# Department of Computer Science and Engineering 

## BA in Information Technology

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


## UNT Discovery Park (NTDP) F201 (940) 565-2767

Valid only for those on Catalog Year 2017-18
ADVISING INFORMATION: http://www.cse.unt.edu/site/node/418

## University of NorthTeXAS

## Educational Objectives

## Educational Objectives for the B.A. in Information Technology

## Graduates will:

- Pursue graduate studies in information technology, computer science or related disciplines, and/or a career in a technology field utilizing skills from the information technology areas studied during the undergraduate program.
- Act responsibly and ethically in their professional conduct and successfully engage in lifelong learning.
- Work effectively in multi-disciplinary teams and exhibit the ability to communicate effectively.
- Complete professional work assignments that exhibit the ability to design, develop, manage, maintain and implement information systems while applying IT and computing principles and practices to the solution of real problems.


## INFORMATION TECHNOLOGY

Bachelor of Arts (B.A.) degree with a major in Information Technology

Department of Computer Science \& Engineering Discovery Park F-201; (940) 565-2767
Faculty Advisors: Dr. Ryan Garlick, Mr. David Keathly ryan.garlick@unt.edu, david.keathly@unt.edu

University Core

## COMMUNICATION

- 3 Hours approved course

Grade of " C " or better is required.

## AMERICAN HISTORY

- HIST 2610, U.S. History To 1865 (3 Hours)
- HIST 2620, U.S. History From 1865 (3 Hours)


## GOVERNMENT/POLITICAL SCIENCE

- PSCI 2305, U.S Political Behavior \& Policy (3 Hours)
- PSCI 2306, U.S. \& Texas Constitution \& Institution (3 Hours)


## CREATIVE ARTS

- 3 Hours approved course


## LANGUAGE, PHILOSOPHY, \& CULTURE

- 3 Hours approved course


## SOCIAL \& BEHAVIORAL SCIENCE

- 3 Hours approved course


## COMPONENT AREA

3 Hours approved course

## Major Requirements

Grades of C or better.

## TECHANICAL COMMUNIICATIONS

[ TECM 2700, Technical Writing (3 Hours)

## MATHEMATICS

- MATH 1710, Calculus I (4 Hours)
- MATH 1680 or MATH 1780, Probability (3 Hours)


## SCIENCES

$\square$ PHYS 1710, Mechanics (3 Hours) \&
PHYS 1730, Mechanics Lab (1 Hour)

- CHEM 1410, General Chemistry I (3 Hours) \&

CHEM 1430, General Chemistry I Lab (1 Hour)

## or

CHEM 1415, Chemistry for Engineers (3 Hours) \&
CHEM 1435, Chemistry for Engineers Lab (1 Hour) or
BIOL 1710, Biology I (3 Hours) \&
BIOL 1760, Biology Lab (2 Hours)

Engineering Advising Office
Discovery Park A-101; (940) 565-4201
Academic Advisor: Heather Burrow, Beverly Wilks heather.burrow@unt.edu, beverly.wilks@unt.edu

## Major Requirements <br> Grades of C or better.

## COMPUTER SCIENCE and ENGINEERING

- CSCE 1030, Computer Science I (4 Hours)
- CSCE 1040, Computer Science II (3 Hours)
- CSCE 2100, Computing Foundations I (3 Hours)
- CSCE 2110, Computing Foundations II (3 Hours)
- CSCE 3055, IT Project Management (3 hours)
- CSCE 3220, Human Computer Interfaces (3 Hours)
- CSCE 3420, Internet Programming (3 Hours)
- CSCE 3530, Introduction to Computer Networks (3 Hours)
- CSCE 3535, Network Administration (3 Hours)
- CSCE 3600, Principles of Systems Programming (3 Hours)
- CSCE 3605, Systems Administration(3 Hours)
- CSCE 3615, Enterprise Systems Arch., Analysis \& Design (3 Hours)
- CSCE 4010, Social Issues in Computing (3 Hours)
- CSCE 4350, Introduction to Database Systems Design (3 Hours)
- CSCE 4355, Database Administration (3 Hours)
- CSCE 4550, Introduction to Computer Security (3 Hours)
- CSCE 4905, Information Technology Capstone I (3 Hours)
- CSCE 4925, Information Technology Capstone II (3 Hours)


## SUPPORTING AREA

- Course approved by an advisor (3 Hours)
- Course approved by an advisor (3 Hours)
- Course approved by an advisor (3 Hours)
- Course approved by an advisor (3 Hours)
- Course approved by an advisor (3 Hours)
- Course approved by an advisor (3 Hours)
- Course approved by an advisor (3 Hours)

You must choose a supporting area (21 Hours) \& complete approved courses. Check with your advisor concerning approved classes. Suggestions include, but are not limited to:

Security
Networking
Information Systems
Software/Web Development
Game Development
Criminology/Forensics
Technical Communications Microsoft/Oracle/Cisco Cert.
Graphic/Communications Design
Geographic Information Systems (GIS)

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# INFORMATION TECHNOLOGY 

Sample Four-Year Schedule<br>Required prerequisite(s) indicated in parentheses \& notes

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL |  | SPRING |  |
| MATH 1710, Calculus I (see note 1) | 4 | MATH 1680 or MATH1780, Probability (MATH 1710) | 3 |
| CHEM 1410 or 1415 or BIOL 1710 (see note 2) | 3 | PHYS 1710, Mechanics (MATH 1710) | 3 |
| CHEM 1430 or 1435 or BIOL 1760 (see note 2) | 1 | PHYS 1730, Mechanics Lab (MATH 1710) | 1 |
| CSCE 1030, Computer Science I (see note 3) | 4 | CSCE 1040, Comp. Science II (CSCE 1030, MATH 1710) | 3 |
| Communication Core course | $\underline{3}$ | TECM 2700, Technical Writing (Communication Core) | 3 |
| Total Hours | 15 | University Core course | 3 |
|  |  | Total Hours | 16 |
| SOPHOMORE YEAR |  |  |  |
| FALL |  | SPRING |  |
| CSCE 2100, Computing Foundations I (CSCE 1040) | 3 | CSCE 2110, Computing Foundations II (CSCE 2100) | 3 |
| Supporting Area course (see note 4) | 3 | CSCE 3600, Systems Programming (CSCE 2100) | 3 |
| University Core course | 3 | Supporting Area course (see note 4) | 3 |
| University Core course | 3 | University Core course | 3 |
| University Core course | 3 | University Core course | 3 |
| Total Hours | 15 | Total Hours | 15 |
| JUNIOR YEAR |  |  |  |
| FALL |  | SPRING |  |
| CSCE 3055, IT Project Management (CSCE 2100) | 3 | CSCE 4010, Social Issues (CSCE 3600) | 3 |
| CSCE 3220, Human Computer Interfaces (CSCE 2110) | 3 | CSCE 3605, Systems Administration (CSCE 3600) | 3 |
| CSCE 3420, Internet Programming (CSCE 2110) | 3 | CSCE 3615, Enterprise Systems Arch. (CSCE 2100) | 3 |
| CSCE 3530, Computer Networks (CSCE 3600) | 3 | CSCE 4350, Database Systems (CSCE 2110) | 3 |
| Supporting Area course (nee note 4) | $\underline{3}$ | University Core course | 3 |
| Total Hours | 15 | Total Hours | 15 |
| SENIOR YEAR |  |  |  |
| FALL |  | SPRING |  |
| CSCE 3535, Network Administration (CSCE 3530) | 3 | CSCE 4925, Capstone II (CSCE 4905) | 3 |
| CSCE 4355, Database Administration (CSCE 4350) | 3 | Supporting Area course (see note 4) | 3 |
| CSCE 4550, Computer Security (CSCE 3600) | 3 | Supporting Area course (see note 4) | 3 |
| CSCE 4905, Capstone I (CSCE 3055, CSCE 3615) | 3 | Supporting Area course (see note 4) | 3 |
| Supporting Area course (see note 4) | 3 | University Core course | 3 |
| Total Hours | 15 | Total Hours | 15 |

## Notes:

Note 1: MATH 1710 requires one of the following as prerequisite: completion of MATH 1650 with a grade of " C " or higher; or completion of MATH 1610 with a grade of " $C$ " or higher; or Freshman Math Group Level 3; or approval authorized by score via mathematics testing; or earned credit for a math course at or above the MATH 1710 level.
Note 2: BIOL $1710 \& 1760$ has no prerequisite. CHEM $1410 \& 1430$ requires MATH 1100, College Algebra (or higher) as prerequisite. CHEM 1415 \& 1435 requires MATH 1650, Pre-Calculus (or higher) as prerequisite.
Note 3: CSCE 1030 requires completion of or co-enrollment in MATH 1710, Calculus I(or higher) as prerequisite.
Note 4: Must enroll in Supporting Area courses approved by an advisor \& complete prerequisite(s) for approved courses.
Must earn at least a grade of " $C$ " and a minimum 2.5 GPA in CSCE 1030, CSCE 1040, CSCE 2100, and MATH 1710 as foundations to enroll in advanced courses.

Must earn at least a grade of " $C$ " in each course above except for most University Core courses.

This is an unofficial sample schedule. Requirements, prerequisites, etc. may change. Students should meet with an advisor each semester for individual scheduling, program decisions, etc. Engineering admissions requirements must be met \& a degree audit must be created in order to progress in the program to a timely graduation.

Prerequisite Structure
BA in Information Technology


CSCE 2900
Special Problems

Special Problems / Directed Study See Undergraduate catalog for requirements


Maximum 6 hours credit in these courses


## COMMUNICATION (3 Hours)

ENGL 1310, College Writing I ENGL 1311, Honors College Writing I ENGL 1315, Writing about Literature I TECM 1312, Intro. to Writing For International Students TECM 1700, Intro. to Professional, Science, \& Tech. Writing

AP English Language \& Composition score of 3,4 or 5
IB English A: Language \& Literature score of 5,6 , or 7

> | AMERICAN HISTORY (6 Hours) |  |
| :--- | :--- |
| HIST | 2610, US to 1865 or |
| HIST | 2675, Honors US History to 1865 |
| HIST | 2620, US from 1865 or |
| HIST | 2685, Honors US History from 1865 |
| HIST | 4700, Texas History |

AP U.S. History score of 3,4 or 5 CLEP History of United States I CLEP History of United Stated II

## GOVT./POLITICAL SCIENCE (6 Hours)

 PSCI 2305, U.S Political Behav. \& Policy or PSCI 2315, Honors U.S. Political Behav. PSCI 2306, U.S. \& Texas or PSCl 2316, Honors U.S. \& TexasAP U.S. Gov. \& Politics score of 3,4 or 5 CLEP American Government

Fulfills PSCI 2305 or 2315

## CREATIVE ARTS (3 Hours)

ART 1300, Art Appreciation
ART 1301, Honors Art Appreciation ART 2360, Art History Survey II COMM 2060, Performance of Literature DANC 1200, Appreciation of Dance DANC 2800, Survey of Dance MUMH 2040, Music Appreciation MUMH 3000, Nineteenth-Century Music MUMH 3010, Twentieth-Century Music MUMH 3500, Music Hist. \& Lit. to 1750 MUMH 3510, Music His. \& Lit from 1750 THEA 1340, Aesthetics of the Theatre THEA 2340, Theater Appreciation THEA 3030, World Theatre to 1700 THEA 3040, World Theatre from 1700

AP Art History score of 3,4 or 5
IB Dance score of 4 or higher*

LANGUAGE, PHIL. \& CULTURE (3 Hours) AGER 2250, Aging in Film \& Lit. ANTH 3101 American Culture \& Society ANTH 3110, Indigenous People of N. Am. ANTH 3120, Indigenous Cultures of S.W. ANTH 3140, Latinos in the U.S. ANTH 3200, Latin American Cultures ANTH 3210, MesoAmerica ANTH 3220, Mayan Culture ANTH 3300, Peoples of the Pacific ANTH 3400, Peoples of Africa ANTH 3500, Peoples of the Middle East ANTH 3700, Peoples of South Asian

LANGUAGE, PHIL. \& CULTURE Cont'd (3 Hours)
ENGL 2210, World Literature to 1700
ENGL 2211, Honors World Literature to 1700
ENGL 2220, World Literature from 1700
ENGL 2221, Honors World Lit. from 1700
FREN 3040, France Today
FREN 4060, Studies in French Literature
FREN 4310, Contemp. French Civilization
GERM 3040, Topics in German Culture
GERM 3050, Topics in German Literature
HDFS 2313, Courtship \& Marriage
HIST 1050, World History to $16^{\text {th }}$ Century
HIST 1060, World History from $16^{\text {th }}$ Century
ITAL 3040, Topics in Italian Culture
ITAL 3050, Comp. Italian Culture Thru Film
ITAL 3070, Intro. to Italian Literature
JAPN 3020, Advanced Japanese I
MUET 3030, Music Cultures of the World
PHIL 1050, Introduction to Philosophy
PHIL 1400, Contemporary Moral Issues
PHIL 2050, Introduction to Logic
PHIL 2070, Great Religions
PHIL 2100, Intro. To Judaism
PHIL 2310, Intro. To Ancient Philosophy
PHIL 2600, Ethics in Science
AP English Literature \& Composition score of 3, 4 or 5
AP World History score of 3,4 or 5
IB History score of 4 or higher*
IB Philosophy score of 5, 6, or 7
IB English Language A: Literature score of 5,6 , or 7
SOCIAL \& BEHAVIORAL SCIENCE (3 Hours)
AGER 4560, Minority Aging
AGER 4800, Social Context of Aging
ANTH 1010, Intro. to Anthropology
ANTH 2300, Culture and Society
BEHV 2300, Behavior Principles I
CJUS 2100, Crime and Justice in the U.S.
COMM 2020, Interpersonal Comm.
EADP 4050, Special Pop. in Disasters
ECON 1100, Microeconomics
ECON 1110, Macroeconomics
GEOG 1200, Global Societies
HDFS 1013, Human Development
HLTH 2200, Family Life \& Human Sexuality
JOUR 1210, Mass Comm. \& Society
MDSE 2750, Consumers in Global Market
MKTG 2650 Culture and Consumption
MAUG 1500 Occupational Health with Music
PADM 2100, Cultural Competency in Urban
PSYC 1630, General Psychology I
PSYC 1650, General Psychology II
PSYC 3620, Developmental Psychology
RHAB 3100, Disability \& Society
SOCI 1510, Intro to Sociology
SOCI 2100, Crime \& Justice in the U.S.
SOWK 1450, Intro. to Social Work
AP Macroeconomics score of 3,4 or 5
AP Microeconomics score of 3,4 or 5
AP Psychology score of 3,4 or 5
IB Economics score of 4 or higher*
IB Geography score of 4 or higher*
IB Psychology score of 4 or higher*
CLEP Macroeconomics
CLEP Microeconomics
CLEP Human Growth \& Development
CLEP Introductory Psychology
CLEP Introductory Sociology

1300, Discover Biomedical
Engr.**
BUSI
1340, Managing Business
Enterprise
CHEM
1400, Discover Chemistry
COMM 1010, Intro. to Communication
COMM 1440, Honors Classical Argument
COMM 2040, Public Speaking
COMM 2140, Advocating in Public

COUN
2620, Diversity \& Cultural
Awareness
DANC
Movement
EENG 1910, Project 1: Learning to Learn
ENGL
Interpretation
ENGR
FREN
North Am.
FREN
Canada
GEOG
Areas
HDFS
Families
HDFS
Communities
HLTH
HMGT
HNRS
HNRS
INST
Studies
INST 2500, Global Perspectives
ITAL 1610, Italian Influences in th
U.S.

JOUR
1210, Mass Communicatior
Society
LANG 1610, World Ling. Landscap
LING 2050, Language of Now
MATH 2000, Discrete Mathematic
MDSE 2750, Consumers in a Globd
Market
MEEN 1000, Discover Mech. \&
Energy Engr.
MGMT
3330, Communicating in
Business
MKTG
MKTG 3010, Professional Selling
MTSE 1100, Discover Materials
PHED
PHIL 1000, Health Related Fitnes:

PHIL
Society
PHIL 2500, Contemp.
Environmental Issues
PHIL 4150, Feminism
PHIL 4200, Science, Technology,
Sotiethpletion of IB program, earned
PHIE-Diploma, \& mi4ißaOnR Sideserd $144 f_{r} F$ ood


RH5AB or 7.
SOCl
SOWK 3000, Microcounseling 2070, Race \& Ethnic Relatio
TECBMEN 1300 is p\&50inglempronerdiatfor Colles
C bureércluded as an option for the

Please contact an engineering advisor prior to enrollment in this course.

## 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 | Collin | ICC | NCTC | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL 1310 | Composition <br> । | $\begin{aligned} & \text { ENGL } \\ & 1301 \end{aligned}$ | $\begin{aligned} & \text { ENGL } \\ & 1301 \end{aligned}$ | $\begin{aligned} & \text { ENGL } \\ & 1301 \end{aligned}$ | $\begin{aligned} & \text { ENGL } \\ & 1301 \end{aligned}$ |  |
| TECM 2700 | Technical Writing | $\begin{aligned} & \text { ENGL } \\ & 2311 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { ENGL } \\ & 2311 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { ENGL } \\ & 2311 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { ENGL } \\ & 2311 \\ & \hline \end{aligned}$ |  |
| HIST 2610 | US History I | HIST 1301 | HIST 1301 | HIST 1301 | $\begin{aligned} & \hline \text { HIST } \\ & 1301 \end{aligned}$ |  |
| HIST 2620 | US History II | HIST 1302 | HIST 1302 | HIST 1302 | $\begin{aligned} & \hline \text { HIST } \\ & 1302 \end{aligned}$ |  |
| PSCI 1040 | State and Local Govt. | $\begin{aligned} & \hline \text { GOVT } \\ & 2301 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { GOVT } \\ & 2301 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { GOVT } \\ & 2306 \end{aligned}$ | $\begin{aligned} & \text { GOVT } \\ & 2306 \\ & \hline \end{aligned}$ |  |
| PSCI 1050 | US Govt. | $\begin{aligned} & \text { GOVT } \\ & 2302 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { GOVT } \\ & 2302 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { GOVT } \\ & 2305 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { GOVT } \\ & 2305 \\ & \hline \end{aligned}$ |  |
| Social \& Behavioral Science | From approved list | From approved list | From approved list | From approved list | From approved list |  |
| Creative Arts | From approved list | From approved list | From approved list | From approved list | From approved list |  |
| Language, Philosophy \& Culture | From approved list | From approved list | From approved list | From approved list | From approved list |  |
| Discovery | From approved list | From approved list | From approved list | From approved list | From approved list |  |

Please see the College of Engineering Advisers in Discovery Park BEFORE enrolling in courses at another institution

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

| UNT Course | Title | DCCCD | Collin | TCC | NCTC | Notes |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| PHYS 1710/1730 | Physics I - <br> Mechanics | PHYS 2425 | PHYS 2425 | PHYS 2425 | PHYS 2425 |  |
| CHEM 1410/1430 | Gen <br> Chemistry I | CHEM 1411 | CHEM 1411 | CHEM 1411 | CHEM <br> 1411 |  |
| MATH 1710 | Calculus I | MATH <br> 2413 | MATH 2413 | MATH 2413 | MATH 2413 |  |
| MATH 1680 |  <br> Statistics | MATH 2342 | MATH 1342 | MATH 1342 | MATH 1342 |  |

Departmental Requirements

| UNT Course | Title | DCCCD | Collin | TCC | NCTC | Notes |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CSCE 1030 | Programming <br> Fundamentals I | COSC <br> 1436 | COSC 1436 | COSC <br> 1436 | COSC <br> 1436 |  |
| CSCE 1040 | Programming <br> Fundamentals II | COSC <br> 1437 | COSC 1437 | COSC <br> 1437 | COSC <br> 1437 |  |
| CSCE 2100 or CSCE <br> 2110 if CSCE 2100 <br> Complete | Foundations I | COSC <br> 2436 | COSC 2436 | COSC <br> 2436 | COSC <br> 2436 |  |
| CSCE 2100 or CSCE <br> 2110 if CSCE 2100 <br> Complete | Foundations II | MATH <br> 2305 | MATH 2305 | MATH 2305 | MATH 2305 |  |


[^0]:    Completion of CSCE 2610, CSCE 4560, \& CSCE 4600 toward a Supporting Area in Security and/or Networking also earns a Security Certificate from the National Security Agency and Department of Homeland Security. CSCE 2610 requires EENG 2710 or ENGR 2720/2730 as prerequisite.

    A maximum of 6 hours may be taken for the Supporting Area from CSCE 4890, 4920, 4930, 4940, or 4950.

