



CURRICULUM OUTLINE
DOCTOR OF PHILOSOPHY IN MATHEMATICS

Regular Ph.D. Math Program

CORE COURSES	12 UNITS	Unit	PRE-REQUISITE	SEMESTER, ACADEMIC YEAR	RATING
Math 612: Real Analysis II		3			
Math 622: Abstract Algebra II		3			
Math 661: Topology		3			
Math 655: Projective Geometry/ Math 652: Algebraic Geometry/ Math 653: Differential Geometry/ Math 650: Modern Geometry		3			
ELECTIVES 18 UNITS					
Math 613: Numerical Analysis I		3			
Math 614: Numerical Analysis II		3			
Math 615: Approximation Theory		3			
Math 617: Complex Analysis II		3			
Math 618: Measure Theory		3			
Math 619: Asymptotic Analysis		3			
Math 624: Linear Algebra II		3			
Math 625: Matrix Theory		3			
Math 626: Linear and Non-Linear Programming		3			
Math 627: Theory of Groups					
Math 628: Theory of Rings		3			
Math 629: Galois Theory		3			
Math 630: Statistical Methods		3			
Math 631: Mathematical Statistics I		3			
Math 632: Mathematical Statistics II		3			
Math 633: Stochastic Processes		3			
Math 634: Probability Theory		3			
Math 635: Multivariate Analysis		3			
Math 636: Regression Analysis		3			
Math 637: Mathematical Modelling		3			
Math 642: Numerical Linear Algebra		3			
Math 643: Numerical Optimization		3			
Math 644: Mathematical Finance		3			
Math 650: Modern Geometry		3			
Math 652: Algebraic Geometry		3			
Math 653: Differential Geometry		3			
Math 655: Projective Geometry		3			
Math 656: Geometric Crystallography		3			
Math 657: Theory Ordinary Differential Equations		3			
Math 658: Theory Partial Differential		3			





College of Computing, Artificial Intelligence and Sciences

Telephone No.: (+63) (0939-087-0765)
Email: cnuccais@cnu.edu.ph
Website: www.cnu.edu.ph

Equations				
Math 659: Ergodic Theory and Dynamical Systems	3			
Math 663: Algebraic Topology				
Math 670: Combinatorial	3			
Mathematics 1	3			
Math 671: Combinatorial	3			
Mathematics 2	3			
Math 672: Graph Theory	3			
Math 673: Number Theory	3			
Math 674: Algebraic Number Theory	3			
Math 675: Coding Theory				
Math 676: Cryptography				
Math 681: Functional Analysis I	3			
Math 682: Functional Analysis II	3			
Math 691: Seminar in Algebra	3			
Math 692: Seminar in Analysis	3			
Math 693: Seminar in Applied	3			
Mathematics				
Math 694: Seminar in Graph Theory	3			
Math 695: Seminar in Combinatorial	3			
Mathematics				
Math 696: Seminar in Topology	3			
Math 697: Seminar in Probability Theory	3			
and Mathematical	3			
Statistics	3			
Math 698: Seminar on Selected Topics				
Math 699: Independent Study				
COMPREHENSIVE EXAMINATION upon completion of all Examination academic requirements				Date of
MATH 700: PHD DISSERTATION				
DD1: PhD Dissertation 1	6			
DD2: PhD Dissertation 2	6			
SUMMARY:				
Core Courses - 12 units				
Math Electives - 18 units				
Dissertation - 12 units				
TOTAL 42 units				

