

Spring 2023 ECE 445 Team Contract

Instructions: The content of this document should be specific to your goals and needs. Ideas for the content of each section are provided as suggestions.

Project No. and Name	Project #75 :ECEB Submetering
Member Name, netID	Aleksai Herrera, aleksai2
Member Name, netID	Jonathan Izurieta, jji11
Member Name, netID	Mike Lee, dcl3

ECE 445 is a project-based course. The course includes both team and individual grades. Project teammates generally all get the same grade for team assignments based on the expectation that all team members do their fair share of the work involved. The purpose of this contract is to lay out the tasks needed for the successful completion of the project and distribute them in a fair and efficient way to the team members. It will also discuss how the teammates will work together during the project and address any issues that come up. A contract that promotes good teamwork that leads to a successful project should:

- Acknowledge that each team member has commitments and responsibilities outside of ECE 445
 - Encourage open communication about challenges that team members are facing, both in and out of ECE 445
 - Give team members the benefit of the doubt and the opportunity to explain themselves when something goes wrong and resist jumping to judgment

Project Description: *Short description of project*

Our project will be used to measure the voltage, current, and power of a 3-phase, 208V, 400A load representing the energy use of the ECEB. This data will then be sent into a ESP32 microcontroller where calculations will be made and the data will be displayed on the LCD. Our data will also be displayed to an ECEB Lobby TV by using a server and database to interact with the ECE website that is displayed on the TV's. Finally the data will be stored onto said databases but also onto an offline SD card for local storage.

Project Goals:*If the team is successful in its purpose, what hardware and software achievements will attest to this?*

If successful our project will be able to accurately display the accurate recorded data onto an LCD display and onto a ECEB lobby TV. In addition, it will be able to store data onto the SD card and onto the online database without losing data.

Expectations (ground rules) for each member: *Try to list six or more minimum expectations. Consider aspects such as preparation, participation, feedback, responsiveness, etc. Try to explicitly list anything that could potentially turn into a problem. Find ways to encourage everyone to communicate (this may also fall under "tasks").*

- Show up to meetings with TA unless otherwise communicated beforehand
- Contribute to reports and assignments collaboratively
- Seek help or ask a TA when we become stuck on a design issue relating to our project
- Respond to messages about the project as soon as possible
- Respect deadlines set by the group
- Ensure work meets high quality standards consistent with the project's goals

Roles: *Do you see this team performing well because everyone works together and contributes equally? Are there certain aspects of the project that some teammates excel at? Can tasks be spread among individuals to optimize progress toward the final product?*

We will work together when writing up reports and other necessary paperwork for the project, but the way we set up our project allows each team member to work on the task that best aligns with their strengths and academic background. This way progress is optimized and the project gets completed in a more timely manner. We will still help each other when a certain task has a higher priority or when a team member finishes the task they were working on.

Project Meeting Time(s): *The team will meet at the scheduled team meeting with TA each week. Can you also preset an ideal time for team meetings in the lab (your team may need to sign up for lab bench access)? Is your team interested in meeting to work on other aspects of the course together such as project research?*

Twice a week, Tuesdays and Thursdays, 3-5 PM, subject to lab bench availability. This will ensure regular progress and provide ample time for troubleshooting.

Agenda: *Who will set the agenda? Beyond the weekly meetings with the TA, what will the team do to ensure that it stays on track during the semester? When a decision needs to be made, will it be approved by consensus or majority vote? Will a team member be appointed to keep records?*

Aleksai Herrera will set the agenda ensuring that we cover all necessary steps to complete our goal. We will set a calendar/project management system that allows us to set deadlines for tasks and attribute them to responsible members. Decisions will be made by consensus wherever possible. If a consensus cannot be reached, a majority vote will be used. All members will keep records of their own work, but Mike will organize records whenever necessary.

Process and penalties for dealing with team issues: What happens when ground rules are broken? Who intervenes? What happens if the situation escalates? Always remember not to jump to judgement. Give group members the benefit of the doubt and the opportunity to explain themselves when something first goes wrong. TAs and instructors are available to help resolve issues.

When ground rules are broken we will or if we have a disagreement about how to implement or design a portion of the project we will ask our TA for input on the situation, and afterwards decide how to move forward based on a majority consensus. A penalty that would result from several violations of said ground rules would be a section on the team contract fulfillment assignment denoting said conflict.

End-of-term agreement on using final peer assessment for grade

adjustment: Do you believe that this contract should hold your team accountable to its contents or that it may hold little value? There will be two formal peer assessments this semester. The first is used only to provide honest, constructive feedback to each team member. The second peer assessment affects a teammate's grade. Without accountability, many promises go by the wayside.

We believe that this contract is very crucial for adjustments on grades. This will ensure fairness and accountability as we work together on the project.

Signatures: Iterate on this document until everyone is comfortable with its contents and signs (it is okay to type your printed name as your digital signature).

I affirm that I participated in generating this team charter and that I will abide by its contents to the best of my ability. Furthermore, I understand that failure to meet the expectations expressed here can lead to the stated consequences.

netID: aleksai2 (digital) Signature: Aleksai Herrera Date: 2/8/2024

netID: jjj11 (digital) Signature: Jonathan Izurieta Date: 2/8/2024

netID: dcl3 (digital) Signature: Mike Lee Date: 2/8/2024