

# Senior Design Presentation Schedule

December 1, 2023

Click on the Live Link to attend virtually or watch recording.

Live Link & Session #	Start/End Faculty Advisor	Project Description
<a href="#"><u>LETS</u></a> 1	8:00 AM - 8:35 AM <b>LETS</b> Dr. Hoo Kim	<b>LETU-ETL Team Stealth</b> is designing an Unmanned Aerial Vehicle (UAV) for stealth application using ETL's special paint coating. Goal is to minimize the radar cross section (RCS) of the drone and maintain aerodynamic design.
<a href="#"><u>STARS</u></a> 2	8:45 AM - 9:20 AM <b>STARS</b> Dr. Nathan Green	<b>Starlink Tracking Antenna Reference System</b> Project will design, build, and test a system to track Starlink and other similar satellites through the sky and record their live-sky signals for processing by the RF team.
<a href="#"><u>LUSCE</u></a> 3	9:30 AM - 10:05 AM <b>LUSCE</b> Dr. Joonwan Kim	<b>LeTourneau University Smart Charging Exploration</b> Project is developing a "recharge-on-the-go" charging solution for Electric Vehicles to reduce reliance on traditional grid connections.
<a href="#"><u>LETREP24</u></a> 4	10:15 AM - 10:50 AM <b>LETREP24</b> Dr. Ko Sasaki	<b>LeTourneau Rehabilitation Engineering Project 24</b> will develop a "wearable" system to log the trunk movement of patients with lower back pain (LBP) and report the summary data to their physicians for objective evaluation.
<a href="#"><u>ACME</u></a> 5	11:00 AM - 11:35 AM <b>ACME</b> Dr. Kraig Warnemuende	<b>Additive Construction Materials Experimentation</b> Project will update the design and footprint of the existing concrete 3D printer for the potential to print a concrete canoe.
<a href="#"><u>OnTrack</u></a> 6	11:45 AM - 12:20 PM <b>OnTrack</b> Dr. Yunus Salami	<b>LETU Go-Kart Track Development</b> Project will prepare a design for a campus Go-Kart track. Items include layout, pavement, standards, and safety, as well as evaluating potential sites. A test portion of the track will be built.
<a href="#"><u>Frontier Robotics</u></a> 7	12:30 PM - 1:05 PM <b>Frontier Robotics</b> Prof. Norman Reese	<b>Frontier Robotics</b> will design, build, test, and compete two 15-lb robots, as well as host a local competition. Project will also design and construct a relocatable arena, and a unique area glass test system.
<a href="#"><u>TATO</u></a> 8	1:15 PM - 1:50 PM <b>TATO</b> Dr. Gitogo Churu	<b>Transition and Transfer Objective</b> Project will design, build, and test a device that can effectively help a disabled person easily and safely transfer in and out of a vehicle, building on lessons from previous years projects.
<a href="#"><u>SAE Baja</u></a> 9	2:00 PM - 2:35 PM <b>SAE Baja</b> Prof. Jeff Johnson	<b>SAE Baja – Renegade Racing</b> Project will improve many components of the existing Baja car to enhance performance, functionality, and readiness for the spring 2024 competition in Pennsylvania.
<a href="#"><u>SAUWW</u></a> 10	2:45 PM - 3:20 PM <b>SAUWW</b> Dr. Ezequiel Pessoa	<b>Submerged Arc Underwater Wet Welding</b> Project will develop a flux for SAUWW application that increases arc stability, decreases cooling rate, and improves weld bead geometry, using the Kielhorn underwater welding tank.
<a href="#"><u>LUNAR</u></a> 11	3:30 PM - 4:05 PM <b>LUNAR</b> Dr. Chad File	<b>LeTourneau University Nexus for Amateur Rocketry</b> Project will design, build and test a successful Rocket with a payload, to compete in NASA Student Launch (NSL) competition while meeting all rules and requirements.
<a href="#"><u>FENNEC</u></a> 12	4:15 PM - 4:50 PM <b>FENNEC</b> Dr. Andrew Davis	<b>Flight Emulation with Neural Networks for Event Characterization</b> Using data from a small RC helicopter, the project will use neural networks to develop a simulation model and predict traditional flight coefficients.
<a href="#"><u>R&amp;D</u></a> 13	5:00 PM - 5:35 PM <b>R&amp;D</b> Dr. Darryl Low	<b>Reconnaissance and Disruption for Facultative Lagoon Rehabilitation</b> Project will provide two autonomous boats, a small one for mapping lagoons and a large one for disruption of the dense sludge blanket of the lagoon.