Design, B.S. *major*
Computer Science and Design Emphasis

This program offers professional training in both the design and computer science fields, integrating design courses with a strong foundation in computer programming. It allows students to learn both the front-end and back-end of the design/computer science discipline.

Required Credits: 78
Required GPA: 2.00

Required TAD Core Courses

Complete the following courses:

- TADD 1100 Orientation to Technology, Art, and Design (2 credits)
- TADD 1200 Two-Dimensional Visual Foundations (2 credits)
- TADD 1300 Three-Dimensional Visual Foundations (2 credits)
- TADD 1400 The Art of Napkin Sketching (2 credits)
- TADD 1500 Adobe Illustrator (2 credits)
- TADD 1550 Adobe Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 1800 Creativity in Action (2 credits)
- TADD 2310 Artificial Intelligence for Art & Design (2 credits)
- TADD 3000 Presentation Planning, Design, and Delivery (3 credits)
- TADD 3090 Leadership in Creative Industries (2 credits)
- TADD 3360 History of Contemporary Art & Design: 1945-Present (3 credits)

Required TAD Courses

Complete the following courses:

- TADD 2200 Introduction to Graphic Design (2 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 3449 Adobe Premiere Pro (2 credits)
- TADD 3551 Autodesk 3ds Max I (2 credits)
- TADD 3552 Autodesk 3ds Max II (2 credits)
- TADD 3553 Blender (2 credits)
- TADD 3750 Tradeshow Exhibit Design (2 credits)
- TADD 3780 Themed Experience Design (2 credits)
- TADD 3800 Adobe After Effects (2 credits)
- TADD 3850 Digital Signage (2 credits)
- TADD 3899 Junior Culmination (2 credits)
- TADD 4020 Web & Social Media Design (2 credits)
- TADD 4040 UX Design (2 credits)
- TADD 4810 Extended Reality (XR) (2 credits)
- TADD 4840 Advanced Interactive Multimedia Design (2 credits)
- TADD 4899 Senior Culmination (2 credits)

Required Computer Sciences and Other

Complete the following courses:

- CS 1310 Computational Problem Solving & Society (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 3270 Web Programming (4 credits)
- CS 3370 Mobile Application Development (3 credits)
- CS 3380 Game Development (3 credits)
- MATH 1170 College Algebra (3 credits)

Program Learning Outcomes | Design, B.S. Computer Science & Design

emphasis

Art & Design:

1. Students will communicate effectively in oral, written and visual forms.
2. Demonstrate knowledge in diverse cultural and historical perspectives and apply them to their art and design practice.
3. Students will develop and demonstrate competence in implementing art and/or design principles.
4. Students will demonstrate the ability to implement the creative process independently and/or interdependently.
5. Students will exhibit the ability to seek, give and accept constructive criticism.

CS:

1. Problem solving: Students will demonstrate understanding of multiple problem solving techniques and how to apply them algorithmically.
2. Core areas: Students will demonstrate knowledge of core areas and how to apply them towards solving problems in computer science and other disciplines.
3. Communication: Students will communicate effectively with a wide range of audiences.
4. Productive in teams: Students will work productively in teams.
5. Broad knowledge of field: Students will demonstrate a broad knowledge of the field through the different electives offered.
6. Professional and ethical: Students will develop a basis for making professional and ethical decisions that pertain to the software they are developing.
7. Programming languages: Students will demonstrate proficiency in a programming language and ability to learn new ones on their own.