



# Department of Computer Science and Engineering

## BA in Information Technology

- Advising Information
- Core Curriculum
- Course Descriptions
- Degree Plan Information

UNT Research Park (NTRP) F201  
(940) 565-2767

[www.cse.unt.edu](http://www.cse.unt.edu)

Valid beginning Fall 2008

- A Minimum of 121 semester hours required for graduation.
- 42 advanced (3000-4000 level) hours required for degree (minimum of 24 must be taken at UNT).
- A minimum of 31 semester hours must be completed at UNT.

**THIS IS A SIMPLIFIED GUIDE TO SELECTING COURSES – PLEASE MEET WITH YOUR ADVISOR AND CHECK THE UNDERGRADUATE CATALOG FOR ALL COURSE OPTIONS IN EACH CATEGORY**

**College of Engineering Core**

**LABORATORY SCIENCES** (12 Hours; **Choose 3 courses** with labs)

- BIOL 1710-1730 (4 Hours) \_\_\_\_\_
- BIOL 1720-1740 (4 Hours) \_\_\_\_\_
- CHEM 1410-1430 **or** 1415-1435 (4 Hours) \_\_\_\_\_
- PHYS 1710-1730 (4 Hours) \_\_\_\_\_
- PHYS 2220-2240 (4 Hours) \_\_\_\_\_

**Must earn at least a "C" in all courses and a 2.5 GPA**

- Math 1710 – Calculus I (4 hours) \_\_\_\_\_
- Math 1780 – Probability Models (3 Hours) \_\_\_\_\_
- Math 2770 – Discrete Math (3 hours) \_\_\_\_\_

**MATHEMATICS** (10 Hours)

**Must earn at least a "C" in 2 courses and a 2.5 GPA**

**ORAL / ADVANCED WRITTEN COMMUNICATIONS** (6 Hours)

- (Satisfies University English II & Communications Requirement)
- ENGL 2700 – Tech Writing \_\_\_\_\_ (satisfies 2nd English)
- ENGR 2060 - Prof. Presen, \_\_\_\_\_ (satisfies UNT commun.)

**Must earn at least a "C" in both courses and a 2.5 GPA**

**CSE Department Required Courses**

**COMPUTER SCIENCE** (39 Hours)

**Group I. CSCE Required Courses**

- CSCE 1030 – Computer Science I(4 hrs) \_\_\_\_\_
- CSCE 1035 – Information Systems I (3 hrs) \_\_\_\_\_
- CSCE 1045 – Information System II (3 hrs) \_\_\_\_\_
- CSCE 1040 – Computer Science II(3 hrs) \_\_\_\_\_
- CSCE 2050 – Computer Science III 3 hrs) \_\_\_\_\_
- CSCE 2615 – Ent. Architecture/Design (3 hrs) \_\_\_\_\_
- CSCE 3055 – IT Project Mgmt (3 hrs) \_\_\_\_\_
- CSCE 4355 – Database/Info. Int.(3 hrs) \_\_\_\_\_
- CSCE 3535 – Network/Sec. Mgmt (3 hrs) \_\_\_\_\_
- CSCE 3605 – IT Systems / Admin.(3 hrs) \_\_\_\_\_
- CSCE 4905 – Capstone I (3 hrs) \_\_\_\_\_
- CSCE 4925 – Capstone II (3 hrs) \_\_\_\_\_
- CSCE 4010 – Engineering Ethics (2 hrs) \_\_\_\_\_

**Group II. CS Concentration Area (9 hours)**

- (3 Hrs.) \_\_\_\_\_ (advanced)
- (3 Hrs.) \_\_\_\_\_ (advanced)
- (3 Hrs.) \_\_\_\_\_ (advanced)

**Supporting Area** (18 hrs to support the CS Concentration Area)  
- these courses may NOT be used to fulfill a minor -

- (3 Hrs.) \_\_\_\_\_
- (3 Hrs.) \_\_\_\_\_
- (3 Hrs.) \_\_\_\_\_
- (3 Hrs.) \_\_\_\_\_
- (3 Hrs.) \_\_\_\_\_

Advanced courses in the supporting track will assist in reaching the 42 advanced hours required for the degree

These credits may come from the community college technology course s under certain conditions. Please check with an advisor

**University Core**

**ENGLISH** (3 Hours)

- ENGL 1310,1311,1312, or 1313 \_\_\_\_\_
- Second English fulfilled by ENGL 2700

**UNITED STATES HISTORY** (6 Hours)

- HIST 2610 \_\_\_\_\_
- HIST 2620 (4260 or 4700 recommended) \_\_\_\_\_

**NOTE:** Honors equivalents or History 4700 (Texas History) or any advanced US-Topic History course(s) may substitute for either of the US History survey courses.

**POLITICAL SCIENCE** (6 Hours)

- PSCI 1040 \_\_\_\_\_
- PSCI 1050 \_\_\_\_\_

**NOTE:** If you are transferring credit for either PSCI course, please check with your advisor. Do not assume that your "first" course elsewhere is the same as PSCI 1040. An out-of-state American Government course cannot be equivalent to PSCI 1040 but may be equivalent to PSCI 1050. Any advanced US- Topic Political Science course may substitute for PSCI 1050 only.

**SOCIAL AND BEHAVIORAL SCIENCES** (3 Hours)

- \_\_\_\_\_
- VISUAL / PERFORMING ARTS** (3 Hours) \_\_\_\_\_
- (MUET 3000 or 3010 recommended)

**HUMANITIES** (3 Hours) \_\_\_\_\_

**UNDERSTANDING THE HUMAN COMMUNITY**(3 Hours)

- (MUET 3020, 3030 PSCI 3810, SOCI 4160 or SMHM 4750 recommended)

**NOTE: The student is required to maintain a 2.75 GPA in all upper division CSCE courses.**

Taking CSCE 3530, CSCE 4550, and CSCE 4560 will earn the student a certificate from the Committee on National Security Systems

A maximum of 6 hours of credit can be received in CSCE 4890, 4920, 4940, 4950 or 4980.

Check with your advisor concerning elective courses and eligible Concentration and Supporting Area courses.

In case of conflicting information, the catalog (the Big Green Book) prevails. This guide is for catalog year 2008-09 and does not apply to other catalog years.

# Bachelor of Arts Major in Information Technology

## Sample Focus Areas

Students are encouraged to consult their advisor concerning transferability of courses.

The focus area does not appear on your diploma.

Supporting Tracks involve a clearly defined focus of courses in the Concentration and Supporting Areas. These courses may not be used as part of a minor. These are just a few samples of the many options available to you.

### Game Development

#### Concentration Area Courses (9 Hours)

CSCE 4210 Game Programming I  
CSCE 4220 Game Programming II  
CSCE 4890.716 Directed Study in Game Dev

#### Supporting Area Courses (18 hours)

Math 2700 Linear Algebra  
CSCE 4230 Intro. to Computer Graphics  
CSCE 4310 Intro to Artificial Intelligence  
CSCE 4890.716 2<sup>nd</sup> Directed Study in Game Dev  
Advanced Elective  
Advanced Elective

### Business (Pre-MBA)

#### Concentration Area Courses (9 Hours)

CSCE 4310 Intro. To Artificial Intelligence  
CSCE 4560 Secure Electronic Commerce  
CSCE 4890 Directed Study in Business Apps.

#### Supporting Area Courses (18 hours)

ACCT 2010  
ACCT 2030  
FINA 3770  
MKTG 3650  
MGMT 3830  
BLAW 3430

### Information Security

#### Concentration Area Courses (9 Hours)

CSCE 4550 Intro. to Computer Security  
CSCE 4560 Secure Electronic Commerce  
CSCE 4890 Directed Study in Security

#### Supporting Area Courses (18 hours)

CSCE 3530 Intro. to Computer Networks  
Advanced BCIS Security Course  
Advanced BCIS Security or e-Commerce  
CSCE 4890 Directed Study in Security  
Advanced CJUS Course  
Advanced CJUS Course

### Pre-Law

#### Concentration Area Courses (9 Hours)

CSCE 4550 Intro. to Computer Security  
CSCE 4560 Secure Electronic Commerce  
CSCE 4890 Directed Study in Security

#### Supporting Area Courses (18 hours)

Choose 18 hours from the following courses depending on legal focus area  
Political Sci. 3200, 3210, 4200, 4210, 4220, 4810  
Criminal Justice 3201, 4250, 2100, 3210, 3700  
Business Law 2000, 3430, 4200, 4430, 4450, 4480, 4600, 4770

# Bachelor of Arts Major in Information Technology

suggested four-year degree plan

Students are encouraged to see their advisor each semester for program decisions and enrollment.

## FRESHMAN YEAR

### FALL

CSCE 1030, Computer Science I	4
ENGL 1310 or 1313, Composition I	3
Humanities	3
Social and Behavioral Science	<u>3</u>
Total Hours	13

### SPRING

CSCE 1040, Computer Science II	3
PSCI 1040, American Government	3
Laboratory Science	4
CSCE 1035, Information Systems I	3
Math 1710, Calculus I	<u>4</u>
Total Hours	17

## SOPHOMORE YEAR

### FALL

CSCE 2050, Computer Science III	3
MATH 2770, Discrete Mathematical Structures	3
CSCE 1045, Information Systems II	3
Laboratory Science	4
ENGR 2060, Professional Presentations	<u>3</u>
Total Hours	16

### SPRING

PSCI 1050, American Government	3
ENGL 2700, Technical Writing	3
CSCE 2615, Ent. Architecture/Design	3
Laboratory Science	4
HIST 2610, United States History to 1865	<u>3</u>
Total Hours	16

## JUNIOR YEAR

### FALL

CSCE 3055, IT Project Mgmt	3
CSCE 4355, Database/Info. Int.	3
Math 1780, Probability Models	3
Understanding the Human Community	3
Supporting Area	<u>3</u>
Total Hours	15

### SPRING

CSCE 3535, Networks / Security Mgmt	3
HIST 2620, United States History Since 1865	3
CSCE Concentration Area	3
Supporting Area	3
Supporting Area	<u>3</u>
Total Hours	15

## SENIOR YEAR

### FALL

CSCE 3605, IT Systems / Mgmt	3
CSCE 4905, Capstone I	3
CSCE Concentration Area	3
Supporting Area	3
Visual and Performing Arts	<u>3</u>
Total Hours	15

### SPRING

CSCE 4925, Capstone II	3
CSCE 4010, Engineering Ethics	2
CSCE Concentration Area	3
Supporting Area	3
Supporting Area	<u>3</u>
Total Hours	14

# Prerequisite Structure BA in Information Technology

Special Problems / Directed Study  
See Undergraduate catalog for requirements

CSCE 4920  
Co-op

See Undergraduate catalog for requirements

CSCE 2900  
Special Problems

Elective credit only

CSCE 4930

CSCE 4950

CSCE 4940

CSCE 4890

Maximum 6 hours credit in these courses

CSCE 1010  
Intro to CS

Not for CSCE major credit

CSCE 4935  
Capstone II

CSCE 4905  
Capstone I

CSCE Specialty I

Pre-reqs vary with course selections

CSCE 4010  
Social Implications

requires Junior level standing

CSCE Specialty II

CSCE Specialty III

CSCE 3055 IT Proj. Mgmt.

CSCE 4355 DB/Info Integration

CSCE 3605 IT Sys./Mgmt

CSCE 3535 Networks & Sec. Mgmt.

CSCE 2050 Computer Science III

CSCE 2615 Ent. Arch/Design

MATH 2770 Discrete Math

Math 1780 Probability Models

MATH 1710 Calculus I

CSCE 1045 Info Sys II

Supporting Courses (18 hours)

MATH 1650 Pre-Calculus

can be concurrent

CSCE 1035 Info Sys I

CSCE 1040 Computer Science II

May be chosen from any subject area with advisor approval. May not be used for a minor

See math department for placement before registering for your first math course

MATH 1100 College Algebra

CSCE 1030 Computer Science I

MATH 1010 Fund. of Algebra

HIGH SCHOOL ALGEBRA

Optional

Required for BA-IT

# Accepted Course Offering for University of North Texas Core Requirements

## ENGLISH

### Composition I

- ENGL 1310 College Writing I  
1313 Computer Assisted College Writing I  
1311 Honors Composition I  
1312 Gram. & Comp. For International Students  
1315 Computer Assisted Writing About Lit. I

## VISUAL AND PERFORMING ARTS

- ART 1300 Art Appreciation  
2360 Art History Survey II  
DANC 1200 Appreciation of Dance  
MUMH 1600 Music in Human Imagination  
2040 Music Appreciation  
3000 Nineteenth-Century Music  
3010 Twentieth-Century Music  
THEA 1340 Aesthetics of the Theatre  
1375 The Actor and the Text  
2340 Theater Appreciation

## HUMANITIES

- AGER 2250 Images of Aging in Film and Literature  
ENGL 2210 World Literature I  
2211 Honors World Literature I  
2220 World Literature II  
2221 Honors World Literature II  
2322 British Literature to 1780  
2323 British Literature from 1780 to Present  
2327 American Literature to 1870  
2328 American Literature from 1870 to Present  
2352 Lit. for International Students I  
2362 Lit. for International Students II  
PHIL 1050 Introduction to Philosophy  
1400 Intro. To Contemporary Moral Issues  
2050 Introduction to Logic  
2310 Intro. To Ancient Philosophy  
2330 Intro. To Modern Philosophy  
2500 Intro. To Contemporary Environ. Issues

## UNITED STATES HISTORY

- HIST 2610 US to 1865  
2675 Honors US History to 1865  
2620 US from 1865 or Advanced US History  
2685 Honors US History from 1865

## AMERICAN GOVERNMENT

- PSCI 1040 American Government  
1041 Honors American Government  
1050 American Government  
1051 Honors American Government  
1060 American Government: Topics

## SOCIAL & BEHAVIORAL SCIENCES

- ANTH 1010 General Anthropology  
2250 Intro. To Socio-cultural Anthropology  
BEHV 2300 Behavior Principles I  
CJUS 2100 Crime and Justice in the United States  
DFST 1013 Human Development  
ECON 1100 Microeconomics  
1110 Macroeconomics  
GEOG 1170 Culture, Environment, and Society  
ENGR 1030 Technological Systems  
PHIL 2600 Ethics in Science  
PSCI 3120 Women and Politics  
3310 Political Theory: Socrates to 18<sup>th</sup> Century  
3320 Political Theory: 18<sup>th</sup> Cent to Present  
PSYC 1630 General Psychology I  
1650 General Psychology II  
RHAB 3100 Disability and Society  
SOC1 1510 Individuals in Society  
1520 Contemporary Social Problems  
2100 Crime and Justice in the United States  
(same as CJUS 2100)

## UNDERSTANDING THE HUMAN CONDITION

- AGER 4560 Minority Aging  
4800 The Social Context of Aging  
ANTH 2045 Gender Across Cultures  
2100 World Cultures Through Film  
2150 World Cultures  
2350 Cultural Diversity in the U. S.  
4050 Contemporary Ethnic Groups  
ART 2350 Art History Survey I  
BIOL 1024 Biological Principles of Women's Health  
BUSI 1340 The Free Enterprise System  
CJUS 2600 Diversity Issues in Criminal Justice  
COMM 1010 Introduction to Communication  
1440 Honors Classical Argument  
2020 Interpersonal Communication  
2040 Public Speaking  
2060 Performance of Literature  
4260 Performance and Culture  
DANC 1100 Stress Reduction through Movement  
2800 Survey of Dance  
DFST 2033 Parenting in Diverse Families  
EDEE 2000 Exploring Diversity through Social Action  
EDSP 2500 Human Exceptionality  
ENGL 3450 Short Story  
3920 Survey of Ethnic Literature  
4300 Modern Drama  
GEOG 1200 World Regional Geography  
3100 Geography in the U.S. and Canada  
3750 Geography of Contemp. Africa  
HIST 1050 World Civilization to the 16th Century  
1075 Honors World Civ. To the 16th Century  
1060 World Civilization from the 16th Century  
1085 Honors World Civ. From the 16th Century  
HLTH 1100 School & Community Health Services  
2200 Family Life and Human Sexuality  
JOUR 1210 Mass Communications and Society  
4250 Race, Gender, and the Media  
KINE 2000 History and Philosophy of Sport  
2050 Sociology of Sport (same as SOCI 2050)  
MKTG 2650 Global Marketing Concepts  
3010 Professional Selling  
MUAG 1500 Occupational Health: Lessons from Music  
MUET 3020 Popular Music in American Culture  
3030 Music Cultures of the World  
PADM 2100 Diversity in Urban Governance  
PHED 1000 Health Related Fitness  
PHIL 2070 Introduction to Great Religions  
2400 Religion & American Society  
PSCI 3500 Introduction to Peace Studies  
3810 International Relations  
4520 International Human Rights  
4660 Democracy and Democratization  
4710 Middle East Politics  
4720 Ethnicity in World Politics  
4850 Critical Issues in World Politics  
PSYC 2580 Health Psychology  
RECR 2550 Leisure and Society  
RHAB 3000 Microcounseling  
SMHM 1450 Principles of Nutrition  
2750 Consumers in a Global Market  
3450 Presentation Techniques  
4750 Managing a Diverse Workforce  
SOC1 2010 Race, Class, Gender, Ethnicity  
2050 Sociology of Sport (same as KINE 2050)  
2070 Introduction to Race & Ethnic Relations  
4160 Developing Societies  
4540 Race and Ethnic Minorities  
SOWK 4540 Human Diversity for the Helping Professions  
THEA 3030 World Theatre to 1700  
3040 World Theatre after 1700  
WMST 2100 Woman & Society: Intro to Women's Studies  
2420 Race, Class, Gender and Ethnicity  
2620 Biological Principles of Women's Health

## BA in Information Technology University of North Texas

### Transfer Student Guide

The tables below indicate the University Core, College of Engineering and Departmental course requirements that are available to take at area community colleges before transferring to UNT Denton or UNT Dallas. Courses that are taken at area community colleges after transferring to UNT Denton or UNT Dallas must be approved from a UNT advisor and may be different than what is listed on these tables.

#### Core Classes

UNT Course	Title	DCCCD	CCCC	TCC	NCTC	Notes
ENGL 1310	Composition I	ENGL 1301	ENGL 1301	ENGL 1301	ENGL 1301	
ENGL 2700	Technical Writing	ENGL 2311	ENGL 2311	ENGL 2311	ENGL 2311	
HIST 2610	US History I	HIST 1301	HIST 1301	HIST 1301	HIST 1301	
HIST 2620	US History II	HIST 1302	HIST 1302	HIST 1302	HIST 1302	
PSCI 1040	State and Local Govt.	GOVT 2301	GOVT 2301	GOVT 2306	GOVT 2306	
PSCI 1050	US Govt.	GOVT 2302	GOVT 2302	GOVT 2305	GOVT 2305	
Social & Behavioral Science	From approved list	From approved list	From approved list	From approved list	From approved list	
Visual/Performing Arts	From approved list	From approved list	From approved list	From approved list	From approved list	
Humanities	From approved list	From approved list	From approved list	From approved list	From approved list	
Understanding the Human Condition	From approved list	From approved list	From approved list	From approved list	From approved list	

College of Engineering Core  
**Grades of 'D' are not accepted**

3 sciences from choices below plus the two math courses

UNT Course	Title	DCCCD	CCCC	TCC	NCTC	Notes
BIOL 1710/1730	General Biology I	BIOL 1406	BIOL 1406	BIOL 1406	BIOL 1406	UNT-D reqd
PHYS 1710/1730	Physics I – Mechanics	PHYS 2425	PHYS 2425	PHYS 2425	PHYS 2425	UNT-D reqd
PHYS 2220/2240	Physics II – Electricity and Magnetism	PHYS 2426	PHYS 2426	PHYS 2426	PHYS 2426	UNT-D reqd
CHEM 1410/1430	Gen Chemistry I	CHEM 1411	CHEM 1411	CHEM 1411	CHEM 1411	UNT-D reqd
BIOL 1720/1740	Gen Biology II	BIOL 1407	BIOL 1407	BIOL 1407	BIOL 1407	UNT-D reqd
MATH 1710	Calculus I	MATH 2513	MATH 2413	MATH 2513	MATH 2413	UNT-D reqd
MATH 2770	Discrete Mathematics	MATH 2305	MATH 2305	MATH 2305	MATH 2305	UNT-D reqd

Departmental Requirements

UNT Course	Title	DCCCD	CCCC	TCC	NCTC	Notes
CSCE 1030	Programming Fundamentals I	COSC 1436	COSC 1436	COSC 1436	COSC 1436	UNT-D reqd
CSCE 1040	Programming Fundamentals II	COSC 1437	COSC 1437	COSC 1437	COSC 1437	UNT-D reqd
CSCE 2050	Programming Fundamentals III	COSC 2436	COSC 2436	COSC 2436	COSC 2436	UNT-D reqd
CSCE 2610	Computer Organization	COSC 2425	COSC 2425	COSC 2425	COSC 2425	UNT-D reqd