



TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES

2018 CURRICULUM FOR BACHELOR OF SCIENCE IN COMPUTER SCIENCE (BSCS)

IMPORTANT: REGISTRATION IN ANY COURSE WITHOUT ALL THE PREREQUISITES, CORRECT SEQUENCE AND AUTHORIZED LOAD SHALL NOT BE GIVEN ANY CREDIT REGARDLESS OF THE GRADE OBTAINED. EVALUATION IS TENTATIVE AND MAY BE REVISED FOR SOME VALID CAUSES OR REASONS OR IF OMISSIONS AND/OR LACK OF UNITS CREDITED BE DISCOVERED LATER.

Student's Name and Signature **COURSE CODE DESCRIPTIVE TITLE** PREREQUISITE(S) FIRST YEAR, FIRST SEMESTER (20 UNITS **GEC** 004 Mathematics in the Modern World 3 3 001 **GEC** Understanding the Self 3 0 3 MATH 022A Linear Algebra with MATLAB 2 3 3 027A MATH Number Theory 3 0 3 001 CITE Introduction to Computing 2 3 3 CITE 002 Computer Programming 1 2 3 3 2 PΕ 001 Physical Activities Toward Health and Fitness 1 (PATHFit 1) 2 0 001 **NSTP** National Service Training Program 1 (3)0 (3)FIRST YEAR, SECOND SEMESTER (21 UNITS) 005 **GEC** Purposive Communication GEC 1003 The Contemporary World 3 0 3 **GEC** 006 Art Appreciation 3 0 3 MATH 031 3 3 MATH 027A Symbolic Logic 0 MATH l018A 4 0 4 MATH 022A Calculus 1 CITE 1003 Computer Programming 2 2 3 3 CITE 002 2 2 PE 001 PΕ 002 Physical Activities Toward Health and Fitness 2 (PATHFit 2) 0 NSTP 001 **NSTP** 002 National Service Training Program 2 (3) 0 (3) **SECOND YEAR, FIRST SEMESTER (24 UNITS)** 1008 **GEC Ethics** 3 **GEC** 1002 Readings in Philippine Histroy 3 0 3 019A MATH Calculus 2 0 MATH 018A 4 4 CCS 201 Object-Oriented Programming 2 3 3 CITE 003 Mobile Computing CIT 306 2 3 3 CITE 003 CCS 202 Principles of Programming Languages 3 0 3 CITE 001, CITE 002 CCS 203 Computer Architecture and Organization 2 3 3 CITE 001 2 PE 002 PΕ 1003 Physical Activities Toward Health and Fitness 3 (PATHFit 3) 0 SECOND YEAR, SECOND SEMESTER (24 UNITS) GEC l007 Science, Technology and Society 3 0 3 MATH 029 Introduction to Numerical Analysis 3 0 3 MATH 018A 001C **PHYS** Calculus-Based Physics 1 3 3 MATH 019A 4 MATH l025B Discrete Mathematics 3 0 3 **MATH 031** CCS 204 Operating Systems 3 0 3 CCS 203 CITE 004 2 3 CITE 003 Data Structures and Algorithm 3 CITE 005A 2 3 3 CITE 003 Information Management PΕ l004 Physical Activities Toward Health and Fitness 4 (PATHFit 4) 2 0 2 PE 003 THIRD YEAR, FIRST SEMESTER (24 UNITS) **GEE** l001В GE Elective 1 - Gender and Society 0 3 001 3 GEM Life and Works of Rizal 0 3 MATH l032 Probability and Statistics 2 3 3 MATH 027A **1**301 3 CCS 204 CCS Networks and Communications 2 3 CITE 006 2 3 3 CITE 005A Application Development and Emerging Technologies 303 2 3 MATH 029 CCS Intelligent Agents 3 CCS 304 Automata Theory and Formal Languages 3 MATH 025B, CITE 004 3 0 CCS 305 2 3 3 CITE 005A Software Engineering 1

CO	COURSE CODE		DESCRIPTIVE TITLE		Sing 3	oute gorioti	PREREQUISITE(S)			
	GEE	002B	GE Elective 2 - Living in the IT Era	3	0	3	GEE 001B			
	CHM	001	Chemistry for Engineers	3	3	4				
	CITE	800	Social Issues and Professional Practice	3	0	3	3rd year standing			
	CITE	007	Information Assurance and Security	3	0	3	CITE 005A			
	CCS	306	Modeling and Simulation	2	3	3	MATH 032, MATH 029			
	CCS	307	Algorithm and Complexity	3	0	3	MATH 029, CCS 304			
		012A	Human Computer Interaction	2	3	3	3rd year standing			
	CSELEC		CCS Elective 1	2	3	3				
NO STUDENT SHALL BE ALLOWED TO TAKE FOURTH YEAR PROFESSIONAL COURSES UNLESS HE HAS COMPLETED THE BASIC AND THE THIRD YEAR COURSES INCLUDING PE AND NSTP.										
			THIRD YEAR,							
	CCS	308	Software Engineering 2	2	3	3	CCS 305, CCS 306			
	CCS	309	Parallel and Distributed Computing	2	3	3	CCS 301			
	CSELEC	002	CCS Elective 2	2	3		CSELEC 001			
			FOURTH YEAR, FIRS							
	GEE	004	GE Elective 3 - Great Books	3	0	_	GEE 002B			
	CITE	009	Technopreneurship	3	0	3	3rd year standing			
	CCS	401	Thesis 1	2	3	3	CCS 308, CITE 009(C)			
	CSFELEC		Free Elective	3	0	3				
	CSELEC	003	CCS Elective 3	2	3		CSELEC 002			
			FOURTH YEAR, SECO	OND SEME	STER	(6 UNI	,			
		402	Internship in Computing	0	9	3	CCS 308			
	CCS	403	Thesis 2	0	9	3	CCS 401			
CS ELECTIVE COURSES: (9 UNITS) NOTE: A study may choose any of the track electives below and once a track elective is chosen, all courses in the track must be taken. TRACK ELECTIVE 1: Intelligent Systems										
		310	Expert Systems	2	3	3	CCS 303			
		312	Machine Learning	2	3	3	CCS 310			
		311	Natural Language Processing	2	3	3	CCS 312			
	TRACK ELECTIVE 2: Game Development									
		313	Multimedia Technology	2	3	3	CIT 306			
		314	Level Design and Scripting	2	3	3	CCS 313			
		315	Multiplayer and Online Programming	2	3	3	CCS 314			
	FREE ELECTIVES: (3 UNITS)						T			
	CIT	503	Current trends and Issues in Computing	3	0	3	CIT 306			
		501	Business Analytic using SAP BW	2	3	3				
	CISELEC		Deployment, Maintenance and Services	3	0	3	CCS 301			
	CISELEC		Big Data Analytics	2	3	3	CITE 005A			
	CISELEC		Introduction to Project Management	3	0	3	CCS 308			
	FLE	313	Mandarin	2	3	3				
	FLE	213	Spanish	2	3	3				

| 2 | 3 | 3 | TOTAL NO. OF UNITS 168

CREDENTIALS SUBMITTED:	DEFICIENCY/IES	Evaluated by:		
		Date:		
() F138 () PSA Birth Certificate				
() GMC () Transfer Credential		Received by:		
() F137A () TOR		Date:		