**18-883 PV Systems Engineering - Project**

The goal of this course is that students will be able to create basic PV system designs and carry out technical and economic analysis on these systems. The project assignment for this course gives students the opportunity to pull together different elements of the course to design and analyze a PV project of their choosing. Students will propose their own project concept that could include isolated PV systems, large utility scale systems and distributed generation projects. Students are permitted to work in groups of two or individually.

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| **Milestone** | **Date** |
| Project proposals due | November 18 |
| Project presentations | December 9 |
| Final reports due | December 18 |

**Project Proposals**

The project proposal is an opportunity to obtain feedback on your project idea. The proposal should include a description of the scenario for which the PV system is being design and the proposed analysis to be conducted as well as potential sources of data. Proposals are due November 18th but may be submitted earlier if students would like feedback sooner.

**Project presentations**

On the last days of class, students will present their project to the class. Each group will have 10 minutes to present plus 2 minutes for questions. This presentation should include:

* Description of the problem/scenario
* Solar resource assessment
* Proposed system design
* System yield/technical performance analysis
* Economic analysis

**Final report**

Final reports should detail the motivation for the project/the problem that the project addresses and related context as well as the design and analysis performed. A possible report format could be:

* Introduction/Background on the project
* Solar resource assessment
* System design specification including methods employed
* PV system yield/performance analysis
* Economic analysis
* Conclusion

The nature of these sections will depend on the nature of the project proposed. For example, a performance analysis of a utility scale plant will focus on maximizing specific yield whereas an off-grid system might be more concerned with reliability.