

Computer Science

TO: Prospective Computer Science Graduate Students
From: Computer Science & Engineering Graduate Committee

Thank you for your interest in the Computer Science & Engineering Graduate Program at the University of North Texas.

Deadlines for applying are as follows: **Fall Semester- March 1st** **Spring Semester- October 1st**

All materials for your application, including all official test scores, letters of recommendation, Assistantship Applications and transcripts, must arrive at the Graduate School admissions office by these dates. You must request official GRE/TOEFL scores early to insure that they arrive by the deadlines. Complete applications received by the deadline will be ranked and the top applicants will be admitted.

If the complete application has not been received by the deadline, it cannot be processed and ranked.

MINIMUM REQUIREMENTS FOR ADMISSION

Effective: August 1st, 2005

All students¹ applying for graduate study, Master's or PhD, **must** take the **GRE** test. GRE guidelines are based on statistics for all GRE scores of students interested in graduate study in Computer Science & Engineering, as released by ETS (the Educational Testing Services). These statistics change as new figures are released by ETS. In addition, international applicants who do not have a previous degree from a U.S. institution must take the **TOEFL** exam. It is the student's responsibility to have official scores sent from ETS to the University of North Texas and those scores must be **received by the deadlines** in order to be considered for admission that semester.

TYPICAL SCORES FOR SUCCESSFUL APPLICANTS

Master's Applicants:

GRE: Verbal 400
Quantitative 700
Analytical 600
(Exam prior to 10/01/02)
Analytical 4.0
(Exam after 10/01/02)

TOEFL: 580 written exams / 237 Computer exams

GPA: 3.0 in prior work

Letters of Recommendation: None required

Doctoral (PhD) Applicants:

GRE: Verbal 50%
Quantitative 700
Analytical 600
(Exam prior to 10/01/02)
Analytical 4.5
(Exam after 10/01/02)

TOEFL: 580 written exams / 237 Computer Exam

GPA: 3.5 in prior work

Letters of Recommendation: 3

A prior Computer Science & Engineering degree is not required for admission to the Master program, but the admissions committee will look for evidence that the applicant has a good chance of thriving in a scientific graduate program. A prior Computer Science & Engineering degree, or substantial Computer Science & Engineering experience, is required of Ph.D. applicants.

Admission is competitive and based on the number of positions available in our program.

MAINTAINING GRADUATE STANDING

All graduate students are expected to make satisfactory progress toward a degree. An overall B average must be maintained, and two courses per year (not previously attempted) must be completed or evidence submitted showing activity in thesis or dissertation work.

For the M.S. degree, all requirements must be completed within six years from the date of admission. Students accepted in the Ph.D. program must be admitted to candidacy within three or five years from their date of admission to the Ph.D. program depending on whether or not the student already has a Master's degree. After admission to candidacy, all requirements, including the dissertation and the final oral exam, must be completed within five additional years.

Any provisionally admitted student who fails to fulfill the requirements specified at admission or any student who for two successive semesters fails to maintain at least a B average will be dropped from the program, unless after a review of the student's overall record, it is the opinion of the Graduate Committee that the student has demonstrated sufficient potential to pursue the graduate program successfully. In this case, probationary status will be granted for one semester.

FINANCIAL ASSISTANCE

Teaching Assistantship or Teaching Fellow (TA/TF) positions are offered to current Computer Science & Engineering majors who are attending classes at UNT. Prospective students are welcome to apply, but these positions are very rarely offered to potential new students. Research Assistant (RA) positions are selected by the individual professors from their current students. Students must submit a completed TA/TF Assistantship Application Form, **separate from the Admission Application form**, to the Computer Science & Engineering Department. The application form is available on the website at <http://www.cs.unt.edu/~gradinfo/assist.pdf>. The complete application has to arrive to the department by the appropriate deadline to be considered. All application materials (including official test scores, letters of recommendation, Admission applications, and transcripts) must be received **before** the following deadlines: **Fall Semester: March 1st** **Spring Semester: October 1st**

¹ Except Graduates of the Department of Computer Science & Engineering at The University of North Texas

MASTER'S DEGREE REQUIREMENTS

The Computer Science and Engineering Department offers two Master's Degree options:

Option A: Thesis Option (25 hours of organized course work which includes CSCE 5020 plus 6 hours of thesis). Leveling courses cannot be counted toward the 25 hours.

Option B: Course Option (37 hours of organized course work which includes CSCE 5020 and may include 3 hours of project/6 hrs of Problem in Lieu of Thesis). Leveling courses cannot be counted toward the 37 hours.

Course Selection

As an introduction to the department and to research in Computer Science and Engineering, every Master's student must take CSCE 5020, Current Research in Computer Science and Engineering, during the first semester they are enrolled in graduate classes.

The Master of Science with a major in computer science includes 9 hours of the following required courses:

- CSCE 5150 Analysis of Computer Algorithms
- CSCE 5450 Programming Languages
- CSCE 5640 Operating System Design

For Option A, the remaining courses are selected in consultation with the student's thesis advisor.

For Option B, the remaining courses are selected in consultation with the graduate coordinator.

To qualify for the master's degree, the student must earn a grade of B or better in each of the core courses.

All of the above options must be approved by the Major Professor, Graduate Coordinator, and the Graduate School prior to the last 2 semesters of classes by submitting a degree plan. Any changes to an approved degree plan must also be approved in writing by all aforementioned parties.

Ph.D. DEGREE REQUIREMENTS

In addition to satisfying the general requirement for all UNT doctoral degrees listed in the Graduate Catalog, each Ph.D. student must satisfactorily complete the following:

1. **A minimum of 12 hours of 6000 level organized courses in Computer Science & Engineering**

2. **Comprehensive Examination:** This exam is meant to test a student's preparation for beginning Ph.D. work, and must be taken before the student has completed 30 hours of credit as a Ph.D. student. It will consist of 3 three-hour tests from three of six areas (Algorithms, Systems, Languages, Databases, Artificial Intelligence, and Scientific Computing). Every student must take the area exams in Algorithms and Systems, plus another exam chosen from the other four areas. The exam is scheduled early each spring and Fall semester and can only be taken then. No student will be allowed to take the Comprehensive Exam more than twice. Students failing the exam will be dismissed from the program. Further details on the exam are available in a separate document.

3. **Qualifying Examination:** The Ph.D. Qualifying Exam is an oral exam that serves as a test of the student's preparation for carrying out his proposed research. The student must have passed the Comprehensive Exams and must have a dissertation topic provisionally accepted by a potential advisor. With the advisor's help, the student prepares a prospectus for the exam, which defines both the primary area of proposed research and supporting secondary areas, and outlines the student's preparation in those areas. A Dissertation Committee is then appointed. This committee consists of at least three faculty members, one of whom is the dissertation advisor. The remaining members are chosen by the advisor in conjunction with the student. The examination prospectus is distributed to the committee well in advance, and an examination announcement invites all interested graduate faculty to attend as non-voting participants. After the oral examination, the student is asked to leave the room, the committee makes its decision, and the student is informed of that decision upon his return. The committee may require the student to take additional supporting course work, or to revise his proposal, or to submit a new dissertation topic if the proposed one is found to be unsuitable.

GRADUATE MINOR IN COMPUTER SCIENCE & ENGINEERING

9-12 graduate credits in the Department of Computer Science & Engineering are required for a Graduate Minor in Computer Science & Engineering. CSCE 5013 is a service course designed for students who are not Computer Science & Engineering majors. All minor classes must be presented in writing to the Graduate Coordinator and approved **prior** to enrolling in any of these classes.