



Student ID: STUDENT ID
Student Name: Student Name

Course	Grade	Prerequisites
I) General Education (A & B) (16 Courses - 44 Credits)		
A- CORE (7 Courses - 21 Credits)		
I. Writing Courses: 3 Courses		
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
II. Communication: 1 Course		
Communication offering		
III. MATH Proficiency: 1 Course		
MATH 131-Analytic Geometry and Calculus I	*	MATH 098 GMPT score
IV. Information Literacy: 1 Course		
CSC 123-Fundamentals of Web Design	*	ENGL 100 coreq
V. Arab Heritage & Cultural Diversity: 1 Course		
Arab Heritage & Cultural Diver offering		
B- EXPLORE (9 Courses - 23 Credits)		
I. Social Sciences : 2 Courses		
Social Sciences offering		
Social Sciences offering		
II. Humanities & Fine Arts: 2 Courses		
PHIL 245-Ethics and the Computer	*	combined 6 credits from MATH, CSC or PHIL
Humanities & Fine Arts offering		
III. MATH: 1 Course		
MATH 132-Analytic Geometry & Calculus II	*	MATH 131
IV. Life/Natural Sciences: (4 Courses - 8 Credits) (a & b)		
a. Any 2 courses : (2 Courses - 6 Credits)		
BIOL 110-Biology I	*	CS student & passed ENGL Foundation & BIOL 110L
CHEM 110-General Chemistry I	ELG-2601	ENGL 098 & (CHEM 110L coreq) & (CS or CEA)
PHYS 110-Physics I	*	(MATH098 /GMPT Score) & PHYS110L & (CS CEA)
b. Any 2 Lab Courses : (2 Courses - 2 Credits)		
BIOL 110L-Biology-I Laboratory	*	BIOL 110 coreq
CHEM 110L-General Chemistry I Laboratory	*	CHEM 110 coreq
PHYS 110L-Physics I Lab	*	PHYS 110 coreq

2) Major Core Requirements: (17 Courses - 52 Credits)		
Must Complete all		
CSC 122-Computational Problem Solving	ELG-2601	ENGL 098/100/110/112 & (CS CEA)
CSC 125-Object Oriented Programming I	*	CSC 122
CSC 225-Programming and Data Structures	*	CSC 125 & CSC Major
CSC 226-Object Oriented Programming II	*	CSC 225 coreq
CSC 230-Digital Systems	*	CSC 125
CSC 270-Computer Systems: Architecture and Organization	*	CSC 230
CSC 300-Discrete Structures	*	CSC 125 & MATH (131 or 140)
CSC 313-Design and Analysis of Algorithms	*	CSC 225 & 300
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 430-Artificial Intelligence	*	CSC 313
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
CSC 477-Security in Computing	*	Senior Standing
CSC 492-Practicum in Computer Science	*	CSC 473 coreq & 361 coreq

3) Major Core Requirements: (3 Courses - 9 Credits)		
Must Complete all		
MATH 140-Elementary Linear Algebra	*	MATH 098 or 130 or GMPT Score
MATH 221-Applied Statistics	*	MATH 131
MATH 331-Numerical Analysis	*	MATH 140 & 132 & CSC 125

4) Major Elective Requirements: (4 Courses - 12 Credits)		
Must Complete 4 Courses from the following list		
CSC 235-Programming Challenges	*	CSC 225
CSC 271-Computer Systems: Programming	*	CSC 270
CSC 290-Data Science	*	CSC 125 & MATH 221
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 371-Data and Software Security	*	CSC 313
CSC 380-Mobile Application Development	*	CSC 226 & CSC 361 coreq
CSC 390-Introduction to Academic Research in Computer	*	Junior Standing & UCOM
CSC 391-Data Visualization	*	CSC 226 & MATH 221
CSC 392-Machine Learning	*	CSC 313 & MATH 221
CSC 399-Internship in Computer Science	*	Junior Standing & UCOM
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 444-Digital Image Processing	*	CSC 226 & MATH 140 & 221
CSC 474-Network Security	*	CSC 473 coreq
CSC 478-Ethical Hacking	*	CSC 477
CSC 479-Cloud Computing	*	Senior Standing
CSC 489-Topics in Computer Science	*	HOD Approval

GEPT: GUST English Placement Test
coreq: Pre-requisite or Co-Requisite
GMPT: GUST Math Placement Test

ELG-[Term Code]: Student eligibility to enroll



Student ID: STUDENT ID
Student Name: Student Name

5) Free Elective Requirements: (3 Courses - 9 Credits)			Course	Grade	Prerequisites
Must Complete 3 Courses					
General Courses offering					
General Courses offering					
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

General Education Requirements

All Students are required to complete 44 credits of General Education requirements.
21 credits from the CORE & 23 credits from EXPLORE area.

Writing Courses

Students with advance placement in ENGL can substitute ENGL 100/ 110 with any ENGL, Foreign Languages or MCM courses.

Communication Offering

Any of the following courses:

MCM 101, 102, 103, 106, 107, THTR 180, 121, KOR 101, FREN 101, 102, 111, ENGL 201

Arab Heritage & Cultural Diversity Offering

Any of the following courses:

ARAB 101, 103, 211, 231 FREN 122, MUSC 109, PHIL 185, 190, WCCS 382, 383
any course with CODE HIST, ISTD

Social Sciences Offering

Any course with code starting with HIST, MCM, POLI, PSYC, SOC.

Humanities & Fine Arts Offering

KOR 101, ENGL 201, 206, 208, WCCS 383

any course with code ARAB, FREN, ISTD, MUSC, PHIL, SPAN.

Life & Natural Sciences Offering (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

Students willing to follow specific specialization group must take major electives as listed:

1. Cybersecurity Specialization:

CSC 371, CSC 474, CSC 478, and any major elective course

2. Intelligent Systems / Data Science Specialization:

CSC 290, CSC 391, CSC 392, and any major elective course

3. Mobile and Web Development Specialization:

CSC 301, CSC 380, (CSC 404 or CSC 405), and any major elective course

Important Instructions and GuideLines

1.The credits of the following courses are **NOT** counted towards the Computer Science BS degree.

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



Student ID: STUDENT ID
Student Name: Student Name

Course	Grade	Prerequisites	Course	Grade	Prerequisites
--------	-------	---------------	--------	-------	---------------

	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

General Education Requirements
All Students are required to complete 44 credits of General Education requirements. 21 credits from the CORE & 23 credits from EXPLORE area.

Writing Courses
Students with advance placement in ENGL can substitute ENGL 100/ 110 with any ENGL, Foreign Languages or MCM courses.

Communication Offering
Any of the following courses:
MCM 101, 102, 103, 106, 107, THTR 180, 121, KOR 101, FREN 101, 102, 111, ENGL 201

Arab Heritage & Cultural Diversity Offering
Any of the following courses:
ARAB 101, 103, 211, 231 FREN 122, MUSC 109, PHIL 185, 190, WCCS 382, 383
any course with CODE HIST, ISTD

Social Sciences Offering
Any course with code starting with HIST, MCM, POLI, PSYC, SOC.

Humanities & Fine Arts Offering
KOR 101, ENGL 201, 206, 208, WCCS 383
any course with code ARAB, FREN, ISTD, MUSC, PHIL, SPAN.

Life & Natural Sciences Offering (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

Students willing to follow specific specialization group must take major electives as listed:

- Cybersecurity Specialization:**
CSC 371, CSC 474, CSC 478, and any major elective course
- Intelligent Systems / Data Science Specialization:**
CSC 290, CSC 391, CSC 392, and any major elective course
- Mobile and Web Development Specialization:**
CSC 301, CSC 380, (CSC 404 or CSC 405), and any major elective course

Important Instructions and GuideLines
1. The credits of the following courses are **NOT** counted towards the Computer Science BS degree.
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