

Utilities Challenge

Objective

The Utilities Challenge (U-Challenge) provides students the unique opportunity to gain access to data about the residence halls here at Texas A&M. Students will use this information, and draw upon the expertise of staff from Utilities & Energy Services (UES) and the Department of Residence Life, to learn about the current proficiency of buildings and propose ways to increase the buildings' efficiency and student engagement to a panel of staff, faculty, and administration. All majors and grade classifications are highly encouraged to participate in this unique program.

Goal: Facilitate a learning experience for students to understand the internal systems at A&M.

Program Outcome

At the end of the project, teams will give a 20 minute presentation about their findings. The presentations will discuss the utility systems of the halls (HVAC, water, etc.) and methods for improving those systems. Strong presentations will discuss the strengths and weaknesses of the utility systems in addition to habits students can adopt to make a difference. Suggestions from these presentations have the potential of being implemented, impacting the operations of the largest university in Texas.

Skills students will utilize during this project includes, but is not limited to:

- Research
- Critical analysis of information
- Creative problem solving
- Professional presentation experience

- Persuasive speaking experience
- Teamwork experience
- Proposal writing
- Coordination with various departments

Process

Applying:

Students who wish to apply will fill out the application on the Residence Life Sustainability page (U-Challenge Application (tamu.edu)) NO LATER THAN 5 pm on Monday, February 5th. Students' applications will be reviewed by the U-Challenge committee members for selection to compete in the challenge. Participants and teams will be announced via email by 5 pm on Friday, February 9th. Students have the option of signing up as an individual or with a set team in mind. More information regarding creating teams is listed below in the 'Creating Teams' section.

NOTE: Be aware that the U-Challenge will only have 4 teams for each level of the competition. A waitlist will be created for those who sign-up after the initial 8 team slots are filled. We encourage those who know they want to participate in the challenge to sign-up as soon as possible to increase the likelihood they will receive a spot. The U-Challenge committee reserves the right to close the application period prior to the February deadline.



If applying for course credit:

Students will need to confer with their instructors about deadlines to earn credit as a part of their degrees. Please note that research proposal deadlines for degrees will likely have deadlines separate from the deadlines presented here. Confer with your academic advisor to learn about those specific dates. Staff of Residence Life and UES would be willing to discuss the desired outcomes of the project and how it will be a valuable addition to your education.

Creating Teams:

Teams of 4-6 students will be created for each residence hall. Duties of team members will be assigned within the group to meet the research objectives of the group. Each group must have a team leader who will be responsible for contributing to research while also directing the efforts of the team and ensuring that the group meets submission deadlines. The team leader will be responsible for communicating with Residence Life and UES about what meetings they need to set-up and for submitting the drafts and final version of their project. It is up to the discretion of the group how they select a team leader. If more students join the group than is necessary, then the U-Challenge committee members reserve the right to shift extra team embers to another hall/team. If you are applying to be with a specific team, we require that all team members sign up on the same day.

Teams Formed/Initial Meeting:

Once students have applied and been accepted, they will attend an initial meeting on Monday, February 12th hosted by Residence Life and UES. At this meeting, students will have the opportunity to meet members of their team (if they did not previously sign-up with a team) and establish roles. This meeting will also show students where and how to access the information they will need and what people will be useful for them in researching and creating solutions. We will discuss the rubric by which their projects will be evaluated. Residence Life will explain the rules and deadlines for this program and UES will provide a brief description about the utility systems in the residence halls and how to interpret data.

NOTE: After this meeting, teams will create their own schedules; they will decide the frequency of their meetings, where, etc. in order to meet the requirement and deadlines for this project. Teams will be required to submit weekly feedback and progress reports to Sustainability Coordinator Kenya Reeves at kreeves@tamu.edu.

Initial Findings/Presentation:

We encourage students to submit their projects' preliminary findings and outlines to sustainability@reslife.tamu.edu to receive feedback early in the process. There will be a pre-presentation feedback on these initial findings and work on March 4th for undergraduate teams and March 6th for graduate teams. Work presented will not factor into a team's final evaluation but instead provide a good opportunity for teams to gauge their progress and to make any necessary edits and updates.



1st Round of Presentations:

In this first round of presentations, teams will deliver their findings in a business casual setting to staff of Residence Life and UES. The staff of these departments will serve as judges in this first found. They will confer in the days after the presentations and select four teams (two from each level) that will advance to the final round. The advancing teams will receive comments from the judges on how to improve their presentations. All participants from the previous rounds will be invited to attend the final round to view the finalist presentations.

Final Round of Presentations:

In the final round of presentations, teams will deliver their revised projects. They will then present to a panel of TAMU administration and staff. The panel of judges will determine the 1st and 2nd place teams of each level. Winning teams will receive their prizes at a later date.

NOTE: Just because a team did not win the U-Challenge <u>DOES NOT</u> mean their recommendations will not be examined for implementation. Recommendations from all teams will be examined each year for feasibility and applicability when Residence Life is preparing Aggie Green Fund grant applications.

Sources of Information

Students are encouraged to access the data provided by UES. UES staff will be willing to consult with students to interpret the data. However, students can also interview staff and students residing within residence hall as they search for solutions to the findings they discover. Students are encouraged to creatively seek sources of information such as the utility services of other universities, the United States Department of Energy, and the Association for the Advancement of Sustainability in Higher Education (AASHE).

Timeline - Please be aware that these dates and times are set and cannot be changed.

Applications Open Online: January 15, 2024 (Monday)
Application Deadline: February 5, 2024 (Monday)
Teams Announced Via Email: February 9, 2024 (Friday)

Initial Meeting for Teams via Zoom: February 12, 2021 (Monday) from 4 pm – 6 pm

Initial Findings/Presentation Submitted to SC (Undergraduate Teams): March 1, 2024 (Friday)
Initial Findings Live Judge Feedback (Undergraduate Teams): March 4, 2024 (Monday) from 4 pm – 7 pm
Initial Findings/Presentation Submitted to SC (Graduate Teams): March 4, 2024 (Monday)
Initial Findings Live Judge Feedback (Graduate Teams): March 6, 2024 (Wednesday) from 4 pm – 7 pm

1st Round Presentations Submitted to SC (Undergraduate Teams): March 29, 2024 (Friday)

1st Round Live Judge Feedback (Undergraduate Teams): April 1, 2024 (Monday) from 4 pm – 7 pm

1st Round Presentations Submitted to SC (Graduate Teams): April 1, 2024 (Monday)



 $\mathbf{1}^{\text{st}}$ Round Live Judge Feedback (Graduate Teams): April 3, 2024 (Wednesday) from 4pm – 7 pm

Final Presentations/Banquet: April 15, 2024 (Monday) from 6 pm – 9 pm