Student Name: __________________________________________

Email: __________________________________________

Advisor’s Name (1st year): ________________________________

Advisor’s Name (2nd year – graduation): ______________________

This booklet serves as your contract with the Computer and Information Sciences Department at East Tennessee State University. The requirements outlined here are the ones you will need to complete in order to graduate with a degree in Computer Science from ETSU.

**********SAVE THIS BOOKLET**********

Bring this booklet with you to each required advising session to prepare for the next semester. If you have any questions, please ask your advisor.

An updated list of majors and their assigned advisors will be posted on the department’s web site (http://www.cs.etsu.edu/) during the two weeks preceding registration each semester.
Bachelor of Science Degree in Computer and Information Sciences with concentrations in:

- Computer Science (CS);
- Information Systems (IS); and
- Information Technology (IT).

The three concentrations share a common core of computer and information science (CSCI) courses that provide a strong background in programming, design, computer organization, database management, networking, and software engineering. All concentrations require a probability and statistics course and a discrete mathematics course. The concentrations emphasize practical skills needed to succeed in careers in computer and information sciences, including technical skills, written and oral communication, project management, and teamwork. Graduates work throughout the region and nation, at highly competitive salaries and in a wide variety of industries. In addition, many of our graduates go on to further studies, including the department’s masters program.

COMPUTER SCIENCE (CS) CONCENTRATION – The CS concentration supplements the CSCI core curriculum with courses in object-oriented programming and design, computer architecture, and operating systems. The concentration also requires 17 hours of mathematics, including the calculus sequence required of mathematics majors. This concentration is designed for students who wish to apply their knowledge in a scientific, engineering, or mathematical environment, and for those who plan graduate work in computer science or applied computational mathematics.

INFORMATION SYSTEMS (IS) CONCENTRATION – The IS concentration supplements the CSCI core curriculum with courses in object-oriented programming and design, web development, database, and system administration. The concentration also requires an emphasis in management or accountancy. This concentration is designed for students who wish to apply their knowledge in web development, database management, network administration, or within their emphasis area, and for those who plan graduate work in certain areas of management or information science.

INFORMATION TECHNOLOGY (IT) CONCENTRATION – The IT concentration supplements the CSCI core curriculum with courses in web development, object-oriented programming, database, and system administration. The concentration also offers a web emphasis or general emphasis providing the opportunity to tailor course work. This concentration is designed for students who wish to apply their knowledge in web development, database management, network administration, and for those who plan graduate work in applied computer science or information technology.
GRADUATION REQUIREMENTS

To earn a Bachelor of Science degree in Computer & Information Sciences, you must:

- complete 124 semester hours;
- meet all requirements of the General Education core, including the General Education Proficiency Requirements (see below);
- meet all CSCI requirements specific to your concentration (CS, IS, or IT);
- attain a grade point average of 2.5 or better overall AND within the major; and
- achieve a grade of “C-” or better in all CSCI major requirements, including both common core and concentration specific-courses; and achieve a grade of “C” or better in the required freshman English courses.

Proficiency/Intensive Course Requirements

In addition to the 6 credit hours of writing and 3 credit hours of oral communication courses required for the general education requirements, courses that are designated as writing intensive, oral intensives and technology intensive must be taken as follows.

WRITING Students must complete a minimum of four writing-intensive (WI) courses. At least two of these courses must be in the student’s major or minor. At least two of the four courses must be at the 3000-4000 level.

ORAL COMMUNICATION Students must complete a minimum of two oral communication intensive (OCI) courses. At least one of these courses must be in the student’s major or minor.

USING INFORMATION TECHNOLOGY Students must demonstrate a working knowledge of word-processing, spreadsheets, electronic communication, and online searches during their first calendar year of enrollment or prior to accumulating 30 semester credits at ETSU. This requirement may be met by passing the UIT proficiency exam or by successfully completing CSCI 1100, Using Information Technology. Students may register to take the UIT proficiency exam at http://www.etsu.edu/uit or by calling the Using Information Technology office at (423) 439-6964. Registration for summer proficiency testing begins the first week in May. After the UIT proficiency exam (or CSCI 1100) is successfully completed, students must complete a minimum of one using information technology-intensive (UITI) course in the student’s major or minor.

NOTE: Transfer students with an associate degree or with 50 or more transferable semester hours are required to complete only two writing-intensive courses, one oral communication-intensive course, and one using information technology-intensive course.

ADVISEMENT IS REQUIRED FOR ALL CSCI MAJORS

Advisement is required for all CSCI majors, from the time they enter the major until graduation. CSCI majors must schedule a meeting with their assigned advisor prior to registering each semester. Only then will the “registration hold” be removed by the advisor so that the student may register. All new CSCI majors are assigned to Mr. Todd Franklin for their first two semesters and then they are reassigned to another faculty advisor. An updated list of majors and their assigned advisors will be posted on the department’s web site (http://www.cs.etsu.edu/) during the two weeks preceding registration each semester.
## General Education Requirements for CSCI Majors (41 credit hours)

### WRITING: 6 credits (both)  
(Grade must be a C or better)
- ENGL 1010 Critical Reading & Exp. Writing (3)
- ENGL 1020 Critical Thinking & Argument (3)

### ORAL COMMUNICATION: 3 credits (select one)
- SPCH 1300 General Speech (3) [O]
- SPCH 2300 Public Speaking (3) [O]
- SPCH 2320 Argumentation & Debate (3) [O] (Recommended)
(Notice: one Speech course cannot satisfy both the general education requirement and an oral-intensive requirement)

### HUMANITIES: 3 credits (select one)
- ENGL 2110 American Literature I (3)
- ENGL 2120 American Literature II (3)
- ENGL 2210 British Literature I (3) [W]
- ENGL 2220 British Literature II (3) [W]
- ENGL 2330 World Literature (3)
- ENGL 2430 European Literature (3) [W]

### SOCIAL/BEHAVIORAL SCIENCES: 6 credits (select two)
- ECON 1050 Economics & Society (3) or ECON 2210 Principles of Economics I (3)*
- GEOG 1012 Introduction to Cultural Geography (3)
- HDAL 2310 Developmental Lifespan Psychology (3)
- PSCI 1120 Introduction to American Government (3)
- PSYC 1310 Introduction to Psychology (3)
- SOAA 1020 Introduction to Sociology (3)
- ANTH 1240 Introduction to Cultural Anthropology (3)
- SOAA 2020 Social Problems (3) [W]
- SRVL 1020 Introduction to Service Learning (3) [W] [O]
- WMST 2010 Introduction to Women's Studies (3) [W]

### SOCIAL/BEHAVIORAL SCIENCES: 6 credits (select two)  
(Grade must be a C- or better)
- ECON 1530 (Required for IS) or MATH 1840 or MATH 1910 (4)

### USING MATHEMATICS: 3-4 credits
- MATH 1530 (Required for IS) or MATH 1840 or MATH 1910 (4)

### OTHER REQUIREMENTS:
- CSCI 1100 Using Information Technology
- Writing Intensive 1
- Writing Intensive 2
- Writing Intensive 3
- Writing Intensive 4
- Oral Intensive 1
- Oral Intensive 2

### NATURAL SCIENCES: 8 credits (select one full sequence from the following options - For example if you take ASTR 1010, you must take ASTR 1020 to complete the sequence.)
- ASTR 1010 and ASTR 1020  
  Astronomy I and II
- BIOL 1110/1111 and BIOL 1120/1121  
  Biology for Science Majors Sequence
- CHEM 1110/1111 and CHEM 1120/1121  
  General Chemistry Sequence
- GEOG 1110 and GEOG 1120  
  Earth Science: Weather & Climate, Landforms & Processes
- GEOL 1040 and GEOL 1050  
  Physical and Historical Geology
- HSCI 2010/2011 and HSCI 2020/2021  
  Anatomy & Physiology I and II
- PHYS 2010/2011/W and PHYS 2020/2021/W  
  General Physics Sequence
- PHYS 2110 and PHYS 2120  
  Technical Physics I and II – Calculus Based

**NOTE** that the following courses are for non-science majors and do not count for Computer Science Majors: BIOL 1010/1011, BIOL 1020/1021, CHEM 1000, CHEM 1030, PHYS 1030

* Choose ECON 2210 if concentration is Information Systems and choosing the Management Emphasis
# Computer Science Concentration

## Major Requirements

### Concentration Courses (60 Hours)

*Courses are not listed in order to be taken*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 1200</td>
<td>Adventures in Computing</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 1250</td>
<td>Intro. to Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 1260</td>
<td>Intro. to Computer Science II</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 1510</td>
<td>Student in University</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 2020</td>
<td>Fundamentals of Database</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 2150</td>
<td>Computer Organization</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 2160</td>
<td>Assembly Language</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 2210</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 2230</td>
<td>File Processing</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 3250</td>
<td>Software Engineering I</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 3350</td>
<td>Software Engineering II</td>
<td>3</td>
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<tr>
<td>CSCI 3400</td>
<td>Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 4717</td>
<td>Computer Architecture</td>
<td>3</td>
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<tr>
<td>CSCI 4727</td>
<td>Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>APPROVED</td>
<td>CSCI _____ major elective</td>
<td>3</td>
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<tr>
<td>APPROVED</td>
<td>CSCI _____ major elective</td>
<td>3</td>
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<td>3</td>
</tr>
<tr>
<td>APPROVED</td>
<td>CSCI _____ major elective</td>
<td>3</td>
</tr>
</tbody>
</table>

### Other Major Requirements (21 Hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1530</td>
<td>or MATH 1840 (also satisfies Gen. Ed. requirement)</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 1900</td>
<td>Math for Comp. Science</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1910</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1920</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2010</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Science</td>
<td>(3)</td>
<td></td>
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<tr>
<td></td>
<td>(one additional lab science)</td>
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</tr>
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</table>

### Free Electives: (5 hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

Two major electives must be selected at the 3XXX/4XXX level. Major electives and any course substitutions must be approved by the student’s advisor. Please note that Cooperative Education, Internship courses, and any 1100 series courses (1100, 1101, 1105, etc) DO NOT count towards Approved Major Electives.

- CSCI 1510 should be taken during the first semester of the freshman year.
- CSCI 1200 should be taken before any other programming courses. Students who have taken CSCI 1250 are not eligible to take CSCI 1200.
- If, for any reason, you do not take or do not pass CSCI 1510 or CSCI 1200, you must take another approved CSCI major elective in its place.
Catalog Year 2008-2009
Prerequisite Tree – Major Courses
Computer Science (CS) Concentration

CSCI 1200 Adv. In Computing

CSCI 1250 Intro to CSCI I

CSCI 1260 Intro to CSCI II

CSCI 2210 Data Structures

CSCI 2230 File Processing

CSCI 2250 Software Engineering I

CSCI 3250 Software Engineering II

CSCI 1900 Math for Comp Science

CSCI 1510 Student in University

CSCI 2020 Fund. Of DB.

CSCI 2150 Computer Organization

CSCI 2160 Assembly Lang

CSCI 3350 Software Engineering II

CSCI 3400 Networking Fundamentals

CSCI 3400 Networking Fundamentals

CSCI 4717 Computer Arch.

CSCI 4727 Operating Systems
CATALOG YEAR 2009-2010
SUGGESTED 4-YEAR SCHEDULE
COMPUTER SCIENCE CONCENTRATION

FRESHMAN YEAR

First Semester
CSCI 1100 Using Information Technology* ........... 3
CSCI 1200 Adventures in Computing** ............ 3
CSCI 1510 Student in University .................. 3
ENGL 1010 Critical Reading & Exp. Writing ....... 3
SPCH 1300, 2300, or 2230 ........................ 3
         15

Second Semester
CSCI 1200 Math for Computer Science .......... 3
CSCI 1900 Math for Computer Science .......... 3
HIST 2010 ........................................ 3
ENGL 1020 Critical Thinking & Argumentation .. 3
Humanities ........................................ 3
         16

SOPHOMORE YEAR

First Semester
CSCI 1260 Introduction to Computer Science II ... 4
CSCI 2150 Computer Organization .................. 4
MATH 1910 Calculus I ................................ 3
         15

Second Semester
CSCI 2160 Assembly Language ...................... 4
CSCI 2210 Data Structures ........................ 4
HIST 2020 U.S. Since 1877 ......................... 3
MATH 1920 Calculus II ................................ 4
         15

JUNIOR YEAR

First Semester
CSCI 2230 File Processing ........................ 4
CSCI 3400 Networking Fundamentals ............... 3
MATH 2010 Linear Algebra ......................... 3
Natural Science (1st of 2-semester sequence) ...... 4
Social/Behavioral Sciences ......................... 3
         17

Second Semester
CSCI 3250 Software Engineering I ................ 3
CSCI major elective ............................ 3
MATH 1530 Probability & Statistics ............. 3
Natural Science (2nd of 2-semester sequence) .... 4
Literature ....................................... 3
         16

SENIOR YEAR

First Semester
CSCI 3350 Software Engineering II ................ 3
CSCI 4717 Computer Architecture ................ 3
CSCI major elective ............................ 3
CSCI major elective ............................ 3
Natural Science ................................ 4
         16

Second Semester
CSCI 4727 Operating Systems ..................... 3
CSCI major elective ............................ 3
Fine Arts ...................................... 3
Free elective .................................. 2
Social/Behavioral Sciences ....................... 3
         14

* If the UIT proficiency exam is taken and passed, 3 credit hours of free electives should be added. If CSCI 1100 is taken and completed with a “C-“ or better, it may take the place of 3 credit hours of free electives.

** If the CSCI 1200 proficiency exam is taken and passed, 3 credit hours of CSCI electives should be added.
Catalog Year 2009-2010

>>> Information Systems Concentration <<<

Major Requirements

Concentration Courses (56 Hours)

(Courses are not listed in order to be taken)

- CSCI 1200 Adventures in Computing (3)
- CSCI 1250 Intro. to Computer Science I (4) [T]
- CSCI 1260 Intro. to Computer Science II (4)
- CSCI 1510 Student in University (3) [W]
- CSCI 1710 Essentials of Web Development (3)
- CSCI 2020 Fundamentals of Database (3)
- CSCI 2150 Computer Organization (4)
- CSCI 2210 Data Structures (4)
- CSCI 2200 Introduction to UNIX (3)
- CSCI 2910 Server-Side Web Programming (4)
- CSCI 3250 Software Engineering I (3) [W]
- CSCI 3350 Software Engineering II (3) [O]
- CSCI 3400 Networking Fundamentals (3) [T]
- CSCI 4127 Database Mgmt. Systems (3) [T]
- CSCI 4417 Intro. to System Administration (3)
- APPROVED CSCI ___ major elective (3)
- APPROVED CSCI ___ major elective (3)

Other Major Requirements (9-10 Hours)

- MATH 1530 (also satisfies Gen. Ed. requirement)
- MATH 1840 Analytic Geom. & Diff. Calc. (3)
  or MATH 1910 Calculus I (4)
- CSCI 1900 Math for Computer Science (3)

Information Systems Emphasis (18 - 21 Hours)

Management Emphasis

ECON 2210** - Principles of Economics I
ACCT 2010 - Principles of Accounting I (3)
MGMT 3000 - Organizational Behavior & Mgmt (3)
MGMT 4010 - Advanced Organizational Behavior (3)
MGMT 4020 - Organizational Theory & Dev (3)
Two approved MGMT electives (6) (check with advisor)

Accountancy Emphasis

ACCT 2010 - Principles of Accounting I (3)
ACCT 2020 - Principles of Accounting II (3)
ACCT 3010 - Financial Accounting I (3)
ACCT 3110 - Management Accountancy (3)
Two approved ACCT electives (6) (check with advisor)

Must make a “C” or better in each course.

Information Systems Emphasis Areas

All students in the Information Systems Concentration must complete one of the following two emphases. These are intended to prepare the student to "function effectively as an IS professional" in a specific business area.

** also satisfies a General Education Core requirement

Major Electives and any course substitutions must be approved by the student’s advisor. Please note that Cooperative Education, Internship courses, and any 1100 series courses (1100, 1101, 1105, etc) DO NOT count towards Approved Major Electives.

- CSCI 1510 should be taken during the first semester of the freshman year.
- CSCI 1200 should be taken before any other programming courses. Students who have taken CSCI 1250 are not eligible to take CSCI 1200.
- If, for any reason, you do not take or do not pass CSCI 1510 or CSCI 1200, you must take another approved CSCI major elective in its place.
Catalog Year 2009-2010
Prerequisite Tree – Major Courses
Information Systems Science (IS) Concentration

CSCI 1510
Student in University

CSCI 1710
WWW Design & Creation

CSCI 2020
Fund. Of DB.

CSCI 2210
Intro to Unix

CSCI 2200
Intro to Unix

CSCI 2150
Computer Organization

CSCI 2910
Server Side Web Prog

CSCI 2250
Software Engineering I

CSCI 2210
Data Structures

CSCI 3400
Network Fundamentals

CSCI 3350
Software Engineering II

CSCI 3250
Software Engineering I

CSCI 4127
DB Mgmt. Systems I

CSCI 4417
System Administration

CSCI 1200
Adv. In Computing

CSCI 1250
Intro to CSCI I

CSCI 1260
Intro to CSCI II

CSCI 1900
Math for Comp. Science

CSCI 1900
Math for Comp. Science

CSCI 1710
WWW Design & Creation

CSCI 1510
Student in University

CSCI 1250
Intro to CSCI I

CSCI 1260
Intro to CSCI II

CSCI 2200
Intro to Unix

CSCI 2150
Computer Organization

CSCI 2910
Server Side Web Prog

CSCI 2250
Software Engineering I

CSCI 2210
Data Structures

CSCI 3400
Network Fundamentals

CSCI 3350
Software Engineering II

CSCI 3250
Software Engineering I

CSCI 4127
DB Mgmt. Systems I

CSCI 4417
System Administration

CSCI 1200
Adv. In Computing

CSCI 1250
Intro to CSCI I

CSCI 1260
Intro to CSCI II

CSCI 2200
Intro to Unix

CSCI 2150
Computer Organization

CSCI 2910
Server Side Web Prog

CSCI 2250
Software Engineering I

CSCI 2210
Data Structures

CSCI 3400
Network Fundamentals

CSCI 3350
Software Engineering II

CSCI 3250
Software Engineering I

CSCI 4127
DB Mgmt. Systems I

CSCI 4417
System Administration
CATALOG YEAR 2009-2010  
SUGGESTED 4-YEAR SCHEDULE  
INFORMATION SYSTEMS CONCENTRATION

FRESHMAN YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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</thead>
<tbody>
<tr>
<td>CSCI 1100 Using Information Technology*</td>
<td>CSCI 1250 Introduction to Computer Science I .... 4</td>
</tr>
<tr>
<td>CSCI 1200 Adventures in Computing**</td>
<td>CSCI 1710 Essentials of Web Development .... 3</td>
</tr>
<tr>
<td>CSCI 1510 Student in University</td>
<td>CSCI 1900 Math for Computer Science ........ 3</td>
</tr>
<tr>
<td>ENGL 1010 Critical Reading &amp; Exp. Writing</td>
<td>ENGL 1020 Critical Thinking &amp; Argumentation ........3</td>
</tr>
<tr>
<td>SPCH 1300, 2300, or 2320</td>
<td>Social/Behavioral Science ................................3</td>
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<td></td>
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<td>16</td>
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SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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</thead>
<tbody>
<tr>
<td>CSCI 1260 Introduction to Computer Science II .... 4</td>
<td>CSCI 2200 Introduction to UNIX ......................... 3</td>
</tr>
<tr>
<td>CSCI 2020 Fundamentals of Database</td>
<td>CSCI 2210 Data Structures ................................4</td>
</tr>
<tr>
<td>CSCI 2150 Computer Organization</td>
<td>CSCI 2910 Server-Side Web Programming ................4</td>
</tr>
<tr>
<td>HIST 2010 U.S. to 1877</td>
<td>MATH 1530 Probability &amp; Statistics .................... 3</td>
</tr>
<tr>
<td>MATH 1840 Analytic Geometry &amp; Differ Calculus or Math 1910 Calculus I .......3-4</td>
<td>HIST 2020 U.S. Since 1877 ................................3</td>
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JUNIOR YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 3250 Software Engineering I ................................ 3</td>
<td>CSCI 3350 Software Engineering II ........................3</td>
</tr>
<tr>
<td>CSCI 3400 Networking Fundamentals</td>
<td>Course from Info Systems Area of Emphasis ............3</td>
</tr>
<tr>
<td>Humanities.</td>
<td>Course from Info Systems Area of Emphasis ............3</td>
</tr>
<tr>
<td>Natural science (1st of 2-semester sequence) ......................................4</td>
<td>Natural science (2nd of 2-semester sequence) ..........4</td>
</tr>
<tr>
<td>Course from Info Systems Area of Emphasis .........................................3</td>
<td>Social/Behavioral Sciences ................................3</td>
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SENIOR YEAR

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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</thead>
<tbody>
<tr>
<td>CSCI 4127 Database Mgmt. Systems I ................................ 3</td>
<td>CSCI 4417 Introduction to System Adm ................... 3</td>
</tr>
<tr>
<td>CSCI major elective</td>
<td>CSCI major elective ......................................3</td>
</tr>
<tr>
<td>Course from Info Systems Area of Emphasis ......................................3</td>
<td>Course from Info Systems Area of Emphasis ............3</td>
</tr>
<tr>
<td>Course from Info Systems Area of Emphasis ......................................3</td>
<td>Fine Arts ....................................................3</td>
</tr>
<tr>
<td>Literature.</td>
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<td>15</td>
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<td>12</td>
</tr>
</tbody>
</table>

* If the UIT proficiency exam is taken and passed, 3 credit hours of free electives should be added. If CSCI 1100 is taken and completed with a “C-” or better, it may take the place of 3 credit hours of free electives.

** If the CSCI 1200 proficiency exam is taken and passed, 3 credit hours of CSCI electives should be added.
Catalog Year 2009-2010

>>> Information Technology Concentration <<<

Major Requirements

### Common Core Courses (70 Hours)
(Courses are not listed in order to be taken)

- CSCI 1200 Adventures in Computing (3)
- CSCI 1250 Intro to Computer Science I (4) \([T]\)
- CSCI 1260 Intro to Computer Science II (4)
- CSCI 1510 Student in University (3) \([W]\)
- CSCI 1710 Essentials of Web Development (3)
- CSCI 2020 Fundamentals of Database (3)
- CSCI 2150 Computer Organization (4)
- CSCI 2200 Introduction to UNIX (3)
- CSCI 2300 Essentials of Information Security (3)
- CSCI 2910 Server-Side Web Programming (4)
- CSCI 3250 Software Engineering I (3) \([W]\)
- CSCI 3350 Software Engineering II (3) \([O]\)
- CSCI 3400 Networking Fundamentals (3) \([T]\)
- CSCI 4127 Database Mgmt. Systems (3)
- CSCI 4217 Ethical Issues in Computing (3) \([W]\)
- CSCI 4417 Intro to System Administration (3)
- CSCI 4927 Human Computer Interaction (3)
- CSCI 4800 Senior Project in IT (3)
- Approved Major Elective _______________ (3)
- Approved Major Elective _______________ (3)
- Approved Major Elective _______________ (3)
- Approved Major Elective _______________ (3)

(At least two electives must be CSCI electives and two at the 3XXX/4XXX level.)

### Other Major Requirements (6 Hours)

- MATH 1530 or MATH 1840 or MATH 1910
  (also satisfies Gen. Ed. requirement)
- CSCI 1900 Math for Comp. Science (3)

### Free Electives (10 Hours)

- _______________
- _______________
- _______________

### Web Emphasis

Students who wish to complete the IT concentration with an emphasis in Web Development should include CSCI 1720 (World Wide Web Advanced) and CSCI 3110 (Advanced Topics in Web Development) as two of their Approved Major Electives.

Major Electives and any course substitutions must be approved by the student’s advisor. Please note that Cooperative Education, Internship courses, and any 1100 series courses (1100, 1101, 1105, etc) DO NOT count towards Approved Major Electives.

- CSCI 1510 should be taken during the first semester of the freshman year.
- CSCI 1200 should be taken before any other programming courses. Students who have taken CSCI 1250 are not eligible to take CSCI 1200.
- If, for any reason, you do not take or do not pass CSCI 1510 or CSCI 1200, you must take another approved CSCI major elective in its place.
Catalog Year 2009-2010
Prerequisite Tree –Major Courses
Information Technology (IT) Concentration

CSCI 1200
Adv. In Computing

CSCI 1900
Math for Comp. Science

CSCI 250
Intro to CSCI I

CSCI 1250
Web Prog

CSCI 1100
UIT

CSCI 1710
WWW Design

CSCI 1510
Student in University

CSCI 2300
Ess. Info Sec.

CSCI 1260
Intro to CSCI II

CSCI 1720
WWW Design

CSCI 3250
Software Engineering I

CSCI 4217
Ethical Issues

CSCI 4927
HCI

CSCI 4127
DB Mgmt. Systems I

CSCI 2910
Server Side Web Prog

CSCI 2150
Computer Organization

CSCI 4127
System Administration

CSCI 2200
Intro to Unix

CSCI 1260
Fund. Of DB.

CSCI 3250
Software Engineering I

CSCI 2200
Intro to Unix

CSCI 4217
Ethical Issues

CSCI 3400
Network Fundamentals

CSCI 3350
Software Engineering II

Senior Status in CSCI and Within Two Semesters of Graduation

Senior Status in CSCI and Within Two Semesters of Graduation

CSCI 4800
Senior Capstone Technology

CSCI 4417
System Administration

CSCI 4800
Senior Capstone Technology
# Suggested 4-Year Schedule

**Information Technology Concentration**

## Freshman Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 1100 Using Information Technology</td>
<td>CSCI 250 Introduction to Computer Science I</td>
</tr>
<tr>
<td>CSCI 1200 Adventures in Computing</td>
<td>CSCI 1900 Math for Computer Science</td>
</tr>
<tr>
<td>CSCI 1510 Student in University</td>
<td>ENGL 1020 Critical Thinking &amp; Argumentation</td>
</tr>
<tr>
<td>CSCI 1710 Essentials of Web Development</td>
<td>Humanities</td>
</tr>
<tr>
<td>ENGL 1010 Critical Reading &amp; Exp. Writing</td>
<td>SPCH 1300, 2300, or 2320</td>
</tr>
<tr>
<td><strong>Total Credits:</strong> 15</td>
<td><strong>Total Credits:</strong> 16</td>
</tr>
</tbody>
</table>

## Sophomore Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 1260 Introduction to Computer Science II</td>
<td>CSCI 2200 Introduction to UNIX</td>
</tr>
<tr>
<td>CSCI 2020 Fundamentals of Database</td>
<td>CSCI 2300 Essentials of Information Security</td>
</tr>
<tr>
<td>CSCI 2150 Computer Organization</td>
<td>CSCI 2910 Server Side Web Programming</td>
</tr>
<tr>
<td>HIST 2010 U.S. to 1877</td>
<td>HIST 2020 U.S. Since 1877</td>
</tr>
<tr>
<td>MATH 1530 Probability &amp; Statistics</td>
<td>Literature</td>
</tr>
<tr>
<td><strong>Total Credits:</strong> 17</td>
<td><strong>Total Credits:</strong> 16</td>
</tr>
</tbody>
</table>

## Junior Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 3110 Advanced Topics in Web Dev</td>
<td>CSCI 3350 Software Engineering II</td>
</tr>
<tr>
<td>CSCI 3250 Software Engineering I</td>
<td>Guided Major Elective</td>
</tr>
<tr>
<td>CSCI 3400 Networking Fundamentals</td>
<td>Social/Behavioral Sciences</td>
</tr>
<tr>
<td>Natural science (1st of 2-semester sequence)</td>
<td>Natural science (2nd of 2-semester sequence)</td>
</tr>
<tr>
<td>Social/Behavioral Sciences</td>
<td>Fine Arts</td>
</tr>
<tr>
<td><strong>Total Credits:</strong> 16</td>
<td><strong>Total Credits:</strong> 16</td>
</tr>
</tbody>
</table>

## Senior Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 4127 Database Mgmt. Systems I</td>
<td>CSCI 4800 Senior Project in IT</td>
</tr>
<tr>
<td>CSCI 4217 Ethical Issues in Computing</td>
<td>CSCI 4927 Human Computer Interaction</td>
</tr>
<tr>
<td>CSCI 4417 Introduction to System Adm.</td>
<td>Guided Major Elective</td>
</tr>
<tr>
<td>Guided Major Elective</td>
<td>Free Electives</td>
</tr>
<tr>
<td>Free Elective</td>
<td><strong>Total Credits:</strong> 13</td>
</tr>
<tr>
<td><strong>Total Credits:</strong> 15</td>
<td><strong>Total Credits:</strong> 16</td>
</tr>
</tbody>
</table>

* If the UIT proficiency exam is taken and passed, 3 credit hours of free electives should be added. If CSCI 1100 is taken and completed with a “C-“ or better, it may take the place of 3 credit hours of free electives.

** If the CSCI 1200 proficiency exam is taken and passed, 3 credit hours of CSCI electives should be added.

*** General Emphasis will replace this course with Guided Major Elective.
# Catalog Year 2009-2010
## Minor Requirements

### Computer Science/Information Systems (CS/IS) minor track (28 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 1250</td>
<td>Introduction to Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 1260</td>
<td>Introduction to Computer Science II</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 2150</td>
<td>Computer Organization</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 2210</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CSCI ____</td>
<td>Approved CSCI major electives, including at least 6 hours at 3000 level or above; CSCI 1100, 110x, and 1510 may not be included</td>
<td>12</td>
</tr>
</tbody>
</table>

**NOTE:** The following must be met to satisfy the requirements for a minor in Computer Science/Information Systems:
- A grade of “C-” or better in each course taken for the minor
- A 2.5 GPA of all courses taken for the minor
- Previous experience in Object Oriented programming or successful completion of CSCI 1200 is required before CSCI 1250 can be taken.
- Other proficiencies or prerequisite courses that are not listed may be required to gain entry into some of the listed courses.

### Information Technology (IT) minor track (28 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 1250</td>
<td>Introduction to Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 1260</td>
<td>Introduction to Computer Science II</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 1710</td>
<td>Essentials of Web Development</td>
<td>3</td>
</tr>
<tr>
<td>CSCI 2150</td>
<td>Computer Organization</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 2910</td>
<td>Server Side Web Programming</td>
<td>4</td>
</tr>
<tr>
<td>CSCI ____</td>
<td>Approved CSCI major elective at 3000 level or above</td>
<td>9</td>
</tr>
</tbody>
</table>

**NOTE:** The following must be met to satisfy the requirements for a minor in Information Technology
- A grade of “C-” or better in each course taken for the minor
- A 2.5 GPA of all courses taken for the minor
- Previous experience in Object Oriented programming or successful completion of CSCI 1200 is required before CSCI 1250 can be taken.
- Other proficiencies or prerequisite courses that are not listed may be required to gain entry into some of the listed courses.
Advisement is required for all CSCI majors from the time they enter the major until graduation. CSCI majors must schedule a meeting with their assigned advisor prior to registering each semester. Only then will the “registration hold” be removed by the advisor so that the student may register. All new CSCI majors are assigned to Mr. Todd Franklin for their first two semesters and then they are reassigned to another faculty advisor. An updated list of majors and their assigned advisors will be posted on the department’s web site (http://www.cs.etsu.edu/) during the two weeks preceding registration each semester.

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