

Senior Design Presentation Schedule

May 2, 2025

[Click on the Live Link to attend virtually.](#)

Live Link & Session #	Start/End Faculty Advisor	Project Description
SAUWW 1	8:00 AM - 8:35 AM SAUWW Dr. Ezequiel Pessoa	Submerged Arc Underwater Wet Welding second year project will develop a flux that increases arc stability, decreases cooling rate, and improves weld bead geometry, using the Kielhorn underwater welding tank.
SAE Baja 2	8:45 AM - 9:20 AM SAE Baja Prof. Jeff Johnson	SAE Baja – Renegade Racing Project will design, document, fabricate, and test an original single-seat, four-wheel-drive off-road vehicle that meets the stringent SAE specifications for competition at Baja SAE Arizona, May 2025.
FENNEC 3	9:30 AM - 10:05 AM FENNEC Dr. Andrew Davis	Flight Emulation with Neural Networks for Event Characterization second year project will use RC helicopter actual flight data to create a machine learning model to predict real-time estimates of the center of gravity.
STARS 4	10:15 AM - 10:50 PM STARS Dr. Nathan Green	Starlink Tracking Antenna Reference System second year project will continue to design, build, and test a system to track Starlink and other satellites across the sky and capture their live-sky signals for processing.
LeJAM 5	11:00 AM - 11:35 AM LeJAM Dr. Hoo Kim	LeTourneau Jubilee Air Mission will deliver a functional UAV platform that is capable of simulating electromagnetic (EM) effects as well as providing insights on the vulnerabilities of modern electronic systems under EM stress.
E-Gen 6	11:45 AM - 12:20 PM E-Gen Dr. Joonwan Kim	Project Electrogenesis is pursuing semiconductor fabrication at LETU, exploring feasibility of in-house development of high-quality semi-conductor devices through processes such as oxidation and photolithography.
LETREP25 7	12:45 PM - 1:20 PM LETREP25 Dr. Ko Sasaki	LeTourneau Rehabilitation Engineering Project 25 will develop a wearable sensor system to track a patient's lumbar range of motion (ROM) and accurately collect data at home during activities of daily living.
PASTEL 8	1:30 PM - 2:05 PM PASTEL Dr. Hanwan Jiang	Picturesque Art Studio to Elevate LeTourneau project will produce a detailed engineering design packet (drawings and reports) for a proposed studio arts building on the LeTourneau University campus.
ACME 9	2:15 PM - 2:50 PM ACME Dr. Kraig Warnemuende	Additive Construction Materials Experimentation multi-year project will refine the concrete 3D printer and perform experimentation on printing concrete materials while defining a QA/QC process.
OnTrack 10	3:00 PM - 3:35 PM OnTrack Dr. Yunus Salami	LETU Go-Kart Track Development second year project will develop two separate go-kart track designs, including a smaller, on-campus track designed for year-round use by students, staff, and faculty and other users.
LUNAR 11	3:45 PM - 4:20 PM LUNAR Dr. Chad File	LeTourneau University Nexus for Amateur Rocketry project will design, build and test a 2-stage rocket carrying a payload of golf balls as high as possible in the Argonia Cup competition in Kansas Spring 2025.
Combat Robotics 12	4:30 PM - 5:05 PM Combat Robotics Prof. Norm Reese	Combat Robotics will design, build, test, and compete with 1- and 3-lb combat robots, and host a local competition. Team will also design and construct a portable 12-ft arena, and an arena wall impact test system.
On PAR 13	5:15 PM - 5:50 PM On PAR Prof. John Tixier	Putting Aid Robot project is designing a pair of robots to capture putt balls, return them to the user, and track user's accuracy improvement. The first indoor prototype has been developed and tested.

Contact John Tixier (johntixier@letu.edu) for access to presentation recordings.