1. **Program goals**

The mission of the Master of Science Program in Computer Science is to instill the student with a breadth-of-knowledge in advanced topics of computer science. The program emphasizes the development of research, writing, and presentation skills along with an appreciation for the difference between research and practice. A solid foundation is provided for continued studies, or advanced placement, within the sciences and technology.

2. **Learning objectives**

Below are a list of cognitive capacities and skills, relating to Computer Science, that represent the learning objectives of the Master of Science in Computer Science program.

- **Knowledge and understanding.** Demonstrate breadth-of-knowledge and understanding of essential facts, concepts, principles, and theories relating to advanced topics in Computer Science.
- **Oral Communication.** Make succinct presentations about research problems and their solutions.
- **Written Communication.** Develop and write papers that survey the literature and describe research problems and their solutions.
- **Researching.** Perform literature searches, comprehend advanced research materials, and uncover connections between related works.
3. Approaches and Methods for Assessment

The Department of Computer Science will utilize a number of methods to assess how well students are meeting the stated learning objectives. These methods will be implemented and integrated vertically into the curriculum to allow a full spectrum view of student progress. Additionally, students work closely with a Thesis Advisor who monitors their progress regularly.

The methods that will be used for assessment include the following:
- Entrance requirements for the Masters Program to assure basic prerequisite knowledge and ability
- Plan of Work to support and assure breadth of knowledge learning object
- CS 69191 Masters Seminar to support communication, knowledge, and research learning objects
- Masters Seminar presentation to assess communication learning objects
- Thesis Topic Approval to assess written communication and research learning objects
- MS Thesis and defense to assess communication, knowledge, and research learning objects
- Exit Survey to assess learning objects

4. Measures for Assessment

A number of measures and metrics can be derived from implemented assessment methods, enrollment data, graduation data, and student data (i.e., grades and transcripts). As the duration of the assessment reaches the point where complete data for the degree program is acquired additional measure and metrics can then be examined.

The measures that will be used in the first stage of assessment are the following:
- Time to submit Plan of Work
- Changes and deviations from Plan of Work
- Completion estimates (from Plan of Work) versus actual completion times
- Participation and feedback from Masters Seminar
- Completion rates for Masters presentation
- Thesis topic approval rates
- Completion rates of MS Thesis
- Acceptance rates into Doctoral program
- Student GPA
- Career & position (academic institution, industry, government)
- Correlate Exit Survey results with time to admission data, completion time, and Plan of Work.
5. **Results & Findings**
First set of initial findings to be presented in Fall 2006.

6. **Improvement**
Initial improvements will be presented in Fall 2006, however little data will be acquired by that time frame and as such changes to this plan may be premature.