



Middle School Engineering Challenge Camp 2024

Co-Sponsored by:



The Service League of Morgantown

Monday

Time	Activity	Location	Instructor
8:30-9:00 am	Drop Off & Registration	ESB Atrium	Camp Coordinators
9:00-9:45 am	Camp Introductions & Icebreaker	ESB Courtyard	Counselors
9:45-10:15 am	Engineering 101 & Engineering Design Process	MRB 205/207	Counselors
10:15-11:00 am	Operation Skyfall: Parachute Challenge	MRB 205/207	Counselors
11:00-11:30 am	Lane Innovation Hub Tour	ESB G85	Counselors
11:30-12:00 pm	Secret Communication Investigation: Cipher Research	MRB 205/207	Counselors
12:00-12:30 pm	Lunch	ESB G39 Hallway	Counselors
12:30-1:00 pm	Sphero Maze Challenge	MRB Atrium	Counselors
1:00-1:45 pm	Unveiling Secrets: Invisible Ink Challenge	MRB 205/207	Counselors
1:45-2:30 pm	Gene Sleuths: DNA Extraction Adventure	MRB 205/207	Counselors
2:30-2:45 pm	Snack	ESB G39 Hallway	Counselors
2:45-3:15 pm	Cipher Quest: Cracking the Code	MRB 205/207	Counselors
3:15-4:15 pm	Intro to Spy Rescue Mission + Simple Machines	MRB 205/207	Counselors
4:15-5:00 pm	Stealth Mechanics: Spy Rescue Mission	MRB 205/207	Counselors
5:00 pm	Pick Up	ESB Atrium	Camp Coordinators

Tuesday

Time	Activity	Location	Instructor
8:30-9:00 am	Drop Off	ESB Atrium	Camp Coordinators
9:00-9:15 am	Icebreaker & Group Recap	ESB Courtyard	Counselors
9:15-10:15 am	Skyward Surveillance: Drone Challenge	MRB 205/207	Counselors
10:15-11:00 am	WVU Robotics Lab Tour with Dr. Gu	AERB	Counselors
11:00-12:00 pm	Intro to TinkerCAD: Sphero Chariot Challenge	MRB 249 (Computer Lab)	Counselors
12:00-12:30 pm	Lunch	ESB G39 Hallway	Counselors
12:30-1:45 pm	Finish TinkerCAD Designs/PlayDoh Prototypes	MRB 205/207	Counselors
1:45-2:30 pm	Gene Sleuths: DNA Extraction Adventure	MRB 205/207	Counselors
1:45-2:45 pm	Airborne Agents: Intro to Gliders	MRB 205/207	Counselors
2:45-3:00 pm	Snack	ESB G39 Hallway	Counselors
3:00-4:15 pm	Illumination Challenge: DIY Flashlight	MRB 205/207	Counselors
4:15-5:00 pm	Group Recap	MRB 205/207	Counselors
5:00 pm	Pick Up	ESB Atrium	Camp Coordinators

Wednesday

Time	Activity	Location	Instructor
8:30-9:00 am	Drop Off	ESB Atrium	Camp Coordinators
9:00-9:15 am	Icebreaker & Group Recap	ESB Courtyard	Counselors
9:15-10:30 am	Airborne Agents: Glider Design & Build	ESB G85 (LIH)	Counselors
10:30-11:30 am	Espionage in the Factory: Industrial Engineering Challenge	MRB 205/207	Counselors
11:30-12:00 pm	Covert Cinema: Spy Flick Intro	MRB 205/207	Counselors
12:00-12:30 pm	Lunch	ESB G39 Hallway	Counselors
12:30-2:00 pm	Sphero Chariot Design	MRB 205/207	Counselors
2:00-3:00 pm	Code Crackers: Intro to SCRATCH	MRB 205/207	Counselors
3:00-3:15 pm	Snack	ESB G39 Hallway	Counselors
3:15-4:00 pm	Chem Conundrum: Chemical Engineering Challenge	ESB G35 (Lab)	Counselors
4:00-4:45 pm	Airborne Agents: Glider Recon Mission	MRB 205/207	Counselors
4:45-5:00 pm	Group Recap	MRB 205/207	Counselors
5:00 pm	Pick Up	ESB Atrium	Camp Coordinators

Thursday

Time	Activity	Location	Instructor
8:30-9:00 am	Drop Off	ESB Atrium	Camp Coordinators
9:00-9:15 am	Icebreaker & Group Recap	ESB Courtyard	Counselors
9:15-10:30 am	Underground & Undercover: Mining Engineering Mineral Hunt	MRB 205/207	Counselors
10:30-11:00 am	Sphero Chariot Design Test	MRB Atrium	Counselors
11:00-12:00 pm	Covert Cinema: Spy Flick Production	MRB 205/207	Counselors
12:00-12:30 pm	Lunch	ESB G39 Hallway	Counselors
12:30-1:30 pm	Tunnel Infiltration: Civil Engineering Challenge – Round 1	MRB 205/207	Counselors
1:30-2:00 pm	Tunnel Infiltration: Brainstorming for Round 2	MRB 205/207	Counselors
2:00-2:20 pm	Snack	ESB G39 Hallway	Counselors
2:20-3:00 pm	Sphero Chariot Design – Round 2	MRB 205/207	Counselors
3:00-3:45 pm	Tunnel Infiltration: Round 2 Test	MRB 205/207	Counselors
3:45-4:45 pm	Covert Cinema: Spy Flick Production	MRB 205/207	Counselors
4:45-5:00 pm	Group Recap	MRB 205/207	Counselors
5:00 pm	Pick Up	ESB Atrium	Camp Coordinators

Friday

Time	Activity	Location	Instructor
8:30-9:00 am	Drop Off	ESB Atrium	Camp Coordinators
9:00-9:15 am	Icebreaker	ESB Courtyard	Counselors
9:15-10:30 am	Covert Cinema: Spy Flick Edits	MRB 205/207	Counselors
10:30-11:15 pm	Sphero Chariot Design – Round 2 Final Edits	MRB 205/207	Counselors
11:15-12:00 pm	Fingerprinting Forensics Challenge	MRB 205/207	Counselors
12:00-12:30 pm	Lunch	G39 Hallway	Counselors
12:30-1:15 pm	Covert Cinema: Movie Premieres	MRB 113	Counselors
1:15-2:00 pm	Stealthy Soundproofing Challenge	MRB 205/207	Counselors
2:00-3:00 pm	Sphero Chariots – Final Testing	MRB Atrium	Counselors
3:00-3:15 pm	Snack	G39 Hallway	Counselors
3:15-3:45 pm	Prepare for Presentations	MRB 205/207	Counselors
3:45-4:15	Judges Showcase	MRB 205/207	Counselors
4:15-4:45	Parent Showcase	MRB 113	Counselors
4:45-5:00	Presentation of Awards	MRB 113	Counselors
5:00	Pick Up	ESB Atrium	Camp Coordinators