UTDesign Corporate Mentor Guidelines

INTRODUCTION:

Thank you for agreeing to become a corporate mentor for a UTDesign team. Our students are very excited to work on actual engineering problems with real corporate partners.

Every engineering and computer science senior at UT Dallas is required to work on a team-oriented capstone project (senior design course). This final project will allow them to fully engage in the design process, teamwork, and project management as well as use their problem-solving skills.

The Erik Jonsson School of Engineering and Computer Science offers the capstone design course for computer science, electrical/computer/telecom engineering, and mechanical engineering students.

	CS	EE/CE/TE	ME
Semester 1	CS 4485	EE/CE/TE 4388	MECH 4381
Semester 2	n/a	EE/CE/TE 4389	MECH 4382

When senior design teams are sponsored by industry, they work under the UTDesign program. The following summarizes the key roles of those involved in UTDesign:

- **UTDesign department director**: The department faculty member who recruits corporate sponsored projects, recruits faculty advisors, assigns students to teams, and stewards the Jonsson School/ corporate relationship.
- **UTDesign faculty advisor**: The faculty member who, using their expertise and interests specific to the project topic, provides guidance to the team as they execute their project.
- **UTDesign corporate mentor**: An individual from the sponsoring company, who serves as the technical point of contact for the team, represents the company's interests, assists the team as they work on the project, and facilitates technology transfer during the project.

ROLES AND RESPONSIBILITIES:

Who Is the UTDesign Corporate Mentor?

A corporate mentor is a representative from the sponsoring company who provides the expertise for the project from the industry side. This mentor is the point of contact for the team.

The Role of the Corporate Mentor

The role of the corporate mentor is very important in the learning process of our students and the success of the sponsored project. In order to help the team achieve success, the corporate mentor needs to:

- Mentor the team throughout the project so students can get a corporate experience.
- Mentor the students with new technology used in their company.
- Guide the team to meet benchmarks.
- Foster teamwork.
- Foster high quality communication and professionalism.

Expectations of the Corporate Mentor

As a corporate mentor you can expect to spend an average of one hour per week working with your team and another half hour to an hour for support/emails. Have in mind that each phase of a project may require more or less supervision than another.

Some of the tasks expected are listed below:

- **Provide a clear description of the project, with expectations and goals for the team.**
  Students will contact the corporate mentor to set up a kick-off meeting soon after the project has been assigned. At this time, describe the project goals and initial requirements in detail and be ready to define expectations. Work with the team to negotiate and approve a final project specification.

- **Attend corporate mentor welcome event.**
  Corporate mentors have the opportunity to network with faculty, students and other company leaders and discuss best practices for successfully leading a UTDesign project. Hear from former corporate mentors about their experience as they provide tips for success.

- **Hold regular team meetings.**
  Weekly meetings are recommended, especially at the beginning of the project. During these meetings provide students with feedback on their weekly status report and suggestions for improvement, help them manage schedule, budget, etc.

- **Regularly check the progress of the project.**
  The corporate mentor is the primary person who monitors the progress of the project. Ask for a weekly status report and ensure they are on the path to meet their goals.

- **Maintain open communication with faculty advisor.**
  The faculty advisor is the university point of contact to address any issue related to the project. Keep him/her informed about any major change in the project or any problem with the team.

- **Review written reports, proposals, and presentations.**
  The team will write a proposal, weekly reports, preliminary and final reports, and give at least one presentation. They will benefit from industrial feedback.

- **Develop an effective team.**
  Fully engage students to work effectively as a team. Assess each student's work in the middle of the semester to provide feedback and assess the team's project at the end of the semester as part of the project evaluation. See Appendix 1.

- **Be part of the team and program assessment.**
  There might be times where the input of the corporate mentor is needed to determine the student grade. UTDesign also needs the corporate mentors' input to improve its outcome, which will be collected through a survey at the end of each semester.

- **Attend your UTDesign final project presentation**.
  See your team deliver their results to faculty, fellow students and other corporate leaders. Provide feedback on the presentation.

SUGGESTED SCHEDULE (UTDesign schedule differs slightly by department):

Typical First Semester Schedule

Weeks 1-3
- Department director and corporate mentors work details on IP and NDA agreements.
- Department director hosts project proposal presentations to students. Corporate mentors are encouraged to introduce their projects to students during first week of class.
- Teams are formed and projects assigned.
- Faculty advisor signs IP and NDA agreements.
- Students sign IP, NDA, and Release and Indemnification for Adult Participants agreements.
- Faculty advisor meets with students to review project.
- Faculty advisor meets with students to review project and set up agenda for kick-off meeting.
- Host kick-off meeting: define scope and deliverables of the project; get specifications, requirements, tour of facilities, etc.

Weeks 4-7
- Corporate mentor attends welcome event on 9/19 from 4:00 – 5:30 pm.
- Corporate mentor and faculty advisor work with team as they:
  - Research the problem.
  - Brainstorm solutions.
  - Develop a routine meeting schedule to include meetings with team/faculty/corporate mentor, work on weekly reports, etc. Weekly meetings with the team are encouraged.
  - Work on preliminary design and proposal.

Weeks 8-10
- Mid-semester team evaluation due: please contact the department director if there are any issues.
- Corporate mentor advises the team as they work on the preliminary design.
- Team works on preliminary design presentation, preliminary design report, and proposal; proposal due.

Weeks 11-14 (Fall Break November 25-29)
- Corporate mentor advises the team as they work on the final design.

Weeks 15
- Team works on poster and PDR/final project presentation.
- Corporate mentors are invited to host a student presentation, provide feedback and approve content for the final presentation.

Week 16
- Final report is due.
- Corporate mentors are encouraged to attend their teams' UTDesign Expo. They are also invited to be judges of all projects.

Electrical Engineering	December 11, 2013
Mechanical Engineering	During finals week – department director will contact
Computer Science	December 13, 2013

- UTDesign debrief.

Week 17
- Corporate mentor survey due.

Typical Second Semester Schedule (only for two-semester projects)

Corporate mentor guides the team as they continue working on the project's proof of concept/prototype, testing, validation, and fabrication. Help the team be ready for the final project presentation.

TIPS FOR SUCCESS:

To succeed as a mentor and in the project, here are some suggestions that might help:

- Attend welcome event where new corporate mentors can listen and learn from experienced mentors about best practices.
- Communicate regularly with the team and, if necessary, with the faculty advisor.
- Be available throughout the project.
- Set clear and achievable goals.
- Be realistic of what a team of 3-5 students can do.
- Scope expectations to 480 hours/team per semester.
- Provide the students with tools necessary to succeed.
- Demand constant professionalism and high performance from the team.
- Contact the UTDesign director with any question, problem, or suggestion.

We hope these guidelines will help you understand your role as a corporate mentor and succeed as such. We look forward to working with you and are open to any suggestions to improve the corporate guidelines.

For any additional questions, comments, issues or complaints, please contact Rod Wetterskog at wetterskog@utdallas.edu and 972.883.2182. We value your feedback.

Appendix 1: Corporate – Student Review

Project: Corporate Mentor:	Possible Score				
Category for Evaluation	**1**	**2**	**3**	**4**	**5**
Cooperation and Leadership: how team is open to feedback and adjusts to changes.	Team is not flexible. Team does not listen to corporate mentor's new plans.	Team is reluctant to listen to corporate mentor's feedback. Team doesn't cooperate much when changes occur.	Team listens to corporate mentor but is not pleased when changes occur.	Team is open to feedback and adjusts to changes most of the time.	Team is always open to feedback and cooperates 100% when changes occurs.
Dependability: how frequently team attends meetings. How team uses project management techniques.	Team fails to attend corporate mentor meetings in general. Team fails to meet deadlines. Team rarely uses project management techniques.	Team attends less than 1/3 of all the meetings. Team occasionally meets deadlines. Team occasionally uses project management techniques.	Team attends between 1/3 and 2/3 of all meetings. Team regularly meets deadlines. Team regularly uses project management techniques.	Team attends more than 2/3 of all meetings. Team consistently meets deadlines. Team consistently uses project management techniques.	Team attends 100% of meetings. Team always meets deadlines and uses project management techniques.
Professionalism: how well prepared the team is, how much effort is the team willing to put toward the project, etc.	Team doesn't come prepared to meetings, doesn't have a plan, and doesn't know the goals. Team doesn't show any interest in the project. Team's communication skills needs improvement.	Team comes sometimes prepared to meetings, doesn't work with a plan in mind, and is confused about goals. Team puts some effort to get project done. Team's communication skills needs improvement.	Team comes most of the times prepared to meetings, has a plan in mind, and knows goals. Team puts some effort to get project done. Team has good communication skills.	Team comes prepared to meetings, has a plan and knows goals. Team puts effort to get project done. Team has good communication skills.	Team always comes prepared to meetings, has a plan and knows goals. Team puts extra effort to get project done. Team has great communication skills.
Comments:					