

CS596 - MS Project

Introduction

CS 596 – MS Project is a 3 credit hour class and counts as a CS graduate elective. The class will include a one hour final presentation which will also serve as the student's exit exam. The class will be listed under one graduate faculty member who serves as the committee chair. The project will be supervised by a committee of three graduate faculty members. In addition to the committee chair, one member will be designated as the committee associate chair at project registration who will be actively involved in the project from the moment the project is registered.

Procedure for Forming a Project Committee

A project committee will be formed in one of three ways:

- **Professor has identified a suitable student for his or her project**

A professor has already identified a student who has the suitable background and skill set for the project and will chair the committee. The student will complete a project proposal (see below) with the help of the committee chair and then recruit two additional faculty members to serve on the committee.

- **Professor has a project but has not identified a suitable candidate**

When a professor has a project but has not identified a suitable candidate, he or she will submit a *project outline* to the graduate program director who will publish it to all graduate students. The outline should include a description of the project as well as the skills and qualifications required of the student. The outline must be submitted by Wednesday of the first week of the semester.

A student who wishes to complete a project will review the available projects and submit an MS Project Request Form which ranks the projects the student is interested in. This form must be submitted to the graduate program director by Monday of week two. The graduate program director will forward student requests to the appropriate professor who may accept or reject a particular request. A professor will rank the requests when multiple requests are deemed acceptable. The graduate program director will match the students to projects based on this information. The professor whose project is matched will chair the project committee and help the student to complete the proposal. The student will recruit two additional faculty members to serve on the committee upon completion of the project proposal.

- **Student proposes a project**

A student interested in doing an MS Project may submit a *project outline*, which includes a description of the project as well as the skills and qualifications of the student. The outline must be submitted to the graduate program director by Wednesday of the first week of the semester. The graduate program director will forward the outlines to professors in the related area, each of which may accept or reject the project. A professor who accepts a project will serve as the chair of the project committee and help the student to complete the project

proposal. The student will recruit two additional faculty members to serve on the committee upon completion of the project proposal.

A project may be rejected by a professor in the area for a number of reasons:

1. The requesting student has not taken sufficient courses related to the project topic.
2. The requesting student did not demonstrate good performance in the course(s) related to the project topic. For example, letter grades of 'A' or 'B' are considered decent performance, while 'C' or lower grades are not.
3. The outlined project is not appropriate for an MS project (see section on appropriateness of project)
4. The project does not match the interest of the professor, due to various reasons including but not limited to the professor's background, research focus, teaching load in the particular semester, etc.

It should be emphasized that not all students who wish to do a MS project will be matched with a professor and/or approved for the project option.

Course Registration and Project Proposal

To register for the MS Project course for a particular semester, the student must submit a completed CS596 Approval Form and project proposal to the graduate program director by 5:00 PM Friday, the third week of the semester. A project proposal must include the following:

- Descriptions of the project and expected deliverable(s)
- Analysis of required skills and resources
- Major project milestones
- Validation plan for the deliverable products (how will the developed product be proven to satisfy the requirements?)

Final Presentation

Upon completion of the project, a student will be required to perform a one hour final presentation. Prior to the presentation, the student must complete a *Project Summary*, similar to what would appear in conference proceedings. The summary document should describe the following:

- Objective(s) of the project and its significance
- Design and implementation
- Summary of the product(s)
- Conclusions and future work

As a general guideline, students will include the following in their final (oral) presentation:

- Introduction and background
- Significance of the product(s) in the project
- Descriptions of the designs of the product(s)
- Descriptions for the implementations of the product(s)
- Demonstration of the product
- Evidence that the delivered product(s) satisfy the requirements (or goals), with required validation and/or test results

The last 15-20 minute of the presentation will be a question-and-answer session by the project committee.

The student must follow these guidelines below when scheduling the final presentation:

- The completed Project Summary must be available to the committee *at least one week* before the scheduled presentation.
- The student must consult with the committee members to schedule the presentation after the student has obtained permission from the committee chair.
- In general, the Project Summary must have been reviewed by a proofreading service provider before it is submitted to the committee.
- The student should schedule a room once the presentation date is finalized; the department office will assist you in room scheduling.

Required Documentation

Each student must submit the following items upon completion of the MS Project class:

- Initial project proposal
- Promised deliverable product(s)
- Project Summary
- Presentation slides
- Other materials used in the final presentation, if applicable
- Copies of important references

The student must upload and publish these required items to the CS website.

General Guidelines for MS Projects

In general, an MS project should contain at least one of the following:

- Considerable significance at least in either design or implementation. Significance in implementation might be measured by the usefulness of the product or the use of emerging technologies or techniques.

The above does NOT include practicing already-popular technologies/techniques, such as creating a home page using HTML or exercising a programming language, such as JAVA, without containing a significant challenge, contribution, or new idea.

- Implementing a new (and significant) idea. MS Projects can be conducted to implement a challenging new idea to determine its feasibility or evaluate its effectiveness.
- Prototyping a research concept. Based on some literature reviews, a student may implement a prototype of the ideas proposed by contemporary researchers. It may be that the prototype has been implemented and tested by the researcher, but reproducing the prototype by the student and performing the student's own testing could be acceptable.

Other Considerations

- A. Passage of the project is by unanimous agreement of the committee. The committee chair, in consultation with the committee members, will assign a grade for CS 596.
- B. A student is allowed to change/drop his project and/or change the committee composition only with the approval of his/her existing project committee.
- C. If a member of a student's committee is no longer with the university or on medical leave, a replacement must be found before the project can be completed.
- D. Any project that a student does that consists of work for an employer with pay is not acceptable as an MS project.