



## CURRICULUM AND CURRICULAR MATERIALS

## IMPLEMENTATION APPROVAL

QR-AAD -005

## LIST OF DOCUMENTS FOR APPROVAL

 Curriculum for the following program:

ASSOCIATE IN COMPUTER TECHNOLOGY

 Laboratory Manual(s): Course Outline(s) for the following courses: List of Textbooks and references Others: (Please specify)

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 Module of Instruction(s) : Competency Standard(s):

Remarks: (Please use this space for additional instructions)

Reduced Units to 79  
Semestral – (2018-2019)

Prepared by:

Date: 3.20.2018

Reviewed by:

Date: 2.24.18

Endorsed by:

Head, Academic Affairs -700Date: 2.28.2018

Approvals: ALCO MEMBERS:

Date: \_\_\_\_\_

Dr. Amable R. Aguiluz, V

Date: \_\_\_\_\_

 <b>ACLC</b> COLLEGE	Doc. No.	QR-AAD-018
	Issue No.	01
	Revision No.	01
College/Department: College of Computer Studies	Date of Effectivity	August 20, 2018
<b>ASSOCIATE IN COMPUTER TECHNOLOGY CURRICULUM</b>		

Teaching Institution	ACLC College
Department	College of Computer Studies
Program Title	Associate In Computer Technology
Title of Final Award	Associate In Computer Technology
Field of Specialization	
Modality	Face-to-Face, Online or Blended Learning
Accreditation	
Other External Influences	<p><b>Local External Influences/ References</b></p> <ul style="list-style-type: none"> <li>• CMO 33 s. 2013 – Policies and Guidelines on University Mobility in Asia and the Pacific (UMAP) Credit Transfer Scheme</li> <li>• CMO 46 s. 2012 - “Policy-Standard to Enhance Quality Assurance (QA) in Philippine Higher Education through an Outcomes-Based and Typology-Based QA</li> <li>• The Philippine Qualifications Framework</li> <li>• CMO No. 25, Series of 2015 - Revised Policies, Standards and Guidelines for Bachelor of Science in Computer Science (BSCS), Bachelor of Science in Information Systems (BSIS), and Bachelor of Science in Information Technology (BSIT) Programs.</li> <li>• CHED Revised Draft of ACT in Computing Degree Program 2018</li> </ul> <p><b>International External Influences/ References</b></p> <ul style="list-style-type: none"> <li>• Accreditation Board for Engineering and Technology (ABET)</li> <li>• Institute of Electrical and Electronics Engineers (IEEE) / Association for Computing Machinery 2013 Computer Science Curricula</li> <li>• European Credit Transfer and Accumulation System Manual (ECTS)</li> </ul>
Date of Production/ Revision of this Specification	August 20, 2018 <i>[Handwritten Signature]</i>



## ASSOCIATE IN COMPUTER TECHNOLOGY CURRICULUM

Effectivity:  
SY 2018-2019

Document Code:  
QR-AAD-002

Revision No.: 01

Issue No.: 01

Date of Issue:  
August 20, 2018

Effectivity	Date Issued	Origin	Reference	Developer/ In-charge
2018-2019	June 2017	<ul style="list-style-type: none"><li>Revised Program Educational Objectives and Program Outcomes</li><li>106 Units</li></ul>	<ul style="list-style-type: none"><li>CMO 33 s. 2013</li><li>CMO 46 s. 2012</li><li>CMO 25 s. 2015</li></ul>	DGB
2018-2019	August 2018	<ul style="list-style-type: none"><li>Reduced number of units.</li><li>79 Units</li></ul>	<ul style="list-style-type: none"><li>As Per Internal Memo</li></ul>	AKK

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Revision No.: 01

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Date Issued:  
August 2018

Basic Program Information			
Name of Institution		Region	
Address			
Head of Institution		Head of College	
Program Name		CHED Program Status	
Program Head		Contact Number	
E-mail Address 1		E-mail Address 2	
Institutional Mission, Vision Statement			
<b>Mission:</b>  ACLC College shall provide a holistic, relevant, quality and globally recognized IT-based education in all levels and disciplines with the objective of producing professional and leaders responsive to the needs of Science and the International Community cognizant of the welfare and benefits of its men and women thereby realizing their potential as productive members of the society for the honor and glory of God almighty.			
<b>Vision:</b>  ACLC College will be the leader and dominant provider of relevant globally recognized information technology-based education and related services in the global market.			
College Mission Vision Statement			
<b>College Mission</b>  The College of Computer Studies will be a leading and dominant provider of Information Technology Education Programs, Research and Community delivering well-rounded professionals recognized nationally and in the international community.			
<b>College Vision</b>  Aims to provide industry relevant and globally responsive Information Technology Education. The college commits itself to provide a holistic environment for the student to acquire skills and Proficiency in facing the demands of local and global arena.			

Prepared by:   Academic Affairs Curriculum Development Unit	Reviewed by:   Academic Affairs Curriculum Development Unit	Approved by:   Engr. Emelin M. Magada , MSCS,(DBA).Ed.D. Vice President Head, Academic Affairs : Program and Curriculum Dep't AMA Education System
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**PROGRAM DESCRIPTION**

The Associate in Computer Technology is a two-year program designed to provide students with specialized hands-on training that will enable them to acquire analytical skills, critical thinking and technical skills in solving information technology related- problems. The program aims to prepare students for a wide range of entry-level computer technology careers. The curriculum is based on the standards set by the Commission on Higher Education (CHED) and is benchmarked from the curricula of leading academic institutions – national and international, offering similar program.

**PROGRAM EDUCATIONAL OBJECTIVES**

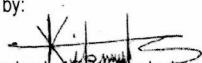
ACLCC's ACT program aims to produce globally competitive graduates who will be professionally competent, morally upright, and socially responsible contributors to national development.

Specifically, in two years after graduation, Associate in Computer Technology alumni shall:

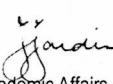
- Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional;
- effectively communicate orally and in writing using both English and Filipino;
- work effectively either independently or as a member of a team;
- act in recognition of professional, social, and ethical responsibility;
- preserve and promote "Filipino historical and cultural heritage" (based on RA 7722)
- assist in analysis of complex problems;
- apply modern computing technologies to solve problems
- develop computing solutions

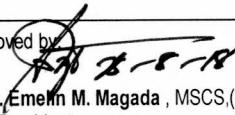
**CAREER PATH**

- Service Management
- Enterprise Resource Planning
- Multimedia Specialist
- Networking Administrator
- Mobile/Web Development
- Software Developer/Programmer

Prepared by:  
  
Academic Affairs Curriculum  
Development Unit

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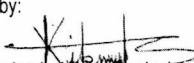
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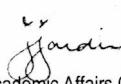
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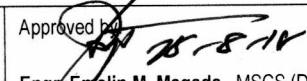
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PROGRAM OUTCOMES		
Graduate Attribute	Graduate Outcomes Code	Graduate Outcomes
Knowledge for Solving Computing Problems	ACT01	Completed and presented computing projects in line with the specialization track.
Problem Analysis	ACT02	Documented software/hardware requirements specifications following computing industry standards.
Design/Development of Solutions	ACT03	Developed a solution using various computing tools and techniques
Modern Tool Usage	ACT04	Used an integrated development environment.
Individual & Team Work	ACT05	Worked in a group to develop a machine project.
Communication	ACT06	Presented a proposed solution in class or in a public forum.
Professional Ethics	ACT07	Immersed/exposed in an actual working environment in industry.
Life-Long Learning	ACT08	Created a report on a conducted independent learning activity.

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**PROGRAM STRUCTURE**
**FIRST YEAR ATTENDANCE**
**First Semester**

SUBJECT AREA	CAT. NO.	COURSE TITLE	LEC UNIT(S)	LAB UNIT(S)	UNIT(S)	PRE-REQUISITES
ITE	6101	Computing Fundamentals	2	1	3	
GE	6100	Understanding the self	3	0	3	
ITE	6102	Computer Programming 1	2	1	3	
GE	6114	Mathematics in the Modern World	3	0	3	
		Major Elective 1			3	
ETHNS	6101	Euthenics 1	1	0	(1)	
PHYED	6101	Physical Fitness	2	0	(2)	
		Life- Long Life-Wide Learning Program (3LP)				

15(3)
**Second Semester**

SUBJECT AREA	CAT. NO.	COURSE TITLE	LEC UNIT(S)	LAB UNIT(S)	UNIT(S)	PRE-REQUISITES
GE	6301	Life and Work of Rizal	3	0	3	
		Major Elective 2			3	
ITE	6104	Computer Programming 2	2	1	3	ITE 6102
GE	6102	The Contemporary World	3	0	3	
GE	6116	Science, Technology & Society	3	0	3	
		Major Elective 3			3	
PHYED	6102	Rhythmic Activities	2	0	(2)	PHYED 6101
NSTP	6101	National Service Training Program 1	3	0	(3)	

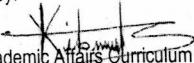
18(5)
**SECOND YEAR ATTENDANCE**
**First Semester**

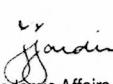
SUBJECT AREA	CAT. NO.	COURSE TITLE	LEC UNIT(S)	LAB UNIT(S)	UNIT(S)	PRE-REQUISITES
ITE	6220	Information Management	2	1	3	ITE 6104
GE	6115	Art Appreciation	3	0	3	
		Major Elective 4			3	
ITE	6201	Data Structures and Algorithms	2	1	3	ITE 6104
		Major Elective 5			3	
ITE	6202	Social and Professional Issues	3	0	3	ITE 6104
		Major Elective 6			3	
NSTP	6102	National Service Training Program 2	3	0	(3)	NSTP 6101
PHYED	6103	Individual/Dual Sports	2	0	(2)	PHYED 6102
ETHNS	6102	Euthenics 2	1	0	(1)	ETHNS 6101

21(6)
**Second Semester**

SUBJECT AREA	CAT. NO.	COURSE TITLE	LEC UNIT(S)	LAB UNIT(S)	UNIT(S)	PRE-REQUISITES
IT	6397A	IT Practicum (486 hours)	0	6	6	3rd Year Standing
GE	6101	Purposive Communication	3	0	3	
PHYED	6200	Team Sports	2	0	(2)	PHYED 6103
		Life- Long Life-Wide Learning Program (3LP)				

9(2)
**Total Number of Academic Units**
**79**

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**LIST OF RECOMMENDED MAJOR ELECTIVES PER PLAN (SPECIALIZATION TRACK)**
**Multimedia Arts Track**

SUBJECT AREA	CAT. NO.	COURSE TITLE	LEC UNIT(S)	LAB UNIT(S)	UNIT(S)	PRE-REQUISITES
IT	6209	Introduction to Multimedia	2	1	3	
DA	6100	Free hand Digital and Drawing	2	1	3	ITE 6104
IT	6314A	Multimedia Systems	2	1	3	ITE 6104
IT	6315A	Digital Imaging	2	1	3	IT 6314A
IT	6316A	Multimedia Communication Systems	3	0	3	IT 6314A
IT	6317A	Multimedia Sound and Video	2	1	3	IT6316A

**Network Administration Track**

SUBJECT AREA	CAT. NO.	COURSE TITLE	LEC UNIT(S)	LAB UNIT(S)	UNIT(S)	PRE-REQUISITES
IT	6201	Data Communications and Networking 1	2	1	3	ITE 6101
IT	6223	Data Communications and Networking 2	2	1	3	IT 6201
IT	6310	Network Security	2	1	3	IT 6201
IT	6311	Network Infrastructure and Directory Services	2	1	3	IT 6201
IT	6312	Mail and Web Services	2	1	3	IT 6201
IT	6313	Linux Administration	2	1	3	ITE 6104

**Web Application Development Track**

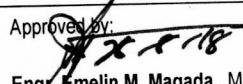
SUBJECT AREA	CAT. NO.	COURSE TITLE	LEC UNIT(S)	LAB UNIT(S)	UNIT(S)	PRE-REQUISITES
ITE	6200	Application Development and Emerging Technologies	2	1	3	ITE 6104
CS	6203	Object- oriented Programming	2	1	3	ITE 6104
IT	6314	Web Application Development 1	2	1	3	ITE 6104
IT	6315	Web Application Development 2	2	1	3	IT 6314
IT	6316	XML - Based Web Applications	2	1	3	IT 6315
IT	6317	Web Enhanced Animation Graphics	2	1	3	IT 6315

**Service Management Program Track**

SUBJECT AREA	CAT. NO.	COURSE TITLE	LEC UNIT(S)	LAB UNIT(S)	UNIT(S)	PRE-REQUISITES
SM	6312	Fundamentals of Business Process Outsourcing 1	3	0	3	ITE 6104
SM	6311	Principles of System Thinking	3	0	3	ITE 6104
SM	6313	Fundamentals of Business Process Outsourcing 2	3	0	3	SM 6312
IT	6282	Platform Technologies 1	2	1	3	ITE6104
SM	6310	Service Culture	3	0	3	ITE6104
SM	6314A	Networking 1	3	0	3	ITE6104

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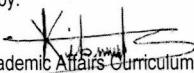
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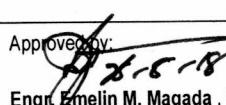
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CURRICULUM MAPPING			PROGRAM OUTCOMES							
SUBJECT AREA	CAT. NO.	COURSE TITLE	1	2	3	4	5	6	7	8
ITE	6101	Computing Fundamentals	F	F	D	F		D	F	D
GE	6100	Understanding the self							F	M
GE	6114	Mathematics in the Modern World	F	F	D	F				F
ETHNS	6101	Euthenics 1							F	F
PHYED	6101	Physical Fitness					D	D		
NSTP	6101	National Service Training Program 1					D	D		
ITE	6102	Computer Programming 1	F	F	F	F	F	D		
GE	6101	Purposive Communication 1					F	M		
GE	6115	Art Appreciation								F
ETHNS	6102	Euthenics 2							D	D
PHYED	6102	Rhythmic Activities					D	D		
NSTP	6102	National Service Training Program 2					M			
ENGL	6100	Purposive Communication 2					D	M		
GE	6102	The Contemporary World								
ITE	6104	Computer Programming 2	D	F	F	D	D	D	F	F
PHYED	6103	Individual/Dual Sports					D	D		
IT	6200	Introduction to Human Computer Interaction	F	F	D	D	F	D	F	F
IT	6201B	Data Communications and Networking 1	F	F	F	D	F	F	F	F
ITE	6201	Data Structures and Algorithms	D	D	F	F	F	F	D	
GE	6116	Science, Technology & Society	F	F	F	F	F	D		D
PHYED	6200	Team Sports					D	D		
ITE	6200	Application Development and Emerging Technology				D	D	F	F	D
ITE	6202	Information Management	F	F	D					
IT	6223B	Data Communications and Networking 2	F	D	F	D	F	D	D	
CS	6206	Principles of Operating Systems and its Applications	F	D	F	D	F	D	D	
ITE	6202	Social and Professional Issues							D	D
IT	6208	System Integration and Architecture 1		D	M	M	F	F	D	D
GE	6301	Life and Work of Rizal								D

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**COURSE DESCRIPTION**

Course Title	Understanding the Self	Credit Unit(s)	3
Course Code	GE 6100	Lec Unit(s)	3
Pre/Co -requisite(s)		Lab Unit(s)	0
Course Description			

The course is intended to enable the process of exploration and thereby help students arrive at an understanding of the concepts of personality, self and identity. The course covers topics on the introduction of major theories of personality – its nature, development and dynamics as well as those forces and factors that lead to the formation of a self and identity; and the provision of experiential learning so as to ground these theories and perspectives in students' concerns and issues relating to their personal self and identity.

Self-discovery exercises and activities, reflection papers and personal journals will be used as the focal point of lectures and class discussions, thereby providing the foundation and structure for all course learning. Other learning tools such as personality tests and measures will also be used.

Course Title	Fundamentals of Business Process Outsourcing 1	Credit Unit(s)	3
Course Code	SM 6312	Lec Unit(s)	3
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	0
Course Description			

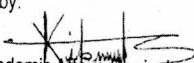
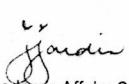
The course provides students with an overview of the outsourcing industry, including g the rationale of outsourcing, critical factors which affect different outsourcing industries, and the processes involved in engaging in, operating, and maintaining an outsourced service. The course also introduces different tools and methodologies used in outsourcing operations and provide the students with opportunities to apply these tools in simulations at a computer laboratory or "Game Lab." The course enables students to recognize areas of opportunities in outsourcing, as well as to analyze and assess how changes in technology, regulation and business environments may affect current industries. It also increases the students' awareness of the different processes critical to maintaining outsourcing engagements, such as maintaining client relationships in the context of a service culture, and the effective management of costs and resources.

Course Title	Principles of System Thinking	Credit Unit(s)	3
Course Code	SM 6311	Lec Unit(s)	3
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	0
Course Description			

The course aims to prepare the students for the twenty-first century workplace by building their foundations in systems thinking, enabling them to examine business systems, identify the inter-dependencies of specific systems within an organization, and recommend suggestions to improve.

Course Title	Fundamentals of Business Process Outsourcing 2	Credit Unit(s)	3
Course Code	SM 6313	Lec Unit(s)	3
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	0
Course Description			

This Course provide an introduction to fundamental business process outsourcing concepts via an understanding of the techniques for using business practices and methods to create and Improve business process. The Foundational study of business process provide a basis by which performance improvement are identified and implemented across business organization. Business Process outsourcing in introduced as a natural evaluation of business process mananagemnet. The student is exposed to a set of qualitative and quantitative topics aimed to enhance Process-oriented thinking, in order to develop the knowledge and skills necessary to appreciate and implement programs of process reengineering, management, and excellence in organization.

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Course Title	Service Culture	Credit Unit(s)	3
Course Code	SM 6310	Lec Unit(s)	3
Pre/Co -requisite(s)	ITE6104	Lab Unit(s)	0
Course Description			

The course builds the students' personal and social competencies (values and attitudes) necessary to executing and delivering excellent service in any professional endeavor. It introduces students to various service companies and industries and key concepts in being a customer-centric organization. It enables students to practice practical customer service skills and to manage a project.

Course Title	Networking 1	Credit Unit(s)	3
Course Code	SM 6314A	Lec Unit(s)	3
Pre/Co -requisite(s)	ITE6104	Lab Unit(s)	0
Course Description			

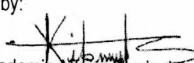
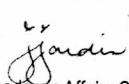
The course build the student understanding of, and basic competencies in, effective communication in the workforce. It introduces student to key concepts of business communication, methods and techniques for its efficacy and its impact on organizational success. Actual business applications and Scenarios are used to illustrate the fundamentals of effective Business Communication

Course Title	Data Structures and Algorithms	Credit Unit(s)	3
Course Code	ITE 6201	Lec Unit(s)	2
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	1
Course Description			

The course covers the standard data representation and algorithms to solve computing problems efficiently (with respect to space requirements and time complexity of algorithm). Specifically, the course covers discussions on stacks, queues, trees, graphs, maps, and sets. Thorough discussion of sorting and searching algorithms and hashing is also covered.

Course Title	The Contemporary World	Credit Unit(s)	3
Course Code	GE 6102	Lec Unit(s)	3
Pre/Co -requisite(s)		Lab Unit(s)	0
Course Description			

The course aims to introduce students to the state of the world today and the new global order. The phenomenon of globalization is examined from a variety of perspectives as well as its effects on traditional cultures and communities, nations and political institutions, and local, national and regional economies. Students will be asked to identify the challenges posed by globalization and consider responses to these challenges as demonstrated by experiences on the ground. For this purpose, students will produce case studies of communities (in the Philippines and other countries) experiencing the impact of globalization and their respective responses to issues that arise. There are global civil societies engaged in advocacies relating to climate and environmental protection, for example, human trafficking across borders, and the application of advances in science and technology to serve some of the world's poorest communities, and so on. There are, too, communities that have managed, in varying degrees of success, to deal with the effects, good and bad, of globalization. The course will focus on contemporary global conditions from a Filipino perspective primarily and also as a member of the global community. Through a combination of readings, class discussions, writing and group presentations, the students are expected to formulate an understanding of globalization that is theoretically informed and rooted in the experiences of communities and nations.

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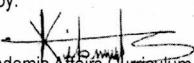
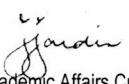
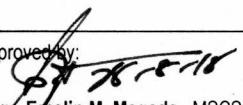
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Course Title	Mathematics in the Modern World	Credit Unit(s)	3
Course Code	GE 6114	Lec Unit(s)	3
Pre/Co -requisite(s)		Lab Unit(s)	0
Course Description			
<p>The course begins with an introduction to the nature of mathematics as an exploration of patterns (in nature and the environment) and as an application of inductive and deductive reasoning. By exploring these topics students are encouraged to go beyond the typical understanding of mathematics as merely a bunch of formulas, but as a source of aesthetics in patterns of nature, for example, and a rich language in itself (and of science) governed by logic and reasoning. The course then proceeds to survey ways in which mathematics provides a tool for understanding and dealing with various aspects of present day living, such as managing personal finances, making social choices, appreciating geometric designs, understanding codes used in data transmission and security, and dividing limited resources fairly. These aspects will provide opportunities for actually doing mathematics in a broad range of exercises that bring out the various dimensions of mathematics as a way of knowing and test the students' understanding and capacity.</p>			

Course Title	Purposive Communication 1	Credit Unit(s)	3
Course Code	GE 6106	Lec Unit(s)	3
Pre/Co -requisite(s)		Lab Unit(s)	0
Course Description			
<p>The five skills of communication (listening, speaking, reading, writing, viewing) are studied and simulated in advanced academic settings, such as conversing intelligently on a subject of import, reporting on group work and/or assignments, writing and delivering a formal speech, writing minutes of meetings and similar documents, preparing a research or technical paper, and making an audio-visual or web-based presentation. In the process, the criteria for effective communication are discussed and used as the basis of peer evaluation of communication exercises in the class as well as for judging communication techniques used by public officials, educators, industry leaders, churches, and private individuals. The purpose of these combined activities is to enable students to practice strategies of communication with a clear purpose and audience in mind, guided by the criteria of effective communication and appropriate language.</p>			

Course Title	Art Appreciation	Credit Unit(s)	3
Course Code	GE 6115	Lec Unit(s)	3
Pre/Co -requisite(s)		Lab Unit(s)	0
Course Description			
<p>The course aims to provide students the opportunity to observe, participate in, or otherwise experience works of art in order to appreciate their role and purpose in life. Students will be exposed to various works of art, ranging from the classical art forms to modern art installations, performance art, indie films, enhanced e-books, and multimedia aesthetics. These works of art will be examined from an aesthetic point of view and also as reflections or critiques of the societies that produced them. The course will thus build upon and hone the skill of understanding, critical appreciation, and expression of one's views.</p>			

Course Title	Science, Technology and Society	Credit Unit(s)	3
Course Code	GE 6116	Lec Unit(s)	3
Pre/Co -requisite(s)		Lab Unit(s)	0
Course Description			
<p>The course is designed to enable students to appreciate, in broad terms, the societal impact of developments in science and technology at the global and national level. This includes a review of the history of science and technology globally – from the prehistoric era all the way to today's advances in sciences and technology – and similarly in the Philippines, including science policy. The historical survey, which is grounded on an understanding of basic science concepts, will examine how these developments have affected the course of human society: politically, economically, and socially (including culturally). The second part of the course focuses on current issues arising from the application of science and technology, how such applications relate to ethical and political decisions in both the public and private sector, and their effects (positive and negative) on society and life in general. The course entails a variety of readings, group discussions, and research, culminating in a presentation of findings regarding a particular issue.</p>			

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Course Title	Life and Works of Rizal	Credit Unit(s)	3
Course Code	GE 6300	Lec Unit(s)	3
Pre/Co -requisite(s)		Lab Unit(s)	0

The course is a critical analysis of Dr. Jose Rizal's life and ideas. The course includes discussion on the moral, intellectual, and political legacies of Dr. Jose Rizal, including examination of his life, and analysis of his notable works. Students will be able to understand how the life and works of Dr. Jose Rizal can serve as a paradigm for the modern Filipino youth.

Course Title	Introduction to Multimedia	Credit Unit(s)	3
Course Code	IT 6209	Lec Unit(s)	2
Pre/Co -requisite(s)		Lab Unit(s)	1

This class introduces students to the capabilities of interactive multimedia and its uses in education, industry and entertainment. Students will review the roles of various types of software applications and experiment with authoring tools to create one or more small projects.

Course Title	Multimedia Systems	Credit Unit(s)	3
Course Code	IT 6314A	Lec Unit(s)	2
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	1

This course introduces the basic concepts of multimedia such as the principles of design, graphics and animation, video, and digital sound and music.

Course Title	Multimedia Communication Systems	Credit Unit(s)	3
Course Code	IT 6316A	Lec Unit(s)	3
Pre/Co -requisite(s)	IT 6314A	Lab Unit(s)	0

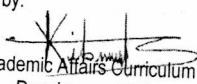
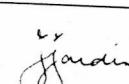
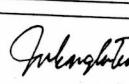
This course introduces the students to the general concept and definition of multimedia, video and audio compression techniques systems and standards, QoS architecture, multimedia support in shared Media LAN and MAN, Transport Network Architectures and Technologies for Multimedia Services, Multimedia OA&M and Services.

Course Title	Multimedia Sound and Video	Credit Unit(s)	3
Course Code	IT 6317A	Lec Unit(s)	2
Pre/Co -requisite(s)	IT 6316A	Lab Unit(s)	1

In this course, students will learn to create and prepare digital audio and video for use in multimedia applications and websites. The course examines basic aspects of audio-video production including: scripting and storyboarding; camera technology and shooting, lighting, editing; and compression for distribution on DVD and the web through technologies such as Quicktime, Flash, and Windows Media. Through the use of various software tools, students will become familiar with video and audio production and post-production processes, and create elements that are optimized for use in DVD and web-based multimedia applications

Course Title	Digital Imaging	Credit Unit(s)	3
Course Code	IT 6315A	Lec Unit(s)	2
Pre/Co -requisite(s)	IT 6314A	Lab Unit(s)	1

This course acts as an introduction to the concepts of Digital Imaging for TV, Film, Advertising, and the Web. Students learn to create, optimize and output various forms of imagery, and explore the potential of new media forms using the computer. The class focuses on the Internet as the main output medium, and each student creates his or her own Website.

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Course Title	Computing Fundamentals	Credit Unit(s)	3
Course Code	ITE 6101	Lec Unit(s)	2
Pre/Co -requisite(s)		Lab Unit(s)	1
Course Description			
The course provides an overview of the computing industry and computing profession, including research and applications in different fields; an appreciation of computing in different fields such as Biology, Sociology, Environment and Gaming; an understanding of ACM requirements; an appreciation of the history of computing; and knowledge of the key components of computer systems (organization and architecture), malware, computer security, internet and internet protocols, HTML 4/5 and CSS.			

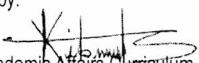
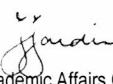
Course Title	Computer Programming 1	Credit Unit(s)	3
Course Code	ITE 6102	Lec Unit(s)	2
Pre/Co -requisite(s)	ITE 6101	Lab Unit(s)	1
Course Description			
The course covers the use of general purpose programming language to solve problems. The emphasis is to train students to design, implement, test, and debug programs intended to solve computing problems using fundamental programming constructs.			

Course Title	Computer Programming 2	Credit Unit(s)	3
Course Code	ITE 6104	Lec Unit(s)	2
Pre/Co -requisite(s)	ITE6102	Lab Unit(s)	1
Course Description			
The course is a continuation of Computer Programming 1. The emphasis is to train the students to design, implement, test, and debug programs intended to solve computing problems using basic data structures and standard libraries.			

Course Title	Social and Professional Issues	Credit Unit(s)	3
Course Code	ITE 6202	Lec Unit(s)	3
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	0
Course Description			
The course aims to provide an in-depth understanding and analysis of the importance of ethics as it applies to the use of Information Technology. Topics include professional ethics in computing, computer and internet crime, privacy, intellectual property and ethics of IT organizations.			

Course Title	Applications Development and Emerging Technologies	Credit Unit(s)	3
Course Code	ITE 6200	Lec Unit(s)	2
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	1
Course Description			
The course allows the development of applications using web, mobile, and emerging technologies with emphasis on requirements management, interface design, usability, testing, and deployment, including ethical and legal considerations.			

Course Title	Information Management	Credit Unit(s)	3
Course Code	ITE 6220	Lec Unit(s)	2
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	1
Course Description			
This course covers history and overview of information management, data information concepts database design, data modeling, database query languages, data organization architecture, special-purpose databases and implementation, including managing the database environment.			

Prepared by:   Academic Affairs Curriculum Development Unit	Reviewed by:   Academic Affairs Curriculum Development Unit	Approved by:   Engr. Emelin M. Magada , MSCS,(DBA).Ed.D. Vice President Head, Academic Affairs : Program and Curriculum Dep't AMA Education System
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Course Title	Data Communication and Networking 1	Credit Unit(s)	3
Course Code	IT 6201B	Lec Unit(s)	2
Pre/Co -requisite(s)	ITE 6101	Lab Unit(s)	1
Course Description			
The course covers the fundamentals of configuring and implementing Local Area Networks (LAN). Students will learn how to design, configure, troubleshoot, and implement LAN using routers for small to medium size business.			

Course Title	Data Communication and Networking 2	Credit Unit(s)	3
Course Code	IT6223B	Lec Unit(s)	2
Pre/Co -requisite(s)	IT6201B	Lab Unit(s)	1
Course Description			
The course introduces the fundamentals of configuring switches and deployment of Local Area Networks (LAN) environment and security. The course extends its coverage to configuration and implementation of Wide Area Networks (WAN). Students will learn how to design, configure, troubleshoot, and implement WAN using routers for medium to large size business organizations.			

Course Title	Mail and Web Services	Credit Unit(s)	3
Course Code	IT 6312	Lec Unit(s)	2
Pre/Co -requisite(s)		Lab Unit(s)	1
Course Description			
This course provides the students with the knowledge and skills necessary to install, configure, administer and manage mail and web services.			

Course Title	Linux Administration	Credit Unit(s)	3
Course Code	IT 6313	Lec Unit(s)	2
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	1
Course Description			
This course provides the students with the knowledge and skills necessary to install, configure, and administer using Linux Operating System. Topics include system installation and configuration, startup and shutdown, adding/deleting users, installing peripheral devices, backing up and restoring system and user data, application package installation, security, and task scheduling. Students will also learn how to administer and maintain file systems, accounts, printers and hardware devices with the Linux operating system.			

Course Title	Web Application Development 1	Credit Unit(s)	3
Course Code	IT 6314	Lec Unit(s)	2
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	1
Course Description			
This course covers the design, creation, and maintenance of websites. The laboratory component of this course provides students with hands-on exercises in the design, creation, and maintenance of websites.			

Course Title	Web Application Development 2	Credit Unit(s)	3
Course Code	IT 6315	Lec Unit(s)	2
Pre/Co -requisite(s)	IT 6314	Lab Unit(s)	1
Course Description			
This course covers the advanced techniques in the design, creation, and maintenance of websites. This also includes teaching the students in using various content management systems. The laboratory component of this course provides students with hands-on exercises in the design, creation, and maintenance of websites. This also includes teaching the students in using various content management systems.			

Prepared by:   Academic Affairs Curriculum Development Unit	Reviewed by:   Academic Affairs Curriculum Development Unit	Approved by:   Engr. Emelin M. Magada , MSCS,(DBA).Ed.D. Vice President Head, Academic Affairs : Program and Curriculum Dep't AMA Education System
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Course Title	XML - Based Web Applications	Credit Unit(s)	3
Course Code	IT 6316	Lec Unit(s)	2
Pre/Co -requisite(s)	IT 6315	Lab Unit(s)	1
Course Description			
This course provides students with the skills to build a Web application of moderate complexity. It covers the fundamental structure of an XML document; XML Technologies; generation of XML Data from a Database; displaying an XML Document Using XSLT; embedding XML Data in HTML; manipulating XML Data on the Client Using the DOM; posting XML Data from Client to Server; validating XML Using Schemas; and SOAP and XML Web Services.			

Course Title	Applications Development and Emerging Technologies	Credit Unit(s)	3
Course Code	ITE 6200	Lec Unit(s)	2
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	1
Course Description			
The course allows the development of applications using web, mobile, and emerging technologies with emphasis on requirements management, interface design, usability, testing, and deployment, including ethical and legal considerations.			

Course Title	Object-Oriented Programming	Credit Unit(s)	3
Course Code	CS 6203	Lec Unit(s)	2
Pre/Co -requisite(s)	ITE 6104	Lab Unit(s)	1
Course Description			
This course provides in-depth coverage of object-oriented programming principles and techniques using Java. Topics include , Introduction to OOAD for Java Developers, Fundamental Programming Structures in Java, Classes and Objects in Java, Object Design and Programming with Java, classes, overloading, data abstraction, information hiding, encapsulation, inheritance, and polymorphism. Java Interfaces, Java Exception Handling, Java Collections API, Java Input/Output API (Optional), Java Programming Best Practices.			

Course Title	Physical Fitness	Credit Unit(s)	2
Course Code	PHYED6101	Lec Unit(s)	2
Pre/Co -requisite(s)		Lab Unit(s)	0
Course Description			
The course is about Physical Fitness and Gymnastics dealing with health related and skill related concerns of individuals. The health related components involved in the course are flexibility, cardio-vascular, endurance, body composition muscular endurance and strength. On the other hand, skill related physical fitness components include agility, balance, coordination, speed, power, and reaction time.			

Course Title	Rhythmic Activities	Credit Unit(s)	2
Course Code	PHYED6102	Lec Unit(s)	2
Pre/Co -requisite(s)	PHYED6101	Lab Unit(s)	0
Course Description			
The course is designed for basic physical movement used in learning and executing, simple natural dances, basic dance steps and correct interpretation performance.			

Course Title	National Service Training Program 1 (NSTP1)	Credit Unit(s)	(3)
Course Code	NSTP6101	Lec Unit(s)	(3)
Pre/Co -requisite(s)	None	Lab Unit(s)	0
Course Description			
This introductory course exposes students to social awareness and interaction. It deals with NSTP law and its implementation, the youth's law in nation building, and the leadership and community service. The students will also be exposed to different government agencies involved in social development.			

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Course Title	National Service Training Program 2 (NSTP2)	Credit Unit(s)	(3)
Course Code	NSTP6102	Lec Unit(s)	(3)
Pre/Co -requisite(s)	NSTP6101	Lab Unit(s)	0
Course Description			
The course is designed to develop and encourage students to engage themselves in community work and to render service as a fulfillment of their responsibility as a youth.			

Course Title	Euthenics 1	Credit Unit(s)	(1)
Course Code	ETHNS6101	Lec Unit(s)	(1)
Pre/Co -requisite(s)		Lab Unit(s)	0
Course Description			
The course is specifically designed to help freshmen adjust to challenges as well as problems in going to college life. It facilitates the students' adjustment as well as their preparation for further academic training.			

Course Title	Euthenics 2	Credit Unit(s)	(1)
Course Code	ETHNS6102	Lec Unit(s)	(1)
Pre/Co -requisite(s)	ETHNS6101	Lab Unit(s)	0
The course surveys Philippine culture in general and focuses on the Filipino value system. Topics include interpersonal relations, identity, behavior and personality.			

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CHED COURSE TITLE	CREDIT UNITS	SUBJ AREA	CAT. NO.	ACLC COURSE TITLE	CREDIT UNITS
<b>A. GENERAL EDUCATION</b>	<b>15</b>				<b>21</b>
Purposive Communication	3	GE	6100	Understanding the Self	3
Mathematics in the Modern World	3	GE	6102	The Contemporary World	3
Art Appreciation	3	GE	6101	Purposive Communication	3
Science Technology and Society	3	GE	6114	Mathematics in the Modern World	3
Life & Works of Rizal	3	GE	6115	Art Appreciation	3
		GE	6116	Science Technology and Society	3
		GE	6301	Life & Works of Jose Rizal	3
<b>B. ITE COMMON CORE COURSES</b>	<b>15</b>				<b>15</b>
Introduction to Computing	3	ITE	6101	Computing Fundamentals	3
Computer Programming 1	3	ITE	6102	Computer Programming 1	3
Computer Programming 2	3	ITE	6104	Computer Programming 2	3
Data Structures and Algorithms	3	ITE	6201	Data Structures and Algorithms	3
Information Management	3	ITE	6220	Information Management	3
<b>C. ELECTIVE COURSES</b>	<b>18</b>				<b>18</b>
			Major 1		
			Major 2		
			Major 3		
			Major 4		
			Major 5		
			Major 6		
<b>D. PROFESSIONAL ISSUES IN COMPUTATING</b>	<b>3</b>				<b>3</b>
Social and Professional Issues	3	ITE	6202	Social and Professional Issues	3
<b>D. INTERNSHIP</b>	<b>6</b>				<b>6</b>
IT Practicum	6	IT	6397A	IT Practicum (486 Hours)	6
<b>F. MISCELLANY COURSES</b>	<b>14</b>				<b>(16)</b>
Physical Education	8	PHYED	6101	Physical Fitness	(2)
		PHYED	6102	Rhythmic Activities	(2)
		PHYED	6103	Individual/Dual Sports	(2)
		PHYED	6200	Team Sports	(2)
National Service Training Program	6	NSTP	6101	National Services Training Program 1	(3)
		NSTP	6102	National Services Training Program 2	(3)
		ETHNS	6101	Euthenics 1	(1)
		ETHNS	6102	Euthenics 2	(1)
<b>TOTAL ACADEMIC UNITS:</b>	<b>71</b>				<b>79</b>

Prepared by:

Academic Affairs Curriculum  
Development Unit

Reviewed by:

Academic Affairs Curriculum Development Unit

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