PhD Graduate Comprehensive Examination (GCE)
As specified in the UND Graduate Catalog, the Doctor of Philosophy (Ph.D.) degree is awarded in recognition of the highest degree of creative scholarship and research in the field of study. The recipient of this degree must have demonstrated proficiency in a broad area of learning and the ability to critically evaluate work in the discipline. The degree is not awarded solely for completing a prescribed number of courses, but for having undertaken and completed independent work in the discipline leading to an original contribution to knowledge.

All PhD students in the Department of Computer Science are required to take a Graduate Comprehensive Examination (GCE). The examination will be given at times announced by CS department. The exam must be extensive and searching and must cover in depth the specific filed within Computer Science discipline and/or other disciplines in which the computer science body of knowledge has been applied. The GCE is administrated and evaluated by the student’s advisory committee. Students are expected to complete both sections of the GCE in a satisfactory manner. Students will be allowed two (2) attempts at satisfactory completion of both sections of GCE; any request for additional sitting of the examination must be approved by petition to the Graduate Program Committee, with the approval of the Academic Advisory Committee. The CGE will consist of two sections:

1. A Written Proposal submitted to the student’s Academic Advisory Committee at least two weeks ahead of the scheduled GCE
2. An Oral Presentation to the student’s Academic Advisory Committee. The oral proposal consists of (e.g., a PowerPoint) presentation and an oral examination.

Written Proposal
The PhD student should work with his/her advisor in drafting Topic Proposal of Dissertation. The Written Proposal must be of publishable quality, in the IEEE format. The length of the report should be between 12-15 pages. The report must include the following sections:

- A title the work.
- Name, affiliation, and email address.
- Advisor’s name and email address.
- A main description of your research work that covers:
  - The technical problem to be solved, as well as a justification of its importance.
  - A discussion of related and prior work explaining the differences between prior work and the proposed work.
  - A sketch of the proposed approach or solution.
  - A plan for evaluating your work and presenting credible evidence of your results to the research community.
  - The expected contributions of your dissertation research.
  - Progress towards the goals: what has already been done and what still need to be done, possibly with a timeline
  - A list of publications directly related to your dissertation work, if any
**Oral Proposal**
The oral proposal is composed of two parts - presentation and oral examination. The presentation should cover the content and structure of the written proposal. The oral examination will be based on the content of the written proposal. The Oral Proposal is to be scheduled for an available CSci 500 – Graduate Orientation sessions, when scheduled in the fall or spring semesters.