews, case studies, observations, or experimental studies, depending on the nature of the research.

• Data Analysis:

Students analyze the collected data using appropriate statistical or qualitative analysis techniques. This phase requires critical evaluation and interpretation of findings in relation to the research questions and existing literature.

• Thesis Writing:

The culmination of the research project is the writing of the thesis, which comprises several key sections: Introduction, Literature Review, Methodology, Results, Discussion, and Conclusion. The thesis should present a coherent and logical argument, demonstrating the student's ability to conduct independent research and contribute to the field.

3. Thesis Defense:

• **Committee Review:**

Upon completion of the written thesis, students submit their work to the Research Thesis Committee for review. The committee evaluates the thesis for its academic rigor, originality, and contribution to the field.

• Oral Defense:

Students must defend their thesis in an oral examination before the committee. This involves presenting the research findings, discussing the implications of the study, and responding to questions and critiques from committee members.

• Final Submission:

After successfully defending the thesis, students may need to make revisions as recommended by the committee before submitting the final version for degree conferral.

Throughout the two-year duration of the degree program, students balance coursework with their research activities, receiving guidance and mentorship from faculty advisors. This structured process ensures that students develop a deep understanding of research methodologies, critical

thinking skills, and the ability to contribute meaningful knowledge to the field of interior design. Successful completion of the MS Research Thesis track prepares graduates for advanced academic pursuits and professional roles that value evidence-based practice and scholarly research.

	CIENCE IN DESIGN					
	GITAL DESIGN (Onli	ne/Onsite) Researd	ch Thesis			
CORE REQUIREMENTS						
DM 5003	Theoretical Perspe	ectives for DM			3	
DM 5013	Research Develop	ments in DM			3	
DM 5093	Proposal Writing				3	
NON-CORE R	EQUIREMENTS					
DM 5000	Master's Thesis				6	
DM 5113	Theories of Creativ	/e Process in DM			3	
REMS 5953	Statistical Method	Statistical Methods in Education				
DM 5073	VR and AR Applica	VR and AR Applications in DM				
DM 5173	Advanced Digital Design Communication				3	
ELECTIVES (S	ELECTIVES (SELECT ONE)					
DM 6003	M 6003 Analyses of Variance				3	
DM 5373	Topics in Building	Topics in Building Information Modeling				
DM 5440	Career Internship				3	
	OTHER ELECTIVES TBD BY ADVISOR					
Total Credit Hours				30		
YEAR ONE YEAR TWO						
FALL	SPRING	SUMMER	FALL	SPRINC	SPRING	
DM 5013	REMS 5953	DM 5073	DM 5113	DM 537	DM 5373 (Elective)	
DM 5003	DM 5173 DM 5000 DM 5000			0		
	DM 5093					

MS Design Thesis (Creative Component) track:

The graduate school at Oklahoma State University offers two options for the culminating experience in a master's degree program: a thesis or a creative component. A traditional thesis is a research project that includes a literature review, research methodology, data collection, and analysis. The creative component is more flexible and allows programs to determine what is appropriate for their discipline. For instance, in a fine arts program, the creative component is often a recital or an exhibition of work. In the digital design option, we have determined that the most appropriate way to meet the intention of the creative component is an evidence-based design project chosen by the student (with committee approval) and an accompanying research report.

The MS Design Thesis (Creative Component) consists of three main components.

1. Design Project: The student is empowered to select a design project that complements their professional aspirations within the design field. For instance, a student with a future orientation towards healthcare design could choose to design a hospital environment. This

project necessitates the application of current design theories and adherence to evidencebased design principles. The student may initiate a fundamental needs assessment for the intended client population, which serves to underpin the project rationale.

- 2. Research Report: Upon establishing a comprehensive digital model of their design project, students are expected to gather data regarding user interactions and experiences within the created spaces. Precedent studies serve as critical reference points and are also subject to data collection. This data is subsequently synthesized into a cohesive research report.
- 3. Public Gallery Presentation: The gathered information and finalized design are showcased on design boards for public display. The goal is to facilitate a conversation about the project among a wider audience and to provide a tangible testament to the student's capabilities.

To maintain academic integrity and ensure the feasibility of the design project, a proposal must be approved by the student's Design Thesis Committee before project initiation. Upon completion, the project is initially presented to the committee for review and evaluation. Following this, the work is exhibited publicly in a gallery space at Oklahoma State University, where it serves both as an inspiration for future students and a demonstration of the student's growth and mastery within the design field.

This progressive structure of the MS Design Thesis ensures students gain a practical understanding of the design process, from conceptualization to public presentation, and prepares them for successful professional practice.

MASTER OF SCIENCE IN DESIGN AND MERCHANDISING						
OPTION IN DIGITAL DESIGN (Online/Onsite) Design Thesis CORE REQUIREMENTS						
DM 5003	Theoretical Perspectives for DM				3	
DM 5013	Research Developmer				3	
DM 5093	Proposal Writing				3	
NON-CORE REQUIREMENTS						
DM 5240						
DM 5113	Theories of Creative Process in DM				3	
DM 5440	Career Internship				3	
DM 5073	VR and AR Applications in DM				3	
DM 5173	Advanced Digital Design Communication				3	
ELECTIVES (SELECT ONE)						
DM 5373 Topics in Building Information Modeling					3	
OTHER ELECTIVES TBD BY ADVISOR						
	Total Credit Hours				30	
YEAR ONE YEAR TWO						
FALL	SPRING	SUMMER	FALL	SPRING		
DM 5013	DM 5173	DM 5073	DM 5113	DM 5373 (Elective)		
DM 5003	DM 5093 DM 5440 DM 5240 DM 5240					

MS Accelerated Masters (Research Thesis):

The MS Accelerated Master's Program in Digital Design with a Research Thesis track offers a unique opportunity for exceptional undergraduate students to seamlessly transition into graduate-level studies, earning both a bachelor's and a master's degree in just five years. Designed for highly motivated individuals, this program enables students to deepen their knowledge, sharpen their research skills, and gain specialized expertise in immersive technologies such as Virtual Reality (VR), Augmented Reality (AR), and Artificial Intelligence (AI).

Program Highlights

- Fast-Track to a Master's Degree: By integrating undergraduate and graduate coursework, students can save time and reduce the overall cost of their education.
- Focus on Research Excellence: The Research Thesis track emphasizes evidence-based design and prepares students for doctoral studies or research-intensive careers.
- Cutting-Edge Curriculum: Students engage in advanced coursework and hands-on projects that explore the latest developments in immersive technologies and their applications in design.

Who Should Apply?

The Accelerated Master's Program is ideal for students who:

- Are committed to academic excellence and have a strong GPA in their undergraduate studies.
- Have a clear interest in pursuing advanced research or academic careers.
- Seek to enter the workforce with a competitive edge, armed with both a bachelor's and a master's degree.
- Career and Academic Outcomes

<u>Graduates of the program are well-prepared for:</u>

- Leadership roles in the design industry.
- Academic positions or research roles in higher education.
- Doctoral studies in design, technology, or related fields.

MASTER OF S	CIENCE IN DESIGN	AND MERCHANDIS	ING			
OPTION IN DI	GITAL DESIGN (Onl	ine/Onsite) Accelera	ated Masters (4+1)	Research T	nesis	
CORE REQUI	REMENTS					
DM 5003	Theoretical Persp	ectives for DM			3	
DM 5013	Research Develo	oments in DM			3	
DM 5093	Proposal Writing				3	
NON-CORE R	EQUIREMENTS					
DM 5000	Master's Thesis				6	
DM 5113	Theories of Creat	Theories of Creative Process in DM				
REMS 5953	Statistical Metho	Statistical Methods in Education				
DM 5073	VR and AR Applic	VR and AR Applications in DM				
DM 5173	Advanced Digital Design Communication				3	
ELECTIVES (S	ELECT ONE)					
DM 6003	Analyses of Variance				3	
DM 5373	Topics in Building	Topics in Building Information Modeling				
DM 5440	Career Internship	Career Internship				
	OTHER ELECTIVES TBD BY ADVISOR					
	Total Credit Hours					
YEAR ONE			YEAR TWO			
FALL	SPRING	SUMMER	FALL	SPRIN	SPRING	
DM 5013	DM 5173	DM 5073	DM 5113	DM 537	DM 5373 (Elective)	
DM 5003	DM 5093	REMS 5953	DM 5000	DM 5000		

MS Accelerated Masters (Design Thesis):

The MS Accelerated Master's Program in Digital Design with a Design Thesis track provides an expedited pathway for outstanding undergraduate students to earn both a bachelor's and a master's degree in just five years. This track is specifically tailored for students with a passion for applying creative and evidence-based design principles to tackle complex challenges in the digital design field, focusing on immersive technologies such as Virtual Reality (VR), Augmented Reality (AR), and Artificial Intelligence (AI).

Program Highlights

- Integrated and Accelerated Pathway: Combines undergraduate and graduate studies to streamline the journey to a master's degree, saving both time and cost.
- Design-Centric Focus: Emphasizes the development of innovative, research-informed design projects that address real-world challenges and advance the field of digital design.
- Professional Preparation: Students gain hands-on experience through coursework, internships, and public exhibitions of their creative work.

Who Should Apply?

This program is ideal for students who:

• Have a passion for innovative design and a strong academic foundation.

- Are interested in pursuing careers in creative industries that leverage immersive technologies.
- Wish to graduate with a competitive edge by completing a master's degree in just one additional year of study.

Graduates of the program are well-prepared for:

- Professional roles in design, creative industries, and technology-driven organizations.
- Entrepreneurship in the development of digital and immersive design solutions.
- Leadership positions in industries that require advanced design skills and technological proficiency.

By combining creativity, research, and technology, the MS Accelerated Master's Design Thesis track equips students with the skills and knowledge needed to excel in the dynamic and rapidly evolving field of digital design. This program not only accelerates academic progression but also sets a foundation for impactful contributions to the industry and beyond.

MASTER OF SCIENCE IN DESIGN AND MERCHANDISING						
OPTION IN DIGITAL DESIGN (Online/Onsite) Accelerated Masters (4+1) Design Thesis						
CORE REQUIREMENTS						
DM 5003	Theoretical Perspectiv	es for DM			3	
DM 5013	Research Developmer	nts in DM			3	
DM 5093	Proposal Writing				3	
NON-CORE REQUIREMENTS						
DM 5240	DM 5240 Master's Creative Component					
DM 5113	Theories of Creative Process in DM				3	
DM 5440	Career Internship				3	
DM 5073	VR and AR Applications in DM				3	
DM 5173	Advanced Digital Design Communication				3	
ELECTIVES (SELECT ONE)						
DM 5373 Topics in Building Information Modeling					3	
OTHER ELECTIVES TBD BY ADVISOR						
Total Credit Hours					30	
YEAR ONE YEAR TWO						
FALL	SPRING	SUMMER	FALL	SPRING		
DM 5013	DM 5173	DM 5073	DM 5113	DM 5373 (Elective)		
DM 5003	DM 5093 DM 5440 DM 5240 DM 5240					

Graduate Certificate in Digital Design:

The Graduate Certificate in Digital Design is tailored for industry professionals who already hold a bachelor's degree and are seeking to enhance their expertise in immersive technologies and digital design. This certificate provides a flexible, focused, and practical pathway for individuals looking to upskill and stay competitive in the rapidly evolving fields of Virtual Reality (VR), Augmented Reality (AR), and advanced design communication.

Program Highlights

- Designed for Professionals: This program is specifically created for working professionals, allowing them to balance their career commitments while gaining specialized knowledge and skills.
- Flexibility: Offered in both online and onsite formats, the certificate program accommodates diverse learning preferences and schedules.
- Targeted Curriculum: The coursework emphasizes practical applications of emerging technologies, equipping participants with tools to address real-world challenges in design and related industries.

Who Should Enroll?

This program is ideal for professionals who:

- Are already working in design, architecture, technology, or related fields and want to stay ahead in their industry.
- Seek to integrate immersive technologies such as VR and AR into their professional practice.
- Wish to expand their skillset without committing to a full degree program.

<u>Graduates of the program will be equipped to:</u>

- Lead innovative design projects incorporating immersive technologies.
- Enhance their professional portfolio with cutting-edge skills and knowledge.
- Transition into specialized roles in fields like digital design, virtual and augmented reality development, and advanced communication design.

With its focused curriculum and flexible delivery, the Graduate Certificate in Digital Design empowers professionals to advance their careers while mastering the technologies shaping the future of design.

GRADUATE CERTIFICATE IN DIGITAL DESIGN (Online/Onsite)					
CORE REQU	IREMENTS				
DM 5113	Theories of Crea	Theories of Creative Process in DM 3			
DM 5073	VR and AR Appli	VR and AR Applications in DM			
DM 5173	Advanced Digita	Advanced Digital Design Communication			
ELECTIVES (SELECT ONE)				
DM 5373	Topics in Buildin	Topics in Building Information Modeling			
DM 5440	Career Internshi	р	3		
	OTHER ELECTIV	OTHER ELECTIVES TBD BY ADVISOR			
	Total Credit Ho	ours	12		
YEAR ONE	· ·				
FALL	SPRING	SUMMER			
DM 5113	DM 5173	DM 5073			
	DM 5373 (Elec	tive)			

Undergraduate Certificate in Digital Design:

The Undergraduate Certificate in Digital Design provides students with foundational knowledge and hands-on experience in the rapidly growing fields of digital communication and immersive technologies. Designed to complement a variety of undergraduate degree programs, this certificate equips students with practical skills in Virtual Reality (VR), Augmented Reality (AR), and digital design, preparing them for dynamic careers in the evolving digital landscape.

Program Highlights

- Comprehensive Foundation: Focuses on essential design principles, digital communication, and problem-solving strategies that are critical for success in the digital age.
- Immersive Technologies for Social Impact: Explores how VR and AR can be leveraged to address real-world challenges and drive meaningful change.
- Capstone Experience: Students culminate their learning journey with a capstone project that showcases their skills and creativity.

Who Should Enroll?

This program is ideal for undergraduate students who:

- Are pursuing degrees in design, architecture, or technology-related fields and want to enhance their skill set.
- Have an interest in immersive technologies and their application in addressing real-world challenges.
- Seek to make their resumes stand out with specialized credentials in digital design.

Graduates of the certificate program will be equipped to:

• Enter roles in digital design, immersive technology development, or related industries.

- Apply advanced digital communication and problem-solving skills in various professional contexts.
- Pursue further studies in digital design, VR, AR, or other emerging technologies.

By blending foundational skills with cutting-edge technologies, the Undergraduate Certificate in Digital Design prepares students to excel in the digital-first world and make a meaningful impact in their chosen fields.

UNDERGRADUATE CERTIFICATE IN DIGITAL DESIGN (Onsite)					
CORE REQUIRE	CORE REQUIREMENTS				
DM 3173	Digital Design Communication	3			
DM 2033	VR and AR for Social Change 3				
DM 2403	Research Methods				
DM 2003	Problem Solving Strategies	3			
DM 4810	Problems in Design and Merchandising (Capstone Project)				
ELECTIVES (SEL	ECT ONE)				
DM 4373	Advanced Computer-Aided Design for Interior Design 3				
	OTHER ELECTIVES TBD BY ADVISOR				
	Total Credit Hours	18			