

Ph.D. Students without a prior Master's Degree

Number of Credit Hours	TYPE	MET
12	Graduate core courses – must have 2 theory & 2 systems THEORY: COP5536, COT5405, COT6315 SYSTEMS: CDA5155, CNT5106c, COP5555, COP5615	
+ 24	CISE graduate-level courses, excluding CIS 6905, 6910, 6940, 7979, 7980; CIS 6971 may account for 6 credits for thesis-option CISE masters	
+ 51	Other graduate-level courses (including research courses and courses outside CISE)	
+ 3	CIS 7980 Research for Doctoral Dissertation (minimum requirement)	
= 90	Total (minimum)	