# University of the Philippines Cebu MASTER OF SCIENCE IN COMPUTER SCIENCE (Study Plan, Part-time, Thesis Option)

Name:			Student No.:			-	
Final Grade	Compl. Grade	Course No.	Course Title	Units	Hrs	Prerequisite	Sem/Yr Taken
			FIRST YEAR				
		<u>First Seme</u>	ester				
		CS 200+	Systems Course	3	3		
		CS 200+	Theory Course	3	3		
			-	6	6		
		<u>Second S</u>	emester				
		CS 200+	Theory or Systems Course	3	3		
		CS/GE/IE 200+	Specialization Course	3	3		
				6	6		
			SECOND YEAR				
		<u>First Seme</u>	<u>ester</u>				
		CS/GE/IE 200+	Specialization Course	3	3		
		CS/GE/IE 200+	Specialization Course	3	3		
<u> </u>		03 290	Seminar	I			
				7	6		
		<u>Second S</u>	emester				
		CS 298	Special Problem	3	3		
		CS/Math/MBB/S	tat Elective	3	3		
				6	6	_	
				0	0		
		5. 40	THIRD YEAR				
		<u>First Seme</u>	<u>ester</u>				
		CS 300	Thesis	6	6		
		(for extension)	or Specialization/Elective Courses	6	6		
				6	6		
		<u>Second S</u>	emester_				
		(for oxtansion)	Spacialization/Elective Course	2	2		
		(for extension)	Specialization/Elective Course	3	3		<u> </u>
		or CS 300	Thesis	6	6		
				6	6		

### List of Core Courses

#### Theory

Theory of Computation Advanced Algorithms and Data Structures
Survey of Programming Languages Advanced Operating Systems Advanced Computer Networks Advanced Software Engineering

'y CS 280 Intelligent Systems

#### List of Specialization Courses

#### Theory

CS 204	Theory of Computation
05 206	Complexity meory
CS 210	Advanced Algorithms and Data Structures
CS 211	Combinatorial Optimization
CS 213	Communication Theory
CS 214	Parallel Algorithms
CS 216	Randomized Algorithms
CS 222	Programming Language Theory
CS 225	Compiler Design and Construction
CS 231	Numerical Computing
CS 236	Scientific Computing
CS 247	Cryptography
CS 271	Database Theory
CS 294	Advanced Topics in Computational Science
CS 290	Advanced Topics in Theoretical Computer Science
CS 297	Special Topics
CS 298	Special Problems
ES 201	Advanced Mathematical Methods in Eng'g. I
ES 202	Advanced Mathematical Methods in Eng'g. II

# Systems

		IE 242	Operations Research II
CS 220	Survey of Programming Languages	Math 258	Combinatorial Mathematics
CS 237	Biomedical Informatics	Math 280	Linear Programming
CS 239	Parallel Computing	Math 281	Nonlinear Programming
CS 240	Computer Graphics	Math 282	Integer Programming and Com
CS 242	Scientific Visualization	Math 286	Graph Theory and Networks
CS 250	Advanced Operating Systems	MBB 390	Bio informatics
CS 253	Computer Security	Stat 231	Probability Theory
CS 255	Advanced Computer Networks	Stat 274	Information Theory
CS 256	Computer Systems Performance Analysis	Stat 276	Statistics for Geographic Inforn
CS 257	Distributed Systems	Stat 277	Statistics for Image Analysis
CS 258	Mobile Computing	TM 202	Technological Innovations
CS 259	Network Performance, Modeling and Monitoring	TM 255	Technology and Intellectual Pro

CS 260	Advanced Software Engineering
CS 262	Methods of Software Development
CS 265	Software Quality Assurance
CS 266	IT Project Management
CS 267	Software Engineering for the Web
CS 268	Web Science
CS 270	Advanced Database Systems
CS 280	Intelligent Systems
CS 281	Robotic Systems
CS 282	Computer Vision
CS 283	Data Mining
CS 284	Machine Learning
CS 286	Natural Language Understanding
CS 289	Digital Image Processing
CS 291	Advanced Topics in Net-Centric Computing
CS 292	Advanced Topics in Software Technology
CS 293	Advanced Topics in Computer Systems
CS 295	Advanced Topics in Intelligent Systems
CS 297	Special Topics
CS 298	Special Problems
EE 227	Modern VLSI Design
EE 264	Computer Architecture
EE 267	Real-Time Systems
EE 270	Digital Communication I
EE 274	Digital Signal Processing I
GE 203	Principles of Geographic Information Systems
GE 213	Advanced Geographic Information Systems
IE 253	Information Systems I
IE 254	Information Systems II

## List of Other Suggested Electives

IE 241 IE 242	Operations Research I
Math 258	Combinatorial Mathematics
Math 280	Linear Programming
Math 281	Nonlinear Programming
Math 282	Integer Programming and Combinatorial Optimization
Math 286	Graph Theory and Networks
MBB 390	Bio informatics
Stat 231	Probability Theory
Stat 274	Information Theory
Stat 276	Statistics for Geographic Information Systems
Stat 277	Statistics for Image Analysis
TM 202	Technological Innovations
TM 255	Technology and Intellectual Property Rights