



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

www.cse.unt.edu

Valid beginning Fall 2011

Information Technology

Information Technology

- 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 (8 Hours)

CHEM 1410 or 1415 & lab (4 Hours) _____

PHYS 1710-1730 (4 Hours) _____

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

MATHEMATICS (7 Hours)

Math 1710 – Calculus I (4 hours) _____

Math 1780 – Probability Models (3 Hours) _____

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

ORAL / ADVANCED WRITTEN COMMUNICATIONS (3 Hours)

TECM 2700 – Tech Writing _____ (satisfies 2nd English)

Must earn at least a "C" in TECM 2700

CSE Department Required Courses

COMPUTER SCIENCE (42 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 2100 – Computing Foundations I (3 hrs) _____

CSCE 2110 – Computing Foundations II (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) – see next page

(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.) _____

(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 courses under certain conditions. Please check with an advisor. Pre-requisites required for Concentration & Supporting Areas can also be used in those areas.

University Core

ENGLISH (3 Hours)

ENGL 1310, 1311, 1312, or 1313 _____

Grade of "C" or better required

Second English fulfilled by TECM 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)

(MUMH 3000 or 3010 recommended)

HUMANITIES (3 Hours)

DISCOVERY (3 Hours)

CAPSTONE (3 Hours)

TAKE UPPER DIVISION (3xxx & 4xxx) COURSES WHERE POSSIBLE

NOTE: You must maintain a 2.75 GPA in all upper division CSCE courses.

Completing CSCE 3530, CSCE 4550, and CSCE 4560 earns a certificate from the Committee on National Security Systems

Completing CSCE 4210, 4215, 4220, and 4250 earns the Certificate in Game Programming.

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 2010-11 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. Please consult your advisor.

Game Development

CS 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 2nd Directed Study in Game Dev
Advanced Elective
Advanced Elective

Business (Pre-MBA)

CS 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

CS 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

CS 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

	Course Title	Fall	Spring
1010	Introduction to Computer Science Non Majors	x	x
1020	Program Development Non Majors	x	x
1030	Computer Science I	x	x
1035	Information Systems I	x	x
1040	Computer Science II	x	x
1045	Information Systems II	x	x
2100	Computing Foundations I	x	x
2110	Computing Foundations II	X	x
2410	Programming Laboratory	x	
2610	Computer Organization	x	x
2615	Enterprise Architecture and Design		x
2900	Special Problems in CSE	x	x
3010	Signals & Systems	x	EE
3020	Fundamentals of Communication Theory	EE	x
3030	Parallel Programming		x
3055	IT Project Management	x	
3110	Data Structures & Algorithms	x	x
3210	Symbolic Processing	x	
3300	File Organization/Process	x	
3410	Advanced Programming	x	x
3510	Introduction to Wireless Communication		x
3520	Data Communications		x
3530	Introduction to Computer Networks	x	
3535	Network and Security Management		x
3600	Principles of Systems Programming	x	x
3605	IT Systems/Management	x	
3612	Embedded System Design	x	
3650	Introduction to Compilation Techniques		x
3730	Reconfigurable Logic	x	
4010	Engineering Ethics (2 hr)	x	x
4110	Algorithms	x	x
4210	Game Programming I	x	
4215	Programming Math and Physics for Games	x	
4220	Game Programming II		x
4230	Introduction Computer Graphics		x
4250	Topics in Game Development		x
4310	Introduction to Artificial Intelligence		x
4350	Introduction to Database Systems Design	x	
4355	Database Design and Information Integration	x	
4410	Software Develop I	x	x
4420	Software Develop II		x
4430	Programming Languages		x
4440	Real-Time Software Development		x
4520	Wireless Networks & Protocols	x	
4530	Computer Network Design		x
4540	TCP/IP Protocols		x
4550	Introduction to Computer Security	x	
4560	Secure E Commerce		x
4600	Introduction to Operating Systems		x
4610	Computer Architecture		x
4620	Real-Time Operating Systems	x	
4730	VLSI Design		x
4750	VLSI Testing	x	
4905	Capstone I	x	
4910	Computer Engineering Design I	x	
4915	Computer Engineering Design II		x
4925	Capstone II		x

Prerequisite Structure BA in Information Technology

Special Problems / Directed Study
See Undergraduate catalog for requirements

CSCE 4920
Co-op See Undergraduate catalog for requirements

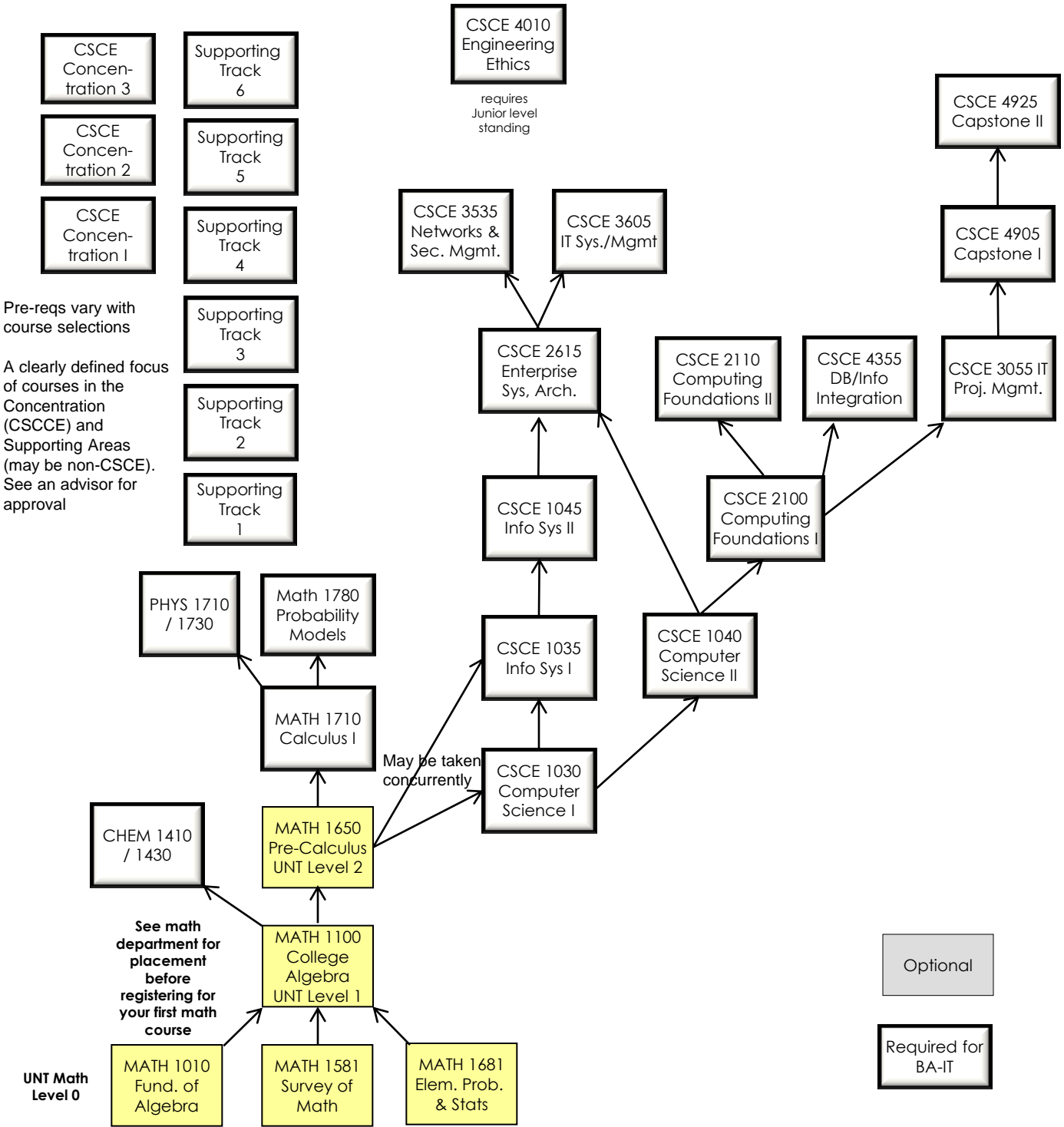
CSCE 2900
Special Problems Elective credit only

CSCE 1010
Intro to CS Not for CSCE major credit

CSCE 4950 CSCE 4950

CSCE 4940 CSCE 4890

Maximum 6 hours credit in these courses



Course Offering for UNT Core Requirements

ENGLISH COMPOSITION (3 Hours)

ENGL	1310, College Writing I
ENGL	1311, Honors Composition I
ENGL	1313, Computer Assisted College Writing I
ENGL	1315, Writing about Literature I
TECM	1312, Gram. & Comp. For International Students
TECM	1700, Intro. to Professional, Science, & Tech. Writing

UNITED STATES HISTORY (6 Hours)

HIST	2610, US to 1865
HIST	2675, Honors US History to 1865
HIST	2620, US from 1865
HIST	2685, Honors US History from 1865
HIST	4700, Texas History Advanced (3*** or 4***) level U.S. History (Group A)

POLITICAL SCIENCE (6 Hours)

PSCI	1040, American Government
	1041, Honors Am. Government
	1050, American Government
	1051, Honors Am. Government

SOCIAL & BEHAVIORAL SCIENCES (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.
DFST	1013, Human Development
EADP	4050, Special Pop. in Disasters
ECON	1100, Microeconomics
ECON	1110, Macroeconomics
HLTH	2200, Family Life & Human Sexuality
JOUR	1210, Mass Comm. & Society
MKTG	2650, Princ. of Global Marketing
PADM	2100, Diversity in Urban Gover.
PSYC	1630, General Psychology I
PSYC	1650, General Psychology II
RHAB	3100, Disability & Society
SOCI	1510, Individuals in Society
SOCI	2100, Crime & Justice in the U.S.

VISUAL AND PERFORMING ARTS (3 Hours)

ART	1300, Art Appreciation
ART	1301, Honors Art Appreciation
ART	2350, Art History Survey I
ART	2360, Art History Survey II
COMM	2060, Performance of Literature
DANC	1200, Appreciation of Dance
DANC	2800, Survey of Dance
MUMH	1600, Music in Human Imagination
MUMH	2040, Music Appreciation
MUMH	3000, Nineteenth-Century Music
MUMH	3010, Twentieth-Century Music
THEA	1340, Aesthetics of the Theatre
THEA	2340, Theater Appreciation
THEA	3030, World Theatre to 1700
THEA	3040, World Theatre from 1700

HUMANITIES (3 Hours)

AGER	2250, Images of Aging in Film & Lit.
ENGL	2210, World Literature I
ENGL	2211, Honors World Literature I
ENGL	2220, World Literature
ENGL	2221, Honors World Literature
ENGL	2322, British Literature to 1780
ENGL	2323, British Literature from 1780
ENGL	2327, American Literature to 1870
ENGL	2328, American Literature from 1870
FREN	3040, Adv. Reading French Culture
FREN	4070, French Culture & Lit. thru Film
FREN	4310, Contemp. French Civilization
MUET	3030, Music Cultures of the World
PHIL	1800, Philosophy of Self
PHIL	2070, Great Religions
PHIL	2100, Intro. To Judaism
PHIL	2310, Intro. To Ancient Philosophy
PHIL	2400, Religion in American Society
PHIL	2500, Contemp. Environ. Issues
PHIL	2600, Ethics in Science

DISCOVERY (3 Hours)

ANTH	1100, World Cultures
ANTH	1150, World Cultures Through Film
ANTH	2070, Intro. to Race & Ethnic Studies
ANTH	2200, Gender Across Cultures
BCIS	3615, Visual Display of Business Info.
BIOL	1750/1755, Intro. Research Lab I & II
BUSI	1340, Managing Business Enterprise
COMM	1010, Intro. to Communication
COMM	1440, Honors Classical Argument
COMM	2040, Public Speaking
COUN	2620, Diversity & Cultural Awareness
DANC	1100, Stress Reduct. Thru Movement
DFST	2033, Parenting in Diverse Families
ENGR	1030, Technological Systems
FREN	1610, French Influence in North Am.
FREN	1620, French Language in Canada
GEOG	1170, Culture, Environment & Society
GEOG	1200, World Regional Geography
GEOG	1500, Geography of DFW Metroplex
HIST	1050, World History to 1500
HIST	1060, World History from 1500
HMGD	1450, Principles of Nutrition
HNRS	1100, The Good Society
HNRS	1500, Intro. to Research
INST	2100, Intro. to International Studies
LING	2050, Pop Culture, Tech. & Society
MDSE	2750, Consumers in a Global Market
MEEN	1000, Discover Mech. & Energy Engr.
MGMT	3330, Communicating in Business
MKTG	3010, Professional Selling
MUAG	1500, Occupational Health:
PHED	1000, Health Related Fitness
PHIL	1050, Introduction to Philosophy
PHIL	1400, Contemporary Moral Issues
PHIL	2050, Introduction to Logic
PSYC	1500, Mythbusting
RHAB	3000, Microcounseling
SOCI	2070, Race & Ethnic Relations
SOWK	4540, Human Diversity
TECM	1500, New Media for College Career
UCRS	1000, Freshman Seminar
WMST	2100, Women & Society

CAPSTONE (3 Hours)

ELET	4790, Senior Design II
HNRS	4000, Honors Capstone Seminar
MEET	4790, Senior Design II
MUET	3020, Popular Music in Am. Culture
PHIL	3700, Science, Technology & Society
PHIL	3900, Philosophy of Food

Additional courses will be added for the 2012-2013 curriculum. If your degree program doesn't require a major course which double-dips for this core category, you should post-pone completing a course until the updated curriculum is released.

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	
TECM 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	
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

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