Computer Science, B.S. *major*
3d and Ux Emphasis

These programs offer professional training in both the design and computer science fields, integrating design courses with a strong foundation in computer programming.

*These programs are comprised of current courses offered at BSU.

A total of 120 semester credits are needed for the **Computer Science, 3d and Ux 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 Nisidotaading 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: 63
Required GPA: 2.00

REQUIRED CORE 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 4390 Social, Ethical, and Professional Issues in Computing (3 credits)
  or BUAD 3520 Business Ethics (3 credits)
- COMM 1100 Public Speaking (3 credits)
  or COMM 2100 Career and Professional Communication (3 credits)
- MATH 1170 College Algebra (3 credits)
  or MATH 1470 Precalculus (3 credits)
  or MATH 2471 Calculus I (5 credits)

REQUIRED DESIGN COURSES

Complete the following courses:

- TADD 1500 Adobe Illustrator (2 credits)
- TADD 1550 Adobe Photoshop (2 credits)
- TADD 1600 Fundamentals of Digital Photography (2 credits)
- TADD 2300 Introduction to Typography (2 credits)
- TADD 2310 Artificial Intelligence for Art & Design (2 credits)
- TADD 2550 Adobe InDesign (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)
- TADD3680
- TADD 3800 Adobe After Effects (2 credits)
- TADD 3850 Digital Signage (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)

REQUIRED COMPUTER SCIENCE COURSES

Complete the following courses:

- CS 3350 Event-Driven Programming in a Windows Environment (3 credits)
  or BUAD 3382 Business Application Development (3 credits)
- CS 3380 Game Development (3 credits)

OTHER REQUIRED COURSES

Complete one the following courses:

- ENGL 2150 Adaptive Technical Writing with AI (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)
- ENGL 3155 Professional Writing (3 credits)

Program Learning Outcomes | Computer Science, B.S. 3D & UX emphasis

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.