Engineering design projects generally start with the recognition that a need or opportunity for an engineered solution exists. When working with a client, experienced professionals will often start by writing a Statement of Work (SOW) that outlines the scope of the project and clarifies expectations between the client and the provider. A well-conceived SOW helps get projects off to a proper start and in the right direction, while minimizing misunderstandings down the road.

As such, you must obtain approval from both your client and your faculty advisor before considering this step complete. The January 20th deadline represents when you have submitted a complete version of the SOW to your faculty advisor.

Each team will develop a SOW for their project that contains at least the following elements:

1. Cover Sheet – Project title, location of project, client name, team members, faculty advisor, approval lines for client and advisor, and date.
2. Background – A clear description of what the need or opportunity is, with appropriate background information to make it understandable to someone not familiar with the project. Include any literature review or other background research that will aid in understanding the problem and its context.
3. Project Objectives – A clear statement of what your team will accomplish this semester. Focus on outcomes or results, not tasks or activities.
4. Stakeholder Needs Assessment – A list of key stakeholders and their role (i.e., what they potentially have at stake), and a discussion of the primary concerns of each. This section should also describe how the team identified stakeholders and their needs/wants.
5. Proposed Approach – A high-level description of how the team intends to accomplish the project objectives. This should be a description of the strategy or over-arching game plan that will set the context for the specific activities outlined in the project plan.
6. Project Plan – An outline of the major activities and project milestones, with dates. It is often helpful to use a Gantt chart or other graphic to communicate the overall plan.
7. Deliverables – Interim and final products the team will produce for the client and to meet course requirements. Deliverables include reports, presentations, and any specific requirements of the project (e.g. layout drawings, written SOPs, economic analyses, etc.).
8. Constraints and Assumptions – A list of the key constraints, quantified wherever possible, and any assumptions made in developing the SOW. Don’t forget to think about access to data or the work site.
9. Budget – Anticipated expense items and amount.

The document should be written in an appropriate technical writing style, substantive yet concise, well organized and neatly presented → professional.

Keep a soft copy on your team’s share, and put the signed and approved hardcopy in your team binder. Make sure your client and advisor get a copy of the final version.

Approval of your SOW by the client is due by 5:00 p.m., January 27.

Please note that even when meeting this deadline you are only allowing three months to finish the project. Starting and completing this task early is strongly encouraged.