

Applied Engineering Club

Congratulations to the twelve out of thirty Applied Engineering Club teams that made it to the 2025 NJSTEAM Tank Challenge Regional. They will go to the next round of competition in March.

TEAM NAME	INVENTION	TEAM MEMBERS
Eco-Pods https://www.youtube.com/watch?v=xXiZnQNHOfc https://youtu.be/JdjYVoyfJBI?feature=shared	Eco-Pods An alternative biodegradable Eco-pod eliminates microplastic contamination of water.	Francesca Gusaf, Safiyya Chouhan, Taylor Lucyk, Ava McGrath Coach: Anika Patel
Shock Sleeve https://drive.google.com/file/d/1dPcXwlCvXEVu3s6nLpzbqPUreNp8hWTu/view?usp=sharing https://www.youtube.com/watch?v=algGHBDSDs4	Shock Sleeve A rechargeable electric stimulation and cryotherapy shoulder sleeve with various modes allows users to customize the therapy they need.	Jeremy Cohen, Neal Shrimali, Maanas Chinni, Ishaan Chakrabarty Mentor: Aaron Shefter
CaveSafe https://youtu.be/aYykhH6MNQ4	CaveSafe An emergency communication device	Jeremy Cohen, Neal Shrimali, Maanas Chinni, Ishaan Chakrabarty Mentor: Aaron Shefter
STEAMPIRE https://www.youtube.com/watch?v=1JwLNey1J04	STEMPIRE An educational interactive App targets youth to combat gender	Sophia Hsiao, Claire Symonds, Ella Cahill, Vashnie Udeshi, Julia Ye Coach: Maggie Zhao

	discrimination and boost female presence in the STEM field.	
DynaCharge https://www.youtube.com/watch?v=qNwysgRlnA0	DynaCharge Converts the rocking/swinging motion to electricity.	Oliver Ilin-Schneider. Jake Chudy, Benjamin Young. Michael Wagner Coach: Nathan Han
Filter Flow https://www.youtube.com/watch?v=PeA6dArYqb0	Filter Flow filters the harmful chemicals and PM2.5 generated from vape	Declan Costello, Kyle Lee, Keyan Farhang, Callum Murphy Coach: Aditya Rajesh
LIMESTARS https://drive.google.com/file/d/1ApllqXFQORs_Ph08_WG XKFaAwSWsQap_r/view?usp=sharing	LIMESTARS A sensor to monitor CO2 in water when limestone is added	Skyler Chun, Daniel Ryu, Bradley Chan, Aidan Han Mentor: Nathan Han
PlantQuench https://drive.google.com/file/d/18RqckO2ePox4kVFiq6O3tgYp-KJ-0O7I/view?usp=sharing	Auto Watering plant device	Alisa Kizis, Erin Margaret Cruz Mentor: Kiana Carroll
Eco mist https://www.youtube.com/watch?v=Dl7WjOXJ9t0	Smart real-time lawn watering system	Bo Polk, Ava Fontus, Sophia Cristaldi Mentor: Trevor Phillips
Osmosip https://drive.google.com/file/d/17HjExB4irj9fw1U0-Df2cjlDPJgZuuOQ/view?usp=sharing	Water bottle with PFAS filter	Kristin Adamiak, Katherine Keating RadhaPatel, Kieran Ozaydin Mentor: Maggie Zhou
Easy drone https://drive.google.com/file/d/1YUzQuPcJp_X_DyQRaJelsoeXZ0Wr-ya/view?usp=sharing	Food delivery drone	James Ryan, Daniel Hept, LucianoSaladino, Paul Hallowell Mentor:Mathias Nguyen-Van-Duong

VitaFlow https://drive.google.com/file/d/12lbZS7xAaTM7eMikfq_k1qiB5G83uQFh/view?usp=sharing	VitaFlow A novel, cost-effective, environmentally friendly, portable, self-powered IV delivery system with a constant flow rate regardless of the patient's position.	Elliott Yi, Ben Soung, Matias Levani, Aarav Motivala Mentor: Maggie Zhou
ViriTec https://www.youtube.com/watch?v=mE126G1v_LI Thoma Edison 1 https://youtu.be/4RVzzQLKRAY?si=aOvpS58BeR7btKX_NAI https://drive.google.com/drive/folders/1YNiPI22cgXCCgwwKGv3ZpnDnQdUvfrDH?usp=sharing	An advanced AI-powered automatic plant care and watering system.	Chris (Cheng Ze) Liang, Kaan Parlak