



# MALAYAN COLLEGES LAGUNA

## COMPUTER SCIENCE

(Curriculum applicable to students who entered as freshmen beginning school year 2011-2012)

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
1	1	CS100	INTRODUCTION TO COMPUTER SYSTEMS OVERVIEW OF THE NATIONAL SERVICE	4.5	-	3.0				CIT
1	1	CWTS011	TRAINING PROGRAM	3.0	-	(2.0)				CNSTP
1	1	ENG021	ENGLISH FOR ACADEMIC STUDIES 1	4.5	-	3.0				DBS
1	1	IT010	I.T. FUNDAMENTALS	3.0	-	2.0				CIT
1	1	IT010L	I.T. FUNDAMENTALS (LAB)	-	3.0	1.0				CIT
1	1	IT100	ALGORITHMS AND PROBLEM SOLVING	4.5	-	3.0				CIT
1	1	MATH011	ALGEBRA	4.5	-	3.0				DBS
1	1	PE021	PHYSICAL EDUCATION 1: PHYSICAL FITNESS AND GYMNASTICS	-	2.5	(1.5)				DBS
1	1	VE011	VALUES EDUCATION 1	1.5	-	(1.0)				DBS
<b>Total</b>				<b>25.5</b>	<b>5.5</b>	<b>15.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
1	2	CWTS012	CIVIC WELFARE TRAINING COURSE - 1	3.0	-	(2.0)	CWTS011			CNSTP
1	2	ENG022	ENGLISH FOR ACADEMIC STUDIES 2	4.5	-	3.0	ENG021			DBS
1	2	FIL001	KOMUNIKASYON SA AKADEMIKONG FILIPINO	4.5	-	3.0				DBS
1	2	HUM012	PHILOSOPHY OF THE HUMAN PERSON	4.5	-	3.0				DBS
1	2	IT110P	COMPUTER PROGRAMMING CONCEPTS (PAIRED)	3.0	4.5	3.0	IT100			CIT
1	2	MATH012	PLANE AND SPHERICAL TRIGONOMETRY	4.5	-	3.0	MATH011			DBS
1	2	PE022	PHYSICAL EDUCATION 2: DANCE AND MARTIAL ARTS	-	2.5	(1.5)				DBS
<b>Total</b>				<b>24.0</b>	<b>7.0</b>	<b>15.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
1	3	CWTS013	CIVIC WELFARE TRAINING COURSE - 2	3.0	-	(2.0)	CWTS012			CNSTP
1	3	ENG023	ENGLISH FOR ACADEMIC STUDIES 3	4.5	-	3.0	ENG022			DBS
1	3	FIL002	PAGBASA AT PAGSULAT TUNGO SA PANANALIKSIK	4.5	-	3.0	FIL001			DBS
1	3	IT111P	OOP 1 - CONCEPTS IN OBJECT ORIENTED PROGRAMMING (PAIRED)	3.0	4.5	3.0	IT110P			CIT
1	3	MATH013	ANALYTIC GEOMETRY	4.5	-	3.0	MATH011, , MATH012			DBS
1	3	MATH140	DISCRETE MATHEMATICS	4.5	-	3.0	MATH011			DBS
1	3	PE023	PHYSICAL EDUCATION 3: INDIVIDUAL/DUAL SPORTS	-	2.5	(1.5)				DBS
<b>Total</b>				<b>24.0</b>	<b>7.0</b>	<b>15.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
2	1	CS102P	DATA STRUCTURES AND FILE ORGANIZATION (PAIRED)	3.0	4.5	3.0	IT110P			CIT
2	1	HUM011	LOGIC REASONING WITH CRITICAL THINKING	4.5	-	3.0				DBS
2	1	IT112P	OOP 2 - PROGRAMMING USING WINDOWS FORMS (PAIRED)	3.0	4.5	3.0	IT111P			CIT
2	1	MATH014	SOLID MENSURATION	3.0	-	2.0	MATH012			DBS
2	1	PE024	PHYSICAL EDUCATION 4: ADVANCED INDIVIDUAL/DUAL SPORTS	-	2.5	(1.5)	PE023			DBS
2	1	SS013	ECONOMICS, TAXATION AND AGRARIAN REFORM	4.5	-	3.0				DBS
<b>Total</b>				<b>18.0</b>	<b>11.5</b>	<b>14.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
2	2	BIO011	GENERAL BIOLOGY	4.5	-	3.0				DBS
2	2	CS103	SYSTEMS ANALYSIS AND DESIGN 1	4.5	-	3.0	CS102P			CIT
2	2	IT113P	OOP 3 - PROGRAMMING USING ACTIVE DATA OBJECTS (PAIRED).	3.0	4.5	3.0	IT112P			CIT
2	2	MATH021	CALCULUS 1	4.5	-	3.0	MATH013			DBS
2	2	PE025	PHYSICAL EDUCATION 5: TEAM SPORTS JOSE RIZAL AND THE DEVELOPMENT OF	-	2.5	(1.5)				DBS
2	2	SS014	FILIPINO NATIONALISM	4.5	-	3.0				DBS
2	2	VE012	VALUES EDUCATION 2	1.5	-	(1.0)	VE011			DBS
<b>Total</b>				<b>22.5</b>	<b>7.0</b>	<b>15.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
2	3	CHM015	GENERAL CHEMISTRY	4.5	-	3.0				DBS
2	3	CHM015L	GENERAL CHEMISTRY (LAB)	-	3.0	1.0		CHM015		DBS
2	3	CS104P	SYSTEMS ANALYSIS AND DESIGN 2 (PAIRED) INTRODUCTION TO RELATIONAL DATA BASE	3.0	4.5	3.0	CS103			CIT
2	3	CS105P	MANAGEMENT (PAIRED)	3.0	4.5	3.0	IT112P			CIT
2	3	CS120	STRUCTURE OF PROGRAMMING LANGUAGES	4.5	-	3.0	CS102P			CIT
2	3	IT114P	OOP 4 - PROGRAMMING USING WEB (PAIRED).	3.0	4.5	3.0	IT112P			CIT
2	3	PE026	PHYSICAL EDUCATION 6: ADVANCED TEAM SPORTS	-	2.5	(1.5)	PE025			DBS
<b>Total</b>				<b>18.0</b>	<b>19.0</b>	<b>16.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
2	4	SS015	POLITICS, GOVERNANCE AND THE 1987 PHILIPPINE CONSTITUTION	4.5	-	3.0				DBS
2	4	SS017	SOCIETY,CULTURE AND FAMILY LIFE	4.5	-	3.0				DBS
<b>Total</b>				<b>9.0</b>	<b>0.0</b>	<b>6.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
3	1	CPE101-1P	DIGITAL DESIGN (PAIRED)	3.0	4.5	3.0				MITL
3	1	CS121	DESIGN AND ANALYSIS OF ALGORITHMS	4.5	-	3.0	CS102P			CIT
3	1	IT117P	JAVA PROGRAMMING (PAIRED)	3.0	4.5	3.0	IT112P			CIT
3	1	MATH022	CALCULUS 2	4.5	-	3.0	MATH021			DBS
3	1	PHY015	GENERAL PHYSICS	4.5	-	3.0	MATH011			DBS
3	1	PHY015L	GENERAL PHYSICS (LAB)	-	3.0	1.0	MATH011	PHY015		DBS
<b>Total</b>				<b>19.5</b>	<b>12.0</b>	<b>16.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
3	2	CPE131-1P	COMPUTER SYSTEMS ORGANIZATION AND ARCHITECTURE WITH ASSEMBLY LANGUAGE PROGRAMMING (PAIRED)	3.0	4.5	3.0				MITL
3	2	IT130	DATA COMMUNICATIONS AND INTRODUCTION TO NETWORKING TECHNOLOGIES	4.5	-	3.0				CIT
3	2	MATH110	PROBABILITY AND STATISTICS	4.5	-	3.0	MATH011			DBS
3	2	SS018	CIVILIZATION AND DEVELOPMENT IN ASIA	4.5	-	3.0				DBS
3	2	VE013	VALUES EDUCATION 3	1.5	-	(1.0)	VE012			DBS
<b>Total</b>				<b>18.0</b>	<b>4.5</b>	<b>12.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
3	3	CS151	OPERATING SYSTEMS	4.5	-	3.0				CIT
3	3	HUM013	LITERATURE AND CREATIVE ARTS	4.5	-	3.0				DBS
3	3	IT127	INFORMATION MANAGEMENT	4.5	-	3.0				CIT
3	3	RES110P	METHODS OF RESEARCH (PAIRED)	3.0	4.5	3.0	MATH110			CIT
<b>Total</b>				<b>16.5</b>	<b>4.5</b>	<b>12.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
4	1	CS122	AUTOMATA AND LANGUAGE THEORY	4.5	-	3.0	MATH140			CIT
4	1	CS150P	SOFTWARE ENGINEERING (PAIRED)	3.0	4.5	3.0	CS104P			CIT
4	1	CS200P-1	THESIS 1 (PAIRED)	1.5	4.5	2.0	RES110P			CIT
4	1	ENG041L	ENGLISH FOR THE WORKPLACE 1	-	3.0	1.0	ENG023			DBS
<b>Total</b>				<b>9.0</b>	<b>12.0</b>	<b>9.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
4	2	CS180F	C.S. FIELD TRIPS (FLD)	-	4.5	1.0	CANDIDATE FOR			CIT
4	2	CS200P-2	THESIS 2 (PAIRED)	1.5	4.5	2.0	CS200P-1			CIT
4	2	ENG042L	ENGLISH FOR THE WORKPLACE 2	-	3.0	1.0	ENG041L 4th Year			DBS
4	2	IT181	ETHICS AND I.T. LAWS	4.5	-	3.0	Standing			CIT
4	2	VE014	VALUES EDUCATION 4	1.5	-	(1.0)	VE013			DBS
<b>Total</b>				<b>7.5</b>	<b>12.0</b>	<b>7.0</b>				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
4	3	CS123	MODELLING AND SIMULATION	4.5	-	3.0	MATH022 FOR			CIT
4	3	CS198L	COMPREHENSIVE EXAMINATION MODULE (LAB)	-	4.5	(1.0)	CANDIDATE			CIT
4	3	CS200P-3	THESIS 3 (PAIRED)	1.5	4.5	2.0	CS200P-2			CIT
4	3	ENG043L	ENGLISH FOR THE WORKPLACE 3	-	3.0	1.0	ENG042L			DBS
<b>Total</b>				<b>6.0</b>	<b>12.0</b>	<b>6.0</b>				

**Required Units of Specialization : 12.00**

## TRACK FOR GAME DEVELOPMENT

Specialization Code: GAME DEV

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
3	3	CS141P	GD 1 - GAME THEORIES AND METHODOLOGIES (PAIRED)	3.0	4.5	3.0	CS102P			CIT
			<b>Total</b>	<b>3.0</b>	<b>4.5</b>	<b>3.0</b>				
4	1	CS142P	GD 2 - GAME PROGRAMMING 1 (PAIRED)	3.0	4.5	3.0	CS141P			CIT
			<b>Total</b>	<b>3.0</b>	<b>4.5</b>	<b>3.0</b>				
4	2	CS143P	GD 3 - GAME PROGRAMMING 2 (PAIRED)	3.0	4.5	3.0	CS142P			CIT
			<b>Total</b>	<b>3.0</b>	<b>4.5</b>	<b>3.0</b>				
4	3	CS144P	GD 4 - GAME DEVELOPMENT PROJECT (PAIRED)	3.0	4.5	3.0	CS143P			CIT
			<b>Total</b>	<b>3.0</b>	<b>4.5</b>	<b>3.0</b>				

## TRACK FOR NETWORK ADMINISTRATION

Specialization Code: CCNA

Year	Term Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
3	1	IT131P CCNA 1 - NETWORKING BASICS	3.0	4.5	3.0				CIT
<b>Total</b>			<b>3.0</b>	<b>4.5</b>	<b>3.0</b>				
3	2	IT132P CCNA 2 - ROUTERS AND ROUTING BASICS	3.0	4.5	3.0	IT131P			CIT
<b>Total</b>			<b>3.0</b>	<b>4.5</b>	<b>3.0</b>				
3	3	IT133P CCNA 3 - SWITCHING BASICS AND INTERMEDIATE ROUTING	3.0	4.5	3.0	IT132P			CIT
<b>Total</b>			<b>3.0</b>	<b>4.5</b>	<b>3.0</b>				
4	1	IT134P CCNA 4 - WAN TECHNOLOGIES	3.0	4.5	3.0	IT133P			CIT
<b>Total</b>			<b>3.0</b>	<b>4.5</b>	<b>3.0</b>				

## ELECTIVES FOR BATCH 2011

Elective Type: CIT FREE ELECTIVES 2011 (9)

Required Units: 9.00

Year	Term Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
3	2	IT116P	3.0	4.5	3.0	IT117P			CIT
		<b>Total</b>	<b>3.0</b>	<b>4.5</b>	<b>3.0</b>				
4	1	LANG111-1	4.5	-	3.0				DBS
		<b>Total</b>	<b>4.5</b>	<b>0.0</b>	<b>3.0</b>				
4	2	MGT110	4.5	-	3.0				ETYCBL
		<b>Total</b>	<b>4.5</b>	<b>0.0</b>	<b>3.0</b>				

**Total Academic Units : 179.00**