

## Major in Computer Science

*Following is one suggested four-year degree plan. Students are encouraged to see their adviser each semester for help with program decisions and enrollment. Some requirements may have changed because the University Core Curriculum was being revised at the time this catalog went to press. Contact a degree program adviser.*

### BS with a Major in Computer Science pdf

#### FRESHMAN YEAR

FALL	HOURS
CSCI 1110, Program Development*	4
ENGL 1310, College Writing I	3
MATH 1710, Calculus I <sup>4</sup>	4
PSCI 1040, American Government	3
Oral Communication <sup>2</sup>	<u>3</u>
Total	17

#### SOPHOMORE YEAR

FALL	HOURS
CSCI 2010, Assembly Language Programming	3
ELET 2720, Digital Logic <sup>62</sup>	4
ENGL 2220, World Literature II	3
HIST 2610, United States History to 1865 <sup>12</sup>	3
MATH 1720, Calculus II	3
CSCI Option	<u>3</u>
Total	19

#### JUNIOR YEAR

FALL	HOURS
CSCI 3600, Principles of Systems	3
CSCI 4600, Social Implications of Computer Science	1
MATH 2700, Linear Algebra or MATH 3350, Numerical Analysis or MATH 3410, Differential Equations	3
PHYS 1710-1730, General Technical Physics	4
CSCI Option (advanced) <sup>13</sup>	3
Wellness <sup>11</sup>	<u>3</u>
Total	17

#### SENIOR YEAR

FALL	HOURS
CSCI 4450, Analysis of Algorithms	3
ENGL 4180, Advanced Technical Writing, or ENGL 4190, Technical Editing, or ENGL 4250, Writing Technical Procedures <sup>31</sup>	3
CSCI Option (advanced) <sup>13</sup>	3
Elective (advanced) <sup>16</sup>	3
Natural/Life Science <sup>64</sup>	<u>4</u>
Total	16

#### FRESHMAN YEAR

SPRING	HOURS
CSCI 1120, Structured Programming	4
ENGL 2210, World Literature I <sup>6</sup>	3
MATH 2770, Discrete Structures	3
PSCI 1050, American Government	3
Visual and Performing Arts <sup>7</sup>	<u>3</u>
Total	16

#### SOPHOMORE YEAR

SPRING	HOURS
CSCI 3100, Computer Organization <sup>30, 63</sup>	3
CSCI 3400, Data Structures <sup>63</sup>	3
ECON 1110, Principles of Macroeconomics	3
ENGL 2700, Technical Writing	3
HIST 2620, United States History Since 1865 <sup>12</sup>	3
MATH 1780, Introduction to Statistical Analysis	<u>3</u>
Total	18

#### JUNIOR YEAR

SPRING	HOURS
CSCI Option (advanced) <sup>13</sup>	3
CSCI Option (advanced) <sup>13</sup>	3
ENGL 4180, Advanced Technical Writing or ENGL 4190, Technical Editing, or ENGL 4250, Writing Technical Procedures <sup>31</sup>	3
PHYS 2220-2240, General Technical Physics	4
Understanding of Ideas and Values <sup>8</sup>	<u>3</u>
Total	16

#### SENIOR YEAR

SPRING	HOURS
CSCI Option (advanced) <sup>13</sup>	3
CSCI Option (advanced) <sup>13</sup>	3
Elective (advanced) <sup>16</sup>	3
Laboratory Science <sup>64</sup>	4
Understanding of Ideas and Values <sup>8</sup>	<u>3</u>
Total	16

*Actual degree plans may vary depending on availability of courses in a given semester.  
Some courses may require prerequisites not listed.*

*\* Taught using C++.*

*See Arts and Sciences notes in supplement booklet for footnotes.*

## Summary of Degree Requirements:

Computer Science (minimum 28 advanced):	45
*Core:	
Oral Communication	3
English	12
History	6
Political Science	6
Visual and Performing Arts	3
Wellness	3
Economics	3
Mathematics	4
Laboratory Science	16
Understanding of Ideas and Values	6
Digital Logic:	4
Mathematics:	12
English or Foreign Language:	6
CSCI:	
Program Development	4
Structured Programming	4
Assembly Language Programming	3
Computer Organization	3
Social Implications of Computer Science	1
Data Structures	3
Principles of Systems	3
Analysis of Algorithms	3
Computer Science Option	21
(15-18 advanced to reach 42 advanced hours required for the degree)	

*\* The University Core Curriculum was being revised at the time this catalog went to press. Consult a degree program adviser or the university's Web site ([www.unt.edu/catsched/](http://www.unt.edu/catsched/)).*

### Note:

- 12 hours of computer science must be taken at UNT.
- 42 hours must be advanced; 24 of the 42 hours must be taken at UNT.
- 24 of the last 30 hours must be completed at UNT.

### Supplemental Information for a BS with a Major in Computer Science

1. Major area: Minimum of 45 semester hours, including CSCI 1110, 1120, 2010, 3100, 3400, 3600, 4450 and 4600 (1), plus 21 hours of computer science (including 15-18 hours to reach 42 advanced hours required for the degree). A maximum of 6 hours of credit in CSCI 4880, 4890, 4900 or 4910 will count toward this degree.
  2. GPA: A grade point average of at least 2.75 is required for all advanced computer science courses.
  3. Other required courses:
    - a. MATH 1710, Calculus I; MATH 1720, Calculus II; MATH 1780, Introduction to Statistical Analysis; and MATH 2770, Discrete Mathematics; plus 3 semester hours selected from MATH 2700, Linear Algebra and Vector Geometry; MATH 3350, Introduction to Numerical Analysis; or MATH 3410, Differential Equations I.
    - b. ELET 2720, Digital Logic.
    - c. PHYS 1710/1730; 2220/2240; one natural life science chosen from BIOL 1710/1730, 1720/1740, GEOL 1610; plus one additional course chosen from the above natural life sciences or from CHEM 1410/1430, 1420/1440, PHYS 3010/3030.
    - d. ENGL 2700, Technical Writing.
    - e. Six semester hours selected from ENGL 4180, 4190, 4250 or 6 hours in an advanced foreign language (3060-3070 or equivalent in one foreign language).
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