

Seymour & Esther Padnos College of Engineering and Computing (PCEC)
K-12 Volunteer Opportunities

Event	Description	When	Volunteer Role	Contact	Location
STEPS Camp; for girls entering 7th grade (Science, Technology, & Engineering Preview Summer Camp)	Aviation themed activities revolve around construction of radio-controlled airplanes, physics of flying, fluids, and forces through robotics, aerodynamics, and engineering design. In addition; CAD, biomedical engineering, renewable energy, design & test, challenge course, field trips & fly night included.	Two four-day camp sessions held mid-June	Airplane construction: tails, fuselage, & wings. Multiple stations manned with 40 volunteers. Training provided.	GVSU-PCEC Sara Maas at (616) 331-6025 maassa@gvsu.edu	GVSU Pew Grand Rapids Campus; Kennedy Hall of Engineering
Engineering Week; Grades 3-7 @ Grand Rapids Public Museum (Open to Public Saturday)	Students explore various applications of math, engineering, problem solving, drawing, estimation, mechanics, & other concepts through fun, hands-on engineering activities.	Annually in February	Hands-on activity stations. Wed-Fri visiting students, Saturday general public. Training provided.	GVSU-PCEC Sara Maas at (616) 331-6025 maassa@gvsu.edu	Grand Rapids Public Museum
Math Counts; Middle School Competitions (Western Chapter)	A math enrichment, coaching, & competition program challenging students with a talent and passion for math. The program stimulates students to push themselves by making math achievement challenging, exciting, & prestigious.	Friday AM in February	Scoring competition tests. (8:00 AM - 12:30 PM)	Coordinator James Kirkwood (616) 364-8491 jkirkwood@preinnewhof.com	GVSU Pew Grand Rapids Campus; Eberhard Center
Science Olympiad; Michigan Region 12 Competitions; Kent & Ottawa County Middle & High School Division	Competitions consist of team events which students prepare for during the year. Events balance science disciplines of biology, earth science, chemistry, physics, & technology with knowledge of science concepts, process skills, and science applications.	Annually in March	Approximately 300 volunteers for specific competition events and general tasks.	GVSU-RMSC (616) 331-3031 gvsu.edu/mso-r12/	GVSU Allendale Campus; Fieldhouse
Junior Achievement of Michigan Great Lakes "Reverse Job Shadow"	Bringing the workplace to middle school students, volunteers from the business world give presentations on career opportunities, education & training needed. Provides relevance & application to every day classes.	Academic School Year	Career Representative	Junior Achievement of the Michigan Great Lakes® 3351 Claystone St. SE, Suite 201 Grand Rapids MI 49546 Phone: (616) 575-9080	Serves over 70 school districts in western Lower Peninsula and the Upper Peninsula
Career Fairs	High Schools and Middle Schools host career fairs asking for volunteers to speak about their careers.	Academic School Year	Career Representative	Local high schools & middle schools	Onsite at selected school
FIRST Lego League (FLL)	Introduce 4th-8th grade students to real-world engineering challenges. Learn critical thinking, team-building, & presentation skills through research challenges and the design, build & programming of robots. District tournaments November.	August to November season	Team Mentor or Competition Volunteer	Marcy VanEvery mavanevery@hotmail.com	West Michigan Districts
FIRST Tech Challenge (FTC)	Introduce middle school students to real-world engineering challenges. Apply math and science concepts with documentation and more advanced robot and challenge than FLL. District tournaments November/December.	August to December season	Team Mentor or Competition Volunteer	Ken Orzechowski ken.orzechowski@gmail.com	West Michigan Districts
FIRST Robotics Competition (FRC)	Introduce 9th-12th grade students to full engineering life cycle. Build a robot player with specific requirements & constrained resources. Develop skills in generating requirements, designing & prototyping, building & testing; mechanical, electrical, & software engineering; marketing, promotion, fundraising, & community involvement; teamwork, decision-making, problem-solving. Regional tournaments March, Championship event April, West-Michigan Invitational October.	Year round with build & competitions January to April season	Team Mentor or Competition Volunteer	West MI Regional; Ken Platteschorre Ken.Platteschorre@Haworth.com	West MI Regional Tournament; GVSU Allendale Campus Fieldhouse
				West-Michigan Invitational; Hilda Westrate usfirst@zps.org	West-Michigan Invitational; Zeeland Public High School
K-12 School STEM Initiatives	Introduce 7th-8th grade students to STEM opportunities. Exposure could be speakers, demonstrations, experiences, hands-on activity, etc.	Academic School Year	STEM Volunteer	GVSU-PCEC Sara Maas at (616) 331-6025 maassa@gvsu.edu	Onsite at selected schools or on campus