CCIT - AASTMT
Course Plan Document

for

<All Programs>

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Prepared by <Fayrouz Elsalmy > <Shaimaa Ahmed>

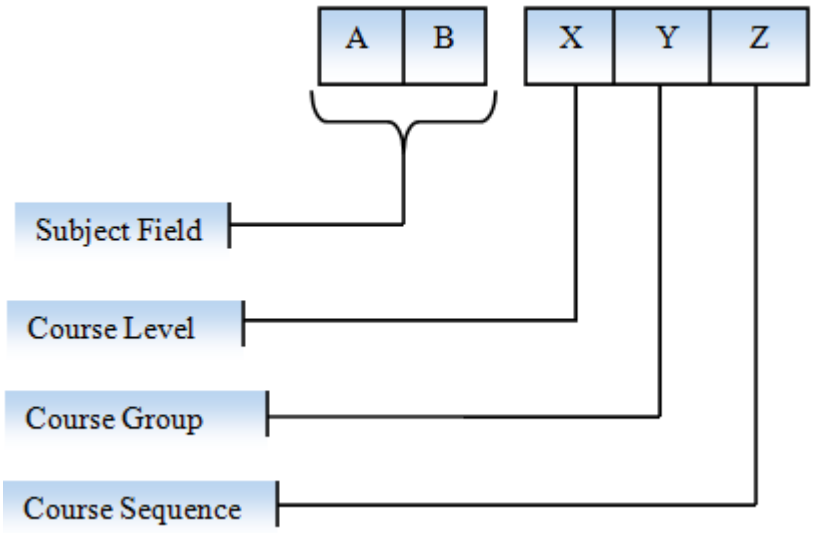
Upon agreement of <Department Heads>

And courses' data entry to the system

Course Coding

Numbering System

The course code consists of five alphanumeric digits, AB XYZ depending on the nature of the course.



The **AB** letters : Represent the abbreviations of the subject field.

The **X** digit : Represents the course level or the year at which the course is offered in the plan of study.

The **Y** digit : Represents the course group.

The **Z** digit : Represents the course sequence number within the group.

Abbreviations of Subject Field

The following abbreviations of subject fields are used in the program detailed structure and Course Description sections of this report; and are listed below:

AR	Architecture	**BA**	Basic and Applied Sciences	**CE**	Computer Engineering
CS	Computer Science	**GM**	Graphics and Multimedia	**IS**	Information Systems
LH	Linguistics and Humanities	**NC**	Non-Computing	**SE**	Software Engineering
EC	Electronics and Communications				

CS Program Detailed Structure

Term I			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
LH135	English for Specific Purposes I		
BA101	Calculus I		
BA113	Physics		
	Humanities Elective		
CS111	Intro. to Computers		
IS171	Introduction to Information systems		
BA003 *	Math 0		

Term II			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
LH136	English for Specific Purposes II	**LH135**	English for Specific Purposes I
BA102	Calculus II	**BA101**	Calculus I
GM311	Introduction to Multimedia	**CS111**	Intro. to Computers
EC134	Fundamentals of Electronics	**BA113**	Physics
CS143	Intro. to Problem Solving and Programming	**CS111**	Intro. to Computers
NC133	Communication Skills	**LH135**	English for Specific Purposes I

Term III			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CE216	Digital Logic Design	**CS111**	Intro. to Computers
CS243	Object-Oriented Programming	**CS143**	Intro. to Problem Solving and Programming
BA201	Calculus III	**BA102**	Calculus II
CS202	Discrete Structures	**CS111**	Intro. to Computers
BA203	Probability and Statistics	**BA102**	Calculus II
BA216	Advanced Physics	**BA113**	Physics

(*): *This course is added for students of science section only*

Term IV			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
SE291	Introduction to Software Engineering	**CS243** **IS171**	Object-Oriented Programming Introduction to Information systems
CS212	Data Structures and Algorithms	**CS243**	Object-Oriented Programming
CE243	Intro. to Computer Architecture	**CE216**	Digital Logic Design
CS244	Advanced Programming Applications	**CS243**	Object-Oriented Programming
IS273	Database systems	**CS143**	Intro. to Problem Solving and Programming
CE231	Introduction to Networks	**CS143**	Intro. to Problem Solving and Programming
IT321	Professional Training in Programming I (.Net 1)	-	None

Term V			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
BA304	Linear Algebra	**BA102**	Calculus II
CS311	Theory of Computation	**CS202**	Discrete Structures
CS321	Systems Programming	**CS243** **CE243**	Object-Oriented Programming Intro. to Comp. Architecture
CS333	Web Programming	**IS273**	Database Systems
CS352	Computer Graphics	**CS212**	Data Structures & Algorithms
BA301	Advanced Statistics	**BA203**	Probability and Statistics
IT322	Professional Training in Programming II (.Net 2)	-	None

Term VI			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CS322	Operating Systems	**CE243** **CS212**	Intro. to Comp. Architecture Data Structures & Algorithms
CS366	Introduction to Artificial Intelligence	**CS202** **CS212**	Discrete Structures Data Structures & Algorithms
CS312	Computing Algorithms	**CS212**	Data Structures & Algorithms
CS301	Numerical Methods	**BA304** **CS143**	Linear Algebra Intro. to Problem Solving and Programming
CS305	System Modeling & simulation	**BA203** **CS243**	Probability and Statistics Object-Oriented Programming
	Minor Elective		
	Professional Training *	-	None

Term VII			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CS481	Computers & Society		96 CR or more
CS445	Structure of programming Languages	**CS311** **CS321**	Theory of Computation Systems Programming
CS401	Project I		GPA>=2.0 & 96 CR or more
	Major Elective		
	Major Elective		
	Minor Elective		
	Professional Training *	-	None

Term VIII			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CS421	Computer System Security	**CS322** **CE231**	Operating Systems Introduction to Networks
CS451	Human Computer Interaction	**SE291**	Intro. to Software Engineering
CS402	Project II	**CS401**	Project I
	Major Elective		
	Major Elective		
	Minor Elective		
	Professional Training *	-	None

(*): *check the last page of the course plan for the Professional Training instructions.*

Computer Science Department

Courses for Major Electives

Course		Prerequisite	
Code	**Title**	**Code**	**Title**
CS461	Software Agents	**CS366**	Introduction to Artificial Intelligence.
CS425	Distributed Systems	**CS322**	Operating Systems
CS403	Optimization techniques	**CS301**	Numerical Methods
CS432	Network Protocols & Programming	**CE231**	Introduction to Networks
		CS244	Advanced Programming Applications
CS441	Compilers	**CS321**	Systems Programming
		CS445	Structure of programming Languages
CS427	Embedded Systems Programming	**CE243**	Intro. to Computer Architecture
		CS143	Intro. to Problem Solving and Programming
CS453	Virtual Environments	**CS352**	Computer Graphics
CS454	Multimedia Acquisition & Communications	**CS244**	Advanced Programming Applications
		CE231	Introduction to Networks
CS464	Soft Computing	**CS366**	Introduction to Artificial Intelligence.
CS469	Robotics Applications	**CS366**	Introduction to Artificial Intelligence
		CE243	Intro. to Computer Architecture
CS443	Game Programming	**CS243**	Object-oriented Programming
		CS352	Computer Graphics
SE391	Project Management	**SE291**	Introduction to Software Engineering
CS468	Advanced Artificial intelligence	**CS366**	Introduction to Artificial Intelligence
CS475	Information Retrieval	**CS212**	Data Structures & Algorithms
		BA304	Linear Algebra
CS353	Digital Image Processing	**CS212**	Data Structures and Algorithms
		BA201	Calculus III
CS449	Functional Programming	**CS445**	Structure of programming Languages
CS428	Cloud Computing	**CS322**	Operating Systems
		CE231	Introduction to Networks
CS411	Data Compression	**CS212**	Data Structures and Algorithms
		BA201	Calculus III

IS Program Detailed Structure

Term I			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
LH135	English For Specific Purposes I		
BA101	Calculus I		
BA113	Physics		
NC172	Fundamentals of Business		
CS111	Introduction to Computers		
IS171	Introduction to Information systems		
BA003 *	Math 0		

Term II			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
LH136	English For Specific Purposes II	**LH135**	English For Specific Purposes I
BA102	Calculus II	**BA101**	Calculus I
GM311	Introduction to Multimedia	**CS111**	Intro. to Computers
EC134	Fundamentals of Electronics	**BA113**	Physics
CS143	Introduction to Problem Solving and Programming	**CS111**	Introduction to Computers
NC133	Communication Skills	**LH135**	English For Specific Purposes I

Term III			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CE216	Digital Logic Design	**CS111**	Intro. to Computers
CS243	Object-Oriented Programming	**CS143**	Introduction to Problem Solving and Programming
BA201	Calculus III	**BA102**	Calculus II
CS202	Discrete Structures	**CS111**	Introduction to Computers
BA203	Probability and Statistics	**BA102**	Calculus II
BA216	Advanced Physics	**BA113**	Physics

(*): *This course is added to term I students of science section.*

Term IV			
Course		**Course**	
Code	**Title**	**Code**	**Title**
SE291	Introduction to Software Engineering	**CS243** **IS171**	Object-Oriented Programming Intro. to Information systems
CS212	Data Structures and Algorithms	**CS243**	Object-Oriented Programming
IS273	Database Systems	**CS143**	Intro. to Problem Solving and Programming
CS244	Advanced Programming Applications	**CS243**	Object-Oriented Programming
CE243	Intro. to Computer Architecture	**CE216**	Digital Logic Design
CE231	Introduction to Networks	**CS143**	Intro. to Problem Solving and Programming
IT321	Professional Training in Programming I (.Net 1)	-	None

Term V			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
IS372	Information Systems Theory & Practice	**IS171**	Intro. to Information Systems
CS333	Web Programming	**IS273**	Database Systems
NC282	Introduction to Accounting	**BA102**	Calculus II
SE391	Project Management	**SE291**	Intro. to Software Engineering
IS391	Systems Analysis & Design	**IS171** **CS243**	Intro. to Information Systems Object-Oriented Programming
NC252	Principles of Marketing		
IT322	Professional Training in Programming II (.Net 2)	-	None

Term VI			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CS322	Operating Systems	**CE243** **CS212**	Intro. to Computer Architecture Data Structures & Algorithms
CS366	Introduction to Artificial Intelligence	**CS202** **CS212**	Discrete Structures Data Structures & Algorithms
NC275	Global Business	**NC172**	Fundamentals of Business
IS371	E-business Fundamentals	**IS171**	Intro. to Information Systems
IS374	Advanced Database Systems	**IS273**	Database Systems
	Minor Elective		
	Professional Training *	-	None

Term VII			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
IS471	Strategic Planning for IS	**IS391**	Systems Analysis & Design
CS481	Computers & Society		96 CR or more
IS401	Project I		GPA>=2.0 & 96 CR or more
	Major Elective		
	Major Elective		
NC471	Business Process Management	**NC172**	Fundamentals Of Business
	Professional Training *	-	None

Term VIII			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
IS421	IS Security	**CS322** **CE231**	Operating Systems Introduction to Networks
IS461	Decision Support Systems	**CS366**	Intro. to Artificial Intelligence
IS402	Project II	**IS401**	Project I
	Major Elective		
	Major Elective		
	Minor Elective		
	Professional Training *	-	None

(*): *check the last page of the course plan for the Professional Training instructions.*

Information Systems Department

Courses for Major Electives

Code	Title	Prerequisite	
		Code	Title
IS477	Geographic Information Systems	**IS273**	Database Systems
IS478	Integrated Information Systems Management	**IS372**	Information Systems Theory & Practice
IS472	E-Learning	**IS372**	Information Systems Theory & Practice
IS479	Digital Libraries	**IS171**	Introduction to Information Systems
IS433	Mobile Computing Applications	**CS244**	Advanced Programming Applications
CS451	Human Computer Interaction	**SE291**	Introduction to Software Engineering
IS473	Multimedia Information Systems	**IS273** **CS212**	Database Systems Data Structures & Algorithms
IS463	Knowledge Management	**CS366**	Introduction to AI
IS465	Data Mining	**IS273**	Database Systems
IS467	Big Data Analytics	**BA203**	Probability and Statistics
		CS366	Intro. to Artificial Intelligence

SE Program Detailed Structure

Term I			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
LH135	English For Specific Purposes I		
BA101	Calculus I		
BA113	Physics		
NC172	Fundamentals of Business		
CS111	Introduction to Computers		
IS171	Introduction to Information systems		
BA003 *	Math 0		

Term II			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
LH136	English For Specific Purposes II	**LH135**	English For Specific Purposes I
BA102	Calculus II	**BA101**	Calculus I
GM311	Introduction to Multimedia	**CS111**	Intro. to Computers
EC134	Fundamentals of Electronics	**BA113**	Physics
CS143	Introduction to Problem Solving and Programming	**CS111**	Introduction to Computers
NC133	Communication Skills	**LH135**	English For Specific Purposes I

Term III			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CE216	Digital Logic Design	**CS111**	Introduction to Computers
CS243	Object-Oriented Programming	**CS143**	Introduction to Problem Solving and Programming
BA201	Calculus III	**BA102**	Calculus II
CS202	Discrete Structures	**CS111**	Introduction to Computers
BA203	Probability and Statistics	**BA102**	Calculus II
BA216	Advanced Physics	**BA113**	Physics

(*): *This course is added to term I students of science section.*

Term IV			
Course		**Course**	
Code	**Title**	**Code**	**Title**
SE291	Introduction to Software Engineering	**CS243** **IS171**	Object-Oriented Programming Intro. to Information systems
CS212	Data Structures and Algorithms	**CS243**	Object-Oriented Programming
IS273	Database systems	**CS143**	Intro. to Problem Solving and Programming
CS244	Advanced Programming Applications	**CS243**	Object-Oriented Programming
CE243	Intro. to Computer Architecture	**CE216**	Digital Logic Design
CE231	Introduction to Networks	**CS143**	Intro. to Problem Solving and Programming
IT321	Professional Training in Programming I (.Net 1)	-	None

Term V			
Course		**Prerequisit**	
Code	**Title**	**Code**	**Title**
SE392	Software requirement & Specifications	**SE291**	Intro. to Software Engineering
BA304	Linear Algebra	**BA102**	Calculus II
SE391	Project Management	**SE291**	Intro. to Software Engineering
CS311	Theory of Computation	**CS202**	Discrete Structures
CS333	Web Programming	**IS273**	Database Systems
	Humanities Elective		
IT322	Professional Training in Programming II (.Net 2)	-	None

Term VI			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CS322	Operating Systems	**CE243** **CS212**	Intro. to Comp. Architecture Data Structures & Algorithms
CS366	Introduction to Artificial Intelligence	**CS212** **CS202**	Data Structures & Algorithms Discrete Structures
CS312	Computing Algorithms	**CS212**	Data Structures & Algorithms
SE393	Principles of Software Architecture	**SE291**	Intro. to Software Engineering
CS451	Human Computer Interaction	**SE291**	Intro. to Software Engineering
	Minor Elective		
	Professional Training *	-	None

Term VII			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
SE491	Software component Design	**SE291**	Introduction to Software Engineering
CS481	Computers & Society		96 CR or more
SE401	Project I		GPA>=2.0 & 96 CR or more
	Major Elective		
	Major Elective		
	Minor Elective		
	Professional Training *	-	None

Term VIII			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
SE492	Software verification	**SE291**	Introduction to Software Engineering
CS421	Computer System Security	**CS322** **CE231**	Operating Systems Introduction to Networks
SE402	Project II	**SE401**	Project I
	Major Elective		
	Major Elective		
	Minor Elective		
	Professional Training *	-	None

(*): *check the last page of the course plan for the Professional Training instructions.*

Courses for Major Electives
Software Engineering Department

Code	Title	Prerequisite	
		Code	Title
SE493	Software Quality Assurance	**SE291**	Introduction to Software Engineering
SE494	Formal Methods in Software Engineering	**SE291**	Introduction to Software Engineering
SE495	Security in Software Engineering	**SE291**	Introduction to Software Engineering
CS427	Embedded Systems Programming	**CE243** **CS143**	Introduction to Computer Architecture Introduction to Problem Solving
SE496	Software Engineering Process	**SE291**	Introduction to Software Engineering
CS428	Cloud Computing	**CS322** **CE231**	Operating Systems Introduction to Networks

GM Program Detailed Structure

Term I			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
LH135	English for Specific Purposes I		-
BA101	Calculus I		-
BA113	Physics		-
NC172	Fundamentals of Business		-
CS111	Intro. to Computers		-
IS171	Introduction to Information systems		-
BA003 *	Math 0		-

Term II			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
LH136	English for Specific Purposes II	**LH011**	English for Specific Purposes I
BA102	Calculus II	**BA101**	Calculus I
GM311	Introduction to Multimedia	**CS111**	Intro. to Computers
EC134	Fundamentals of Electronics	**BA113**	Physics
CS143	Intro. to Problem Solving and Programming	**CS111**	Intro. to Computers
NC133	Communication Skills	**LH135**	English for Specific Purposes I

Term III			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CE216	Digital Logic Design	**CS111**	Intro. to Computers
CS243	Object-Oriented Programming	**CS143**	Intro. to Problem Solving and Programming
BA201	Calculus III	**BA102**	Calculus II
CS202	Discrete Structures	**CS111**	Intro. to Computers
BA203	Probability and Statistics	**BA102**	Calculus II
BA216	Advanced Physics	**BA113**	Physics

(*): *This course is added for students of science section only.*

Term IV			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
SE291	Introduction to Software Engineering	**CS243** **IS171**	Object-Oriented Programming Introduction to Information systems
CS212	Data Structures and Algorithms	**CS243**	Object-Oriented Programming
CE243	Intro. to Computer Architecture	**CE216**	Digital Logic Design
CS244	Advanced Programming Applications	**CS243**	Object-Oriented Programming
IS273	Database systems	**CS143**	Intro. to Problem Solving and Programming
CE231	Introduction to Networks	**CS143**	Intro. to Problem Solving and Programming
IT321	Professional Training in Programming I (.Net 1)	-	None

Term V			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CS333	Web Programming	**IS273**	Database systems
GM315	Digital Audio & Video Fundamentals	**GM311**	Introduction to Multimedia
CS352	Computer Graphics	**CS212**	Data Structures and Algorithms
SE391	Project Management	**SE291**	Intro. to Software Engineering
	Humanities Elective		
GM317	Media Production and Editing	**GM311**	Introduction to Multimedia
IT322	Professional Training in Programming II (.Net 2)	-	None

Term VI			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CS322	Operating Systems	**CE243** **CS212**	Intro. to Computer Architecture Data Structures and Algorithms
CS366	Introduction to Artificial Intelligence	**CS202** **CS212**	Discrete Structures Data Structures & Algorithms
CS451	Human Computer Interaction	**SE291**	Introduction to Software Engineering
GM324	3D Modeling	**GM311**	Introduction to Multimedia
CS443	Game Programming	**CS243** **CS352**	Object-Oriented Programming Computer Graphics
	Minor Elective		
	Professional Training *	-	None

Term VII			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
GM323	Digital Lighting and Rendering	**GM324**	3D Modeling
CS455	Digital Image Processing	**CS212**	Data Structures and Algorithms
		BA201	Calculus III
GM413	Project I		GPA>=2.0 & 96 CR or more
	Minor Elective		
	Major Elective		
	Major Elective		
	Professional Training *	-	None

Term VIII			
Course		**Prerequisite**	
Code	**Title**	**Code**	**Title**
CS421	Computer System Security	**CS322** **CE231**	Operating Systems Introduction to Networks
GM411	Computer Animation	**GM323**	Digital Lighting and Rendering
GM423	Project II	**GM413**	Project I
	Minor Elective		
	Major Elective		
	Major Elective		
	Professional Training *	-	None

(*): *check the last page of the course plan for the Professional Training instructions.*

Multimedia and Graphics Department

Courses for Major Electives

Code	Title	Code	Prerequisite
GM415	Digital Audio & Video Fundamentals	**GM311**	Introduction to Multimedia
GM416	Video Editing	**GM311**	Introduction to Multimedia
CS446	Computer Games programming: Tools and Techniques	**CS443**	Game Programming
GM418	Information Visualization	**CS352**	Computer Graphics
		IS171	Intro. to Information systems
CS466	Machine Learning and AI for Games	**CS366**	Introduction to Artificial Intelligence
		CS443	Game Programming
CS447	Writing Games Analysis – concept art for gaming	**CS443**	Game Programming
		GM324	3D Modeling
GM425	3D animation and Graphics Programming Tools	**GM411**	Computer Animation
		GM324	3D Modeling
GM426	Video Databases	**GM311**	Introduction to Multimedia
		IS273	Database Systems
CS448	Game Modeling Design	**CS443**	Game Programming
GM427	Video Streaming	**GM311**	Introduction to Multimedia
		CE231	Introduction to Networks
CS411	Data Compression	**CS212**	Data Structures and Algorithms
		BA201	Calculus III

Courses for Minor Electives

Computer Science

Code	Title	Prerequisite	
		Code	Title
CS301	Numerical Methods	**BA304**	Linear Algebra
		CS143	Introduction to Problem Solving & Programming
CS445	Structure of Programming Languages	**CS311**	Theory of Computation
		CS321	Systems Programming
CS305	System Modeling & Simulation	**BA203**	Probability and Statistics
		CS243	Object-Oriented Programming
CS321	Systems Programming	**CS243**	Object-Oriented Programming
		CE243	Introduction to Computer Architecture
CS352	Computer Graphics	**CS212**	Data Structures & Algorithms
CS311	Theory of Computation	**CS202**	Discrete Structures
CS443	Game Programming	**CS243**	Object-oriented Programming
		CS352	Computer Graphics

Information Systems

Course		Prerequisite	
Code	**Title**	**Code**	**Title**
IS372	Information Systems Theory & Practice	**IS171**	Introduction to Information systems
IS391	Systems Analysis & Design	**IS171**	Introduction to Information systems
		CS243	Object-Oriented Programming
IS371	E-business Fundamentals	**IS171**	Intro. to Information Systems
IS374	Advanced Database Systems	**IS273**	Database Systems
IS461	Decision Support Systems	**CS366**	Introduction to Artificial Intelligence
IS471	Strategic Planning for IS	**IS391**	Systems Analysis & Design

Software Engineering

Course		Prerequisite	
Code	**Title**	**Code**	**Title**
SE392	Software Requirements & Specifications	**SE291**	Introduction to Software Engineering
SE393	Principle of Software Architecture	**SE291**	Introduction to Software Engineering
SE491	Software Component Design	**SE291**	Introduction to Software Engineering
SE492	Software Verification	**SE291**	Introduction to Software Engineering
SE493	Software Quality Assurance	**SE291**	Introduction to Software Engineering

Multimedia and Graphics

Course		Prerequisite	
Code	**Title**	**Code**	**Title**
GM323	Digital Lighting and Rendering	**GM324**	3D Modeling
GM324	3D Modeling	**GM311**	Introduction to Multimedia
CS352	Computer Graphics	**CS212**	Data Structures & Algorithms
GM411	Computer Animation	**GM323**	Digital Lighting and Rendering
GM317	Media Production and Editing	**GM311**	Introduction to Multimedia
GM315	Digital Audio & Video Fundamentals	**GM311**	Introduction to Multimedia

Humanities Elective Courses

Course		Prerequisite	
Code	**Title**	**Code**	**Title**
NC215	Theory of Colors		
NC252	Principles of Marketing		
NC262	Scientific Thinking		
NC263	Environmental Science & Technology		
NC264	Principle of Microeconomics		
NC275	Global Business		
NC282	Introduction to Accounting		
NC172	Fundamentals of Business		
NC471	Business Process Management	**NC172**	Fundamentals Of Business

Professional Training Courses in CCIT

All students MUST complete professional training requirements before graduation.

Starting terms 4 and 5, the student registers for Professional Training in Programming I and II, respectively. Then, in term 6, the student chooses one of currently available three tracks: *Networking*, *Database*, or *Multimedia*, and covers three Professional Training courses in the chosen track in terms 6, 7, and 8.
The following tables show the distribution of Professional Training courses in each track.

Networking

Term	Course Code	Course Title
Term 6	IT331	Professional Training in Networking I
Term 7	IT332	Professional Training in Networking II
Term 8	IT431	Professional Training in Networking III

Database

Term	Course Code	Course Title
Term 6	IT371	Professional Training in Database I
Term 7	IT372	Professional Training in Database II
Term 8	IT471	Professional Training in Database III

Multimedia

Term	Course Code	Course Title
Term 6	IT382	Professional Training in Multimedia I
Term 7	IT481	Professional Training in Multimedia II
Term 8	IT482	Professional Training in Multimedia III

Changes Log:

- **Add Business Process Management NC471 to Humanities Electives with Fundamentals of Business NC172 prerequisite**
- **Rename Financial Accounting NC282 to Introduction to Accounting leave code same in list of Humanities Electives**
- **Remove Linear Algebra BA304 from IS plan term 5 and replace with Introduction to Accounting NC282**
- **Remove Humanities Elective course from IS plan term 5 and replace with Principles of Marketing NC252**
- **Remove Organizational Behavior NC381 from IS plan in term 6 and replace with Global Business NC275**
- **Remove Minor Elective from IS plan term 7 and replace it with business process management NC471**
- Add new major elective course to IS named Big Data Analytics IS467 with Probability and Statistics BA203 and Intro. to Artificial Intelligence CS366 as its prerequisites.
- Digital Image Processing was changed from CS353 to CS455 and it was moved from term 5 to term 7 GM plan replacing Data compression CS411.
- Data Compression CS411 got moved from term 7 to Major electives in GM plan
- Digital Audio and Video Fundamentals was changed from GM415 to GM 315 and it was moved from being a major elective to term 5 in GM plan.
- Digital Audio and Video Fundamentals now GM315 was added as a Multimedia minor elective
- Data Compression CS411 added as a major elective course to CS plan
- Visual Studies AR115 was removed from term 1 in all departments and Fundamentals of Business NC172 was its replacement in IS, SE, GM plans and Humanities Electives was its replacement in CS plan.
- Fundamentals of Business was moved to term 1 and was replaced with Introduction to Multimedia GM311 in all departments.
- Advanced Physics BA216 was placed in term 3 in all departments to replace Introduction to Multimedia GM311
- Advanced Statistics BA301 was added to CS plan only to replace Statistics for Computing CS306, with Probability and Statistics BA203 being the only prerequisite.
- In GM plan Graphics Design for Web Pages (As Visual Studies AR115 was one of its prerequisites and we no longer offer this course) was removed from the list of GM Majors with no replacements.
- The prerequisite of Project 1 in all departments was changed from 99 credit hours to a minimum of 96.

- The prerequisite of Computers and Society CS481 in CS, IS, SE plan was changed from 99 credit hours to a minimum of 96.
- Humanities Electives was replaced by Statistics for Computing CS306, its prerequisites are Intro. to Problem solving CS143 and Probability and statistics BA203 in the CS plan term 5
- Fundamentals of Business NC172 was replaced by Humanities Elective in CS plan term 2
- Fundamentals of Business NC172 was added to list of Humanities Electives for all plans.
- Cloud Computing CS428 was added to the list of Major Electives in the SE plan.
- Media Production and Editing GM317 removed from the list of Major Electives in GM plan and added as a core subject to the GM plan in term 5 15/1/2017
- The prerequisite to 3D Modeling GM324 changed from Computer Graphics CS352 to Introduction to Multimedia GM311 15/1/2017
- Media Production and Editing GM317 added as Minor Multimedia Elective
- Introduction to Multimedia: GM311 Moved from term 5 to term3(CS Plan)
- Introduction to Multimedia: GM311 Moved from term 5 to term3(IS Plan)
- Introduction to Multimedia: GM311 Moved from term 5 to term3(Software Engineering Plan)
- Introduction to Multimedia: GM311 Moved from term 5 to term3(MM Plan)

- Humanities Elective moved from term 3 to term 5 for all course plans.

- According to the above changes, GM students will take 4 minor electives instead of 3 minor electives.

- Graphics and MM course plan : CS451 Human Computer Interaction moved from term 8 to term 6

- Graphics and MM course plan: GM411 Computer Animation moved from term 7 to term 8

- Graphics and MM course plan:GM323 Digital Lighting and Rendering moved from term 6 to 7

- Add CS352 Computer Graphics to GM Minor Electives of IS and SE plans

- Add GM Major electives to GM Minor Electives of CS, IS and SE plans

- Graphics and MM course plan: change pre-requisite of GM323 Digital Lightering and Rendering to GM324 3D Modeling

- Add IS471 Strategic Planning for IS as an IS minor for CS, SE, GM plans.

- Add CS428 Cloud Computing to CS major electives

- Game Programming CS443 Moved from SE major electives to CS minor electives

- Information System course plan: change pre-requisite of IS472 E-learning to IS372 Information Systems Theory and Practice instead of IS171 Introduction to Information Systems

- In all course plans: change pre-requisite of Project II to Project I instead of GPA>=2.0 && CR 117

Amendments made earlier to the old plan but were agreed upon on date of the creation of this document:

- NC272: changed to NC172
- NC233: **changed** to NC133 + prerequisite added
- Digital Design: changed back to Digital Logic Design, pre-req: Intro. to Computers replacing Fundamentals of Electronics
- IS373: changed to IS273
- IS474: changed to IS374
- BA204: changed to BA304 (swapped with CS244)
- CS433: changed to CS333
- CS452: changed to CS352
    - CS352 moved from term 7 to term 5 (CS plan)
    - CS322 swapped with CS311 (CS plan)
        - CS322 moved back to term 6 (CS plan)
        - CS311 moved back to term 5 (CS plan)
    - CS301 moved from term 5 to term 6 (CS plan)
- CS345: changed to CS445
    - CS345 moved from term 6 to term 7 (CS plan)
- CS405: changed to CS305
    - CS305 moved from term 8 to term 6 (CS plan)
- SE391 swapped with CS322 (Multimedia plan)
- Computer Security: changed back to Computer System Security
- Computer Graphics pre-req: Data Structures only; Linear Algebra removed
- New humanity course: Theory of Colors
- NC364: changed to NC264
- NC382: changed to NC282
- An independent coding scheme in the Multimedia plan for GM courses, knowing that courses from other course plans are coded according to the course area.

In the previous version of this document, some courses has codes that would be replicates to other courses on the system, thus, new codes for these courses were entered to the system:

- Global Business: NC275 (instead of NC272)
- Multimedia Information Systems: IS473 (instead of IS476)
- Network Protocols and Programming: CS432 (instead of CS431)
- Data Compression: CS411 (instead of CS412)
- Machine Learning and AI for Games: CS466 (instead of CS465)