



Department of Computer Science

Admission - Master of Science in Computer Science

In addition to the University-wide requirements for admission to graduate study, the prospective Master of Science (M.S.) or Doctor of Philosophy (Ph.D.) candidate must submit verbal, quantitative and analytical GRE scores (general test) as well as satisfy the following criteria for admission to graduate study:

1. Knowledge of computer science equivalent to CS 152L, 251L, 261, 341L, 351L, 357L, 361L, 362, **460 and **481.
2. Knowledge of mathematics essential to computer science equivalent to MATH 162, 163, **314 and STAT **345. (**See Keys and Symbols Reference)

Students lacking adequate undergraduate training may be admitted, at the discretion of the admissions committee, with the understanding that course work required to remove the deficiencies in undergraduate background is not applicable to the graduate degree.

Each student is assigned a graduate advisor. The student should see his or her graduate advisor before registering for the first time. The student and the advisor together work out a course of studies which meets the student's career objectives and which constitutes a coherent program satisfying the graduation requirements. No course shall be counted toward the required credit hours which has not been agreed on by the student and the advisor as a part of this coherent program. It is the responsibility of the student to meet the requirements and to keep the department office informed of compliance with them; i.e., the student is **required** to meet with his or her graduate advisor at least once a semester to review progress toward the degree and to have **academic hold removed** so student will be allowed to register.

Options to graduate: Plan I or Plan III

Plan I

In addition to all Graduate Studies requirements for the master's degree, the department also requires the following:

1. 32 credit hours of approved graduate courses.
2. At least 2 credit hours of CS 592 (Colloquium), taken at UNM.
3. At least 26 of the 32 credit hours must be in courses offered by the Computer Science department at the 500-level or above.
4. Completion of a minimum of two courses from each category a) Mathematical Methods b) Empirical Methods and c) Engineering/System Building Methods (required B-).
5. Passing the master's examination (examination is the defense of thesis)

Plan III

In addition to all Graduate Studies requirements for the master's degree, the department also requires the following:

1. 32 credit hours of approved graduate courses.
2. At least 2 credit hours of CS 592 (Colloquium), taken at UNM.
3. In addition to Colloquium, at least 24 of the 32 credit hours must be in courses offered by the Computer Science Department at the 500-level or above.
4. Same as #4 in Plan I.

LJC: CS MS Curr rev. Feb 2017

CURRICULUM FOR MASTER OF SCIENCE

COMPUTER SCIENCE

32 Hours Required for Graduation

Name: _____ UNM ID# _____

MATHEMATICAL METHODS				
Course #	<i>Required B- or better</i>	Cr	Grade	Sem/Yr
CS 500: Intro Theory of Computation		3		
CS 530: Geometric & Probabilistic Methods		3		
CS 550: Prog. Languages & Systems		3		
CS 558: Software Foundations		3		
CS 561: Algorithms/Data Structure		3		

EMPIRICAL METHODS				
Course #	<i>Required B- or better</i>	Cr	Grade	Sem/Yr
CS 512: Intro Comp Graphics/Adv. Image Synthesis		3		
CS 522: Digital Image Processing		3		
CS 523: Complex Adaptive Systems		3		
CS 527: Principles of Artificially Intelligent Machines		3		
CS 529: Introduction to Machine Learning		3		
CS 547: Neural Networks		3		

ENGINEERING/SYSTEM BUILDING METHODS				
Course #	<i>Required B- or better</i>	Cr	Grade	Sem/Yr
CS 554: Compiler Construction		3		
CS 580: Specification of Software Systems		3		
CS 585: Computer Networks		3		
CS 587: Advanced Operating Systems		3		
Add'l course: CS 442: Intro to Parallel Processing		3		
Add'l course: CS 544: Intro to Cybersecurity		3		
Add'l course: CS 564: Intro to Database Mgmt.		3		

CS ELECTIVES or 3-6crhrs GRADUATE COURSES*				
*w/CS faculty approval related to CS from outside the department				
Course #		Cr	Grade	Sem/Yr
Elective CS or Grad Credit:		3		
Elective CS or Grad Credit:		3		

CS ELECTIVES or THESIS RESEACH				
Course #		Cr	Grade	Sem/Yr
CS 599 or Elective CS:		3		
CS 599 or Elective CS:		3		

COLLOQUIUM				
Course #		Cr	Grade	Sem/Yr
CS 592: Colloquium		1		
CS 592: Colloquium		1		