



1st, 2nd, and 3rd Grade Engineering Challenge Camp



Cosponsored by:
 West Virginia University
 BENJAMIN M. STATLER COLLEGE OF
 ENGINEERING AND MINERAL RESOURCES

Monday

Time	Activity	Place	Led By
8:30-8:45 a.m.	Registration/Check In	ESB Atrium	Cate Schlobohm
9:00 a.m.	Welcome and Icebreaker	109 MRB	Counselors
9:10 a.m.	Introduction to Mechanical Engineering	109 MRB	Counselors
9:15 a.m.	<u>Cargo Plane</u> – Design a small plane to carry a payload with controlled landing	109 MRB	Counselors
10:45 a.m.	Snack/Break/Discussion	MRB Atrium	Counselors
11:00 a.m.	<u>Hydraulic Drawbridge</u> – Design and build your own hydraulic drawbridge	209 MRB	Counselors
12:30 p.m.	Pick Up	ESB Atrium	Counselors

Tuesday

Time	Activity	Place	Led By
8:30-8:45 a.m.	Registration/Check In	ESB Atrium	Cate Schlobohm
9:00 a.m.	Introduction to BioMedical/Chemical Engineering	G35	Counselors
9:10 a.m.	<u>Better Bones</u> – Build your own composite bone	G35	Counselors
10:00 a.m.	Icebreaker	G35	
10:10 a.m.	<u>Density Décor</u> -Create your own tabletop decoration by utilizing the densities of various liquids	G35	Counselors
11:00 a.m.	Snack/Break/Discussion	G39 Hallway	Counselors
11:10 a.m.	<u>Football Helmet Challenge</u> - Design a safer football helmet	109 MRB	Counselors
12:30 p.m.	Pick Up	ESB Atrium	Counselors

Wednesday

Time	Activity	Place	Led By
8:30-8:45 a.m.	Registration/Check In	ESB Atrium	Cate Schlobohm
9:00 a.m.	Welcome and Icebreaker	G35	Counselors
9:10 a.m.	Introduction to Civil Engineering	G35	Counselors
9:15 a.m.	<u>RollerCoaster Design</u> – Build a gravity propelled rollercoaster with limited materials	G35	Counselors
10:10 a.m.	<u>Super Structure</u> – Compete with other groups to design, build, and test the strongest bridge/arch	G35	Counselors
11:10 a.m.	Snack/Break/Discussion	G39 Hallway	Counselors
11:20 a.m.	<u>Storm Chaser</u> -Construct a quickly deployable structure to withstand high winds	105 MRB	Counselors
12:30 p.m.	Pick Up	ESB Atrium	Counselors

Thursday

Time	Activity	Place	Led By
8:30-8:45 a.m.	Registration/Check In	ESB Atrium	Cate Schlobohm
9:00 a.m.	Welcome and Icebreaker	105 MRB	Counselors
9:10 a.m.	Introduction to Electrical Engineering	105 MRB	Counselors
9:15 a.m.	<u>BristleBots</u> – Construct your own BristleBot	105 MRB	Counselors
10:10 a.m.	<u>Magnetic Marvel</u> – Design and build your own electromagnet	109 MRB	Counselors
11:00 a.m.	Snack/Break/Discussion	MRB Atrium	Counselors
11:10 a.m.	<u>Electric Car</u> -Construct your own battery powered car	209 MRB	Counselors
12:30 p.m.	Pick Up	ESB Atrium	Counselors

Friday

Time	Activity	Place	Led By
8:30-8:45 a.m.	Registration/Check In	ESB Atrium	Cate Schlobohm
9:00 a.m.	Welcome and Icebreaker	Atrium	Counselors
9:10 a.m.	Introduction to Mining/Industrial/PNG Engineering	Atrium	Counselors
9:15 a.m.	<u>Modular House</u> – In a group, create an assembly line and construct modular houses	Atrium	Counselors
10:45 a.m.	Snack/Break/Discussion	205 MRB	Counselors
11:00 a.m.	<u>Mining Company</u> –In groups, run a mining operation involving conservation, extraction, and reclamation	205 MRB	Counselors
12:30 p.m.	Pick Up	ESB Atrium	Counselors

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