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 only for those on Catalog Year 2013-14

ADVISING INFORMATION:
http://www.cse.unt.edu/site/node/418

UNIVERSITY of NORTH TEXAS

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 – <u>CHECK THE UNDERGRADUATE CATALOG FOR ALL COURSE OPTIONS</u>

Math, Science, & Engineering Core

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

LABORATORY SCIENCES (8 Hours)

CHEM 1410 **or** 1415 & lab (4 hrs) _____
PHYS 1710-1730 (4 hrs) _____

MATHEMATICS (7 Hours)

Math 1710 – Calculus I (4 hrs) _____
Math 1680, 1681or 1780 Probability (3 hrs) _____

ORAL / ADVANCED WRITTEN COMMUNICATIONS (3 Hours)

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

CSE Department Required Courses

COMPUTER SCIENCE (46 Hours)

Group I. CSCE Required Courses
CSCE 1030 – Computer Science I(4 hr) _____
CSCE 1040 – Computer Science II(3 hr) _____
CSCE 2100 – Computing Foundations I (3 hr) _____
CSCE 2110 – Computing Foundations II (3 hr) _____
CSCE 3055 – IT Project Mgmt (3 hr) _____
CSCE 3220 – Human Computer Interf. (3 hr) _____
CSCE 3420 – Internet Programming (3 hr) _____
CSCE 3530 – Intro to Comp. Networks (3 hr) _____
CSCE 3600 – Systems Programming(3 hr) _____
CSCE 4010 – Social Issues in Computing(3 hr) _____
CSCE 4350 – Intro to Database Sys.(3 hr) _____
CSCE 4444 – Software Engineering (3 hr) _____
CSCE 4550 – Intro. To Comp. Security (3hr) _____
CSCE 4905 – Capstone I (3 hr) _____
CSCE 4925 – Capstone II (3 hr) _____

Group II. CS Concentration Area (9 hours) – see next page
(3 Hrs.) _____ (advanced)
(3 Hrs.) _____ (advanced)
(3 Hrs.) _____ (advanced)
CSCE courses most closely aligned with the supporting area

Supporting Area (21 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.) _____   **Advanced courses in**
(3 Hrs.) _____   **the supporting track**
(3 Hrs.) _____   **will assist in reaching**
(3 Hrs.) _____   **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)   <u>CSCE 4010 Satisfies</u>

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

<u>NOTE: You must maintain a 2.75 GPA in all upper division CSCE courses.</u>

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, or 4950.

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

In case of conflicting information, the catalog (catalog.unt.edu) prevails. This guide is for catalog year 2013-14 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.

Focus areas involve a clearly defined set of courses in the Concentration and Supporting Areas
These courses may not be used as part of a minor.
Concentration area courses must be CSCE. Supporting area courses can be CSCE or from other disciplines. Approved courses and their pre-requisites will work for the Concentration / Supporting Areas

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 4215 Programming Math & Physics for Games

Suggested Supporting Area Courses
Math 2700 Linear Algebra
CSCE 4230 Intro. to Computer Graphics
CSCE 4310 Intro to Artificial Intelligence
CSCE 4890.716 Directed Study in Game Dev
CSCE 4250 Topics in Game Development
Advanced Digital Art / Modeling Courses

Business (Pre-MBA)

CS Concentration Area Courses (9 Hours)

CSCE 4310 Intro. To Artificial Intelligence
CSCE 4560 Secure Electronic Commerce
CSCE 4520 Wireless Networks and Protocols

Suggested Supporting Area Courses
ACCT 2010
ACCT 2020
FINA 3770
MKTG 3650
MGMT 3820
BLAW 3430
Any 3000-4000 level College of Business course

Security & Networking

CS Concentration Area Courses (9 Hours)

CSCE 3110 Data Structures
CSCE 4560 Secure Electronic Commerce
CSCE 4050 Cryptography

Suggested Supporting Area Courses
CSCE 4520 Wireless Networks and Protocols
CSCE 4050 Applications of Cryptography
CSCE 3510 Introduction to Wireless Comm.
Advanced BCIS Security or e-Commerce
CSCE 4890 Directed Study in Security
Advanced BCIS Security or e-Commerce
Advanced CJUS Course

Pre-Law

CS Concentration Area Courses (9 Hours)

CSCE 3110 Data Structures
CSCE 4560 Secure Electronic Commerce
CSCE 4890 Directed Study in Security

Suggested Supporting Area Courses

Choose 21 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

Teaching Certification

CS Concentration Area Courses (9 Hours)
Course suggestions based on teaching area:
Theory: CSCE 3110, 4110, 4115
Security: CSCE 4050, 4240. 4560
Biocomputing: CSCE 3850, 4810, 4820
Systems: CSCE 4115, 4600, 4650
Etc...

Suggested Supporting Area Courses

TNTX 1100, TNTX 1200, PHIL 2600, EDSE 3500, EDSE 4000, EDSE 4500, EDSE 4608, EDSE 4618, EDSE 4628
Must have these 22 hours, a 2.5 GPA and be recommended for certification. Students should contact the Teach North Texas program office for more information.
All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

Prerequisite Structure
BA in Information Technology

CSCE 4890	CSCE 4920
CSCE 4940	CSCE 4950

Maximum 6 hours credit in these courses

CSCE 4920 Co-op — See Undergraduate catalog for requirements

CSCE 2900 Special Problems — Elective credit only

Supporting Track 7

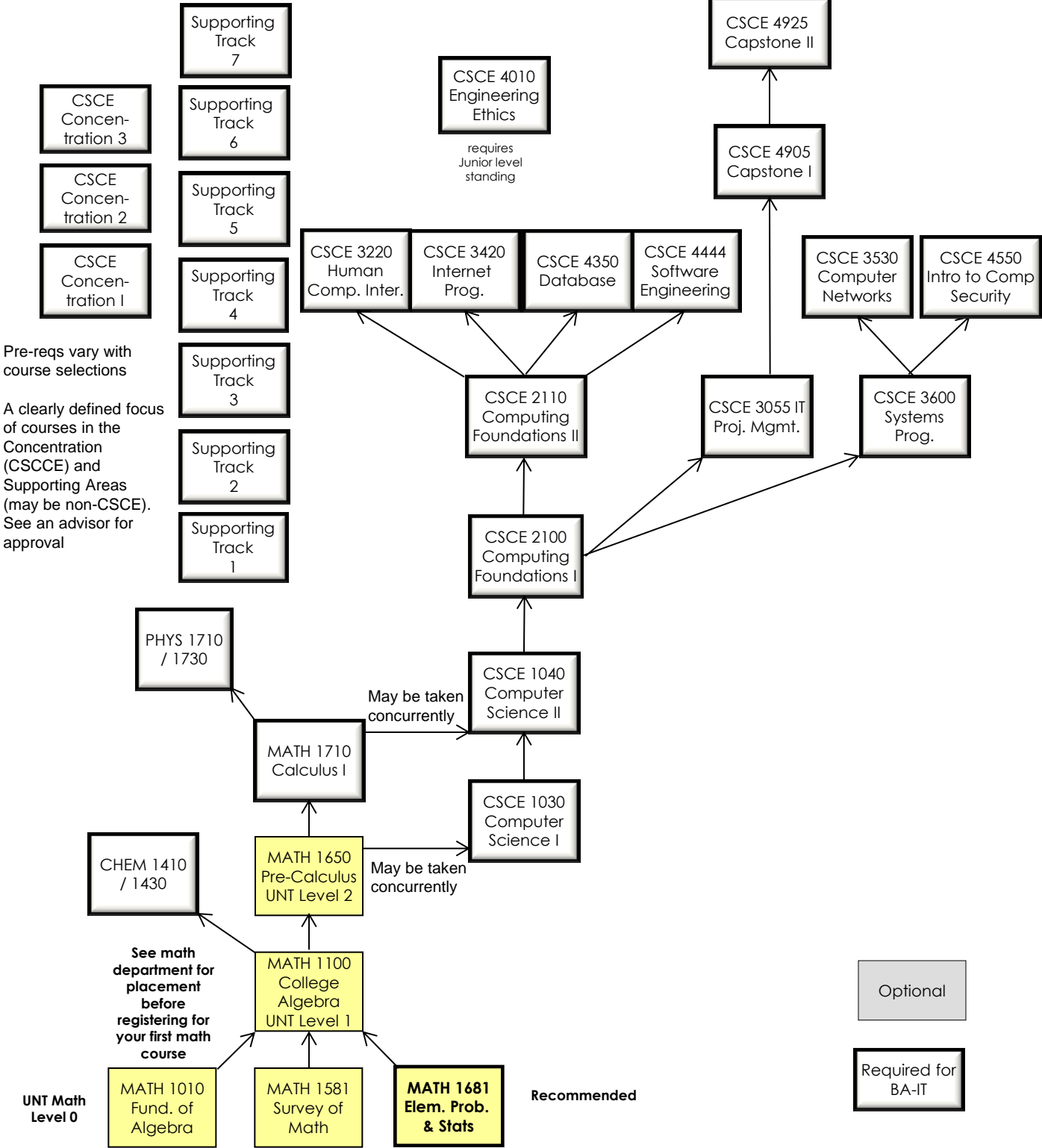Supporting Track 6

Supporting Track 5

Supporting Track 4

Supporting Track 3

Supporting Track 2

Supporting Track 1

CSCE Concentration 3

CSCE Concentration 2

CSCE Concentration 1

Pre-reqs vary with course selections

A clearly defined focus of courses in the Concentration (CSCCE) and Supporting Areas (may be non-CSCE). See an advisor for approval

CSCE 4010 Engineering Ethics — requires Junior level standing

CSCE 4925 Capstone II

CSCE 4905 Capstone I

CSCE 3220 Human Comp. Inter.

CSCE 3420 Internet Prog.

CSCE 4350 Database

CSCE 4444 Software Engineering

CSCE 3530 Computer Networks

CSCE 4550 Intro to Comp Security

CSCE 2110 Computing Foundations II

CSCE 3055 IT Proj. Mgmt.

CSCE 3600 Systems Prog.

CSCE 2100 Computing Foundations I

PHYS 1710 / 1730

CSCE 1040 Computer Science II

May be taken concurrently

MATH 1710 Calculus I

CSCE 1030 Computer Science I

CHEM 1410 / 1430

MATH 1650 Pre-Calculus UNT Level 2

May be taken concurrently

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

MATH 1100 College Algebra UNT Level 1

UNT Math Level 0

MATH 1010 Fund. of Algebra

MATH 1581 Survey of Math

MATH 1681 Elem. Prob. & Stats

Recommended

Optional

Required for BA-IT

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
HMGT 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	Collin	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

UNT Course	Title	DCCCD	Collin	TCC	NCTC	Notes
PHYS 1710/1730	Physics I – Mechanics	PHYS 2425	PHYS 2425	PHYS 2425	PHYS 2425	
CHEM 1410/1430	Gen Chemistry I	CHEM 1411	CHEM 1411	CHEM 1411	CHEM 1411	
MATH 1710	Calculus I	MATH 2413	MATH 2413	MATH 2413	MATH 2413	
MATH 1680 / 1681	Elem. Prob & Statistics	MATH 2342	MATH 1342	MATH 1342	MATH 1342	

Departmental Requirements

UNT Course	Title	DCCCD	Collin	TCC	NCTC	Notes
CSCE 1030	Programming Fundamentals I	COSC 1436	COSC 1436	COSC 1436	COSC 1436	
CSCE 1040	Programming Fundamentals II	COSC 1437	COSC 1437	COSC 1437	COSC 1437	
CSCE 2100 or CSCE 2110 if CSCE 2100 complete	Foundations I	COSC 2436	COSC 2436	COSC 2436	COSC 2436	
CSCE 2100 or CSCE 2110 if CSCE 2100 complete	Foundations II	MATH 2305	MATH 2305	MATH 2305	MATH 2305	