



## Design, B.S. *major*

### Computer Science & Design Emphasis

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A total of 120 semester credits are needed for the **Design, Computer Science & Design emphasis B.S.** degree and include the following:

- Completion of a minimum of 40 upper division credits (level 3000/4000)
- Completion of all required major credits
- Completion of Core Curriculum credits (Minnesota Transfer Curriculum [MnTC] Goal Areas 1-10 with a minimum of 40 credits) required for all baccalaureate degrees
- Completion of BSU Focus and Nisodotaading Course Requirements

#### Dual Degrees

Students wishing to complete two degrees concurrently, (example: Bachelor of Science and Bachelor of Arts) must complete a minimum of an additional 30 credits above the required 120 credits.

#### Multiple Credentials

Any additional major, minor or certificate in a degree must have at least 6 credits of course work not used to meet the requirements of another major, minor or certificate in the degree.

Required Credits: 78

Required GPA: 2.00

#### Required TADD 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 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)
- TADD 3668 TAD LAB: Laser (2 credits)

#### Required TADD 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 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 Science and Other Courses

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

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.