



**Student ID:** STUDENT ID  
**Student Name:** Student Name

**ARTS & SCIENCES**  
**Academic Program:** Computer Science  
**Academic Plan:** Computer Science  
**Requirement Term:** Fall Semester 2013-14

Course	Grade	Prerequisites
<b>1) General Education (16 Courses - 44 Credits) (A and B)</b>		
<b>A- Skill Goals (5 Courses - 15 Credits)</b>		
<b>I. Communicating Skills: 3 Courses</b>		
ENGL 100-Academic English I	*	GEPT / TOEFL Score / ENGL 098
ENGL 110-English Composition I	*	GEPT / TOEFL Score / ENGL 100
ENGL 112-English Composition II	*	GEPT / TOEFL Score / ENGL 110
<b>II. Managing Information: 1 Course</b>		
CSC 122-Introduction to Computer Programming	ELG-	ENGL 098/100/110/112 & CS student
<b>III. Valuing</b>		
Valuing offering		
<b>B- Knowledge Goals (11 Courses - 29 Credits)</b>		
<b>I. Social Behavioral Sciences: 2 Courses</b>		
Social & Behavioral Sciences offering		
Social & Behavioral Sciences offering		
<b>II. Humanities &amp; Fine Arts: 2 Courses</b>		
PHIL 245-Ethics and the Computer	*	combined 6 credits from MATH, CSC or PHIL
Humanities & Fine Arts offering		
<b>III. Arab Heritage: 1 Course</b>		
Arab Heritage offering		
<b>IV. Math : 2 Courses</b>		
MATH 131-Analytic Geometry and Calculus I	*	MATH098 & REQTERM>=1301 or MATH113
MATH 132-Analytic Geometry & Calculus II	*	MATH 131
<b>V. Life/Natural Sciences: 4 Courses - 8 Credits (I &amp; II)</b>		
<b>I. Any 2 Courses - 6 credits</b>		
BIOL 110-Biology I	*	CS student & passed ENGL Foundation & BIOL 110L
CHEM 110-General Chemistry I	*	CS student & passed ENGL Foundation & (CHEM 110L
PHYS 110-Basic Physics I	*	MATH 098/113 (CS students from 1201 must
<b>II. Any 2 Lab Courses - 2 Credits</b>		
BIOL 110L-Biology-I Laboratory	*	BIOL 110 coreq
CHEM 110L-General Chemistry I Laboratory	*	CHEM 110 coreq
PHYS 110L-Basic Physics Lab	*	PHYS 110 coreq

<b>2) Major Core Requirements: (15 Courses - 46 Credits)</b>		
<b>Must Complete all</b>		
CSC 125-Object Oriented Programming I	*	CSC 122
CSC 130-Discrete Structures	*	CSC 122 & MATH 098 coreq
CSC 225-Programming and Data Structures	*	CSC 125 & CSC 130
CSC 226-Object Oriented Programing II	*	CSC 225 coreq
CSC 230-Digital Systems	*	CSC 125
CSC 270-Computer Systems: Architecture and Organization	*	CSC 230
CSC 271-Computer Systems: Programming	*	CSC 270
CSC 313-Design and Analysis of Algorithms	*	CSC 225
CSC 325-Concepts of Programming Languages	*	CSC 226
CSC 350-Software Engineering	*	CSC 226
CSC 361-Database Management Systems	*	CSC 313 PRE OR CO

Course	Grade	Prerequisites
CSC 451-Capstone Project	*	CSC 350 & CSC 361 & PHIL 245
CSC 473-Computer Networks & Communications	*	CSC 313 & MATH 221
CSC 476-Operating Systems	*	CSC 270 & 313
CSC 492-Practicum in Computer Science	*	CSC 473 coreq & 361 coreq

<b>3) Major Elective Requirements: (4 Courses - 12 Credits)</b>		
<b>Must Complete 4 Courses from the following list</b>		
CSC 123-Fundamentals of Web Design	*	ENGL 100 coreq
CSC 235-Programming Challenges	*	CSC 225
CSC 280-Introduction to Mobile Application Programming	*	CSC 226
CSC 301-Web Application Development	*	CSC 226 & 361 coreq
CSC 326-Object Oriented Design Patterns	*	CSC 226
CSC 351-Software Requirements & Business Analysis	*	CSC 350
CSC 352-Java and Internet Programming	*	CSC 226
CSC 380-Mobile Application Development	*	CSC 226 & CSC 361 coreq
CSC 404-Introduction to eCommerce	*	CSC 361 Pre or co-requisite
CSC 405-User Interface Development	*	CSC 226
CSC 410-Software Testing & Quality Assurance	*	CSC 350
CSC 420-Software Maintenance & Re-engineering	*	CSC 350
CSC 428-Program Translation Techniques	*	CSC 226 & 270
CSC 430-Artificial Intelligence	*	CSC 313
CSC 440-Introduction to Fuzzy logic and Neural Networks	*	CSC 226 & 313
CSC 441-Computer Graphics	*	CSC 226 & MATH 231
CSC 444-Digital Image Processing	*	CSC 226 & MATH 210 & 221
CSC 452-Object-Oriented Analysis and Design	*	CSC 350
CSC 454-Software System Architectures	*	CSC 350 & CSC 271
CSC 474-Client - Server Architectures	*	CSC 4730 coreq
CSC 477-Security in Computing	*	Senior Standing
CSC 478-System Administration & Computer Security	*	CSC 473 co-requisite
CSC 489-Topics in Computer Science	*	Senior Standing

<b>4) Major Core Requirements: (5 Courses - 15 Credits)</b>		
<b>Must Complete all</b>		
MATH 210-Elementary Linear Algebra	*	MATH 098 or MATH 131 or MATH 130
MATH 221-Applied Statistics I	*	MATH 131
MATH 231-Analytic Geometry & Calculus III	*	MATH 132
MATH 232-Introduction to Differential Equations	*	MATH 132
MATH 331-Numerical Analysis I	*	MATH 232 & CSC 125

GEPT: GUST English Placement Test  
HFA: Humanities & Fine Arts

GMPT: GUST Math Placement Test  
LNS: Life / Natural Sciences

MI: Managing Information

SBS: Social Behavioral Sciences  
ELG-[Term Code]: Student eligibility to enroll

**Date:** 09/10/2018

**Time:** 10:04:49



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**ARTS & SCIENCES**  
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Course	Grade	Prerequisites	Course	Grade	Prerequisites
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<b>5) Free Elective Requirements: (3 Courses - 9 Credits)</b>		
<b>Must Complete 3 Courses</b>		
Free Electives General courses offering		
Free Electives General courses offering		
Free Electives General courses offering		

	UNITS	COURSES
University Requirements	126	43
Earned Credits	0	0
Transferred Credits	0	0
Satisfactory Credits	0	0
Total Credits	0	0
Needed	126	43

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**ARTS & SCIENCES**  
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**General Education Requirements**

All Students are required to complete 44 credits of general Education requirements including 15 credits which correspond to three Skills Goals (Communicating, Managing and Valuing), and 29 credits to Knowledge Goals in the areas of Social and Behavioral Sciences, Humanities and Fine Arts Mathematics and Natural Sciences and Arabic Heritage and Cultural Diversity.

**Skills Goals (5 courses - 15 credits)**

**I. Communicating Skills (3 courses - 9 credits)**

ENGL 100, ENGL 110, ENGL 112 (All required)  
Substitutes for students with advanced placement: Any course with an ENGL or MCM prefix  
THTR 180, Any language course

**II. Managing Skills (1 courses - 3 credits)**

CSC 123, CSC 122, MCM 104, MIS 118  
Substitutes for students with advanced placement: Any other course in CSC or MIS Prefix

**III. Valuing Skills (1 courses - 3 credits)**

ANTH 111, ARAB 101, ART 110, CHIN 101, ECON 101, ECON 102, FREN 101, GRMN 101, HIST 103  
HIST 104, MUSC 110, PHIL 110, PHIL 115, POLI 101, PSYC 103, SOC 110, SPAN 101

**Knowledge Goals (11 courses - 29 credits)**

**IV. Social and Behavioral Sciences (2 courses - 6 credits)**

Any course with code starting with ANTH, ECON, GEOG, HIST, MCM, POLI, PSYC & SOC.

**V. Humanities and Fine Arts (2 courses - 6 credits)**

Any course with starting code ARAB, ART, CHIN, ENGL, FREN, GRMN, HIST, MUSC, PHIL, SPAN & THTR

**VI. Arab Heritage and Cultural Diversity (1 courses - 3 credits)**

Arab Heritage: Any course with code ARAB, ANTH 214, HIST 144, HIST 252, PHIL 125  
or any other course which deals the Arab Heritage.  
Cultural Diversity: Any course with Code ANTH, HIST, ART 110, FREN 121, FREN 122, GRMN 122  
MUSC 109, PHIL 185, PHIL 190, PSYC 223, SOCI 120, SPAN 121, SPAN 122

**VII. Mathematics (2 courses - 6 credits)**

MATH 131, MATH 132

**VIII. Natural Sciences (4 courses - 8 credits)**

**At least two course must be taken with their corresponding lab courses concurrently**

- A. Any two courses from BIOL 110, CHEM 110, PHYS 110
- B. Any two corresponding lab courses BIOL 110L, CHEM 110L, PHYS 110L

**Important Instructions and GuideLines**

1. The credits of the following courses are **NOT** counted towards the Computer Science BS degree.  
CSC 101, CSC 105  
MIS 118, MIS 206, MIS 306, MIS 310, MIS 342, MIS 344, MIS 345  
MIS 347, MIS 448, MIS 450, MATH 100, MATH 111, MATH 113, MATH 121, MATH 130



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	UNITS	COURSES
University Requirements	0	0
Earned Credits	0	0
Transferred Credits	0	0
Satisfactory Credits	0	0
Total Credits	0	0
Needed	0	0

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ENGL 100, ENGL 110, ENGL 112 (All required)  
Substitutes for students with advanced placement: Any course with an ENGL or MCM prefix  
THTR 180, Any language course

**II. Managing Skills (1 courses - 3 credits)**  
CSC 123, CSC 122, MCM 104, MIS 118  
Substitutes for students with advanced placement: Any other course in CSC or MIS Prefix

**III. Valuing Skills (1 courses - 3 credits)**  
ANTH 111, ARAB 101, ART 110, CHIN 101, ECON 101, ECON 102, FREN 101, GRMN 101, HIST 103  
HIST 104, MUSC 110, PHIL 110, PHIL 115, POLI 101, PSYC 103, SOC 110, SPAN 101

**Knowledge Goals (11 courses - 29 credits)**

**IV. Social and Behavioral Sciences (2 courses - 6 credits)**  
Any course with code starting with ANTH, ECON, GEOG, HIST, MCM, POLI, PSYC & SOC.

**V. Humanities and Fine Arts (2 courses - 6 credits)**  
Any course with starting code ARAB, ART, CHIN, ENGL, FREN, GRMN, HIST, MUSC, PHIL, SPAN & THTR

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MUSC 109, PHIL 185, PHIL 190, PSYC 223, SOCI 120, SPAN121, SPAN 122

**VII. Mathematics (2 courses - 6 credits)**  
MATH 131, MATH 132

**VIII. Natural Sciences (4 courses - 8 credits)**  
**At least two course must be taken with their corresponding lab courses concurrently**  
A. Any two courses from BIOL 110, CHEM 110, PHYS 110  
B. Any two corresponding lab courses BIOL 110L, CHEM 110L, PHYS 110L

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MIS 347, MIS 448, MIS 450, MATH 100, MATH 111, MATH 113, MATH 121, MATH 130