

PRESS RELEASE



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U.S. Army, Macomb Community College Offering Science-Technology-Engineering-Math Event to SE Michigan Students

- 1,500+ participating in *Robotics, Engineering and Technology Days Dec. 3-5*
- *Interactive displays overtaking Macomb Community College*

DETROIT ARSENAL, WARREN, Mich. – The U.S. Army’s Tank Automotive Research, Development and Engineering Center is partnering again with Macomb Community College to host the sixth annual **Robotics, Engineering and Technology Days** (RET Days) Dec. 3-5 at the college’s Sports & Expo Center (14500 E. 12 Mile Rd., Warren).

While closed to the general public, media are invited to attend RET Days and see the more than 1,500 pre-registered middle- and high-school students as they take part in a variety of challenging, hands-on displays.

During RET Days, these displays will open students’ eyes to new occupational possibilities:

- **LEGO Robots** -- The LEGO education program uses state-of-the-art materials from The Lego Group to get students interested in STEM concepts. During RET Days, students will do basic robotic programming teaching robots to navigate and take part in a “sumo” competition. More information on Lego Education is available at:

<http://www.legoeducation.us/eng/aboutUs/aboutUs.cfm>

- **Underwater Robots** – Inside a large pool, students will get a first-hand look at the field of Underwater Remotely Operated Vehicles. The deep-water demonstration comes courtesy of the Square One Education Network, which provides grant funding to schools and other K-12 learning environments enabling them to provide innovative, meaningful STEM programs. www.squareonenetwork.org

The poster for "Robotics, Engineering and Technology Days" features a blue background with a large, stylized title in yellow and black. Below the title, there is a list of activities and a schedule. A large image of a tracked robot is shown on the right side. At the bottom, there are logos for the participating organizations: Macomb Community College, MIA, Lawrence Tech, and the Center for Advanced Automotive Technology. The text at the bottom of the poster reads: "The event is geared toward grades 6-12 and is open to all students who are U.S. citizens. *Register by Friday, November 2, 2012."

Macomb Community College in collaboration with
Science, Technology, Engineering and Mathematics (STEM) partners presents:

ROBOTICS, ENGINEERING AND TECHNOLOGY DAYS

Learn about careers in
robotics and engineering

- Check out the latest trends for semi-autonomous robotics in action.
- Talk with leading experts in the fields of Robotics and Engineering.
- Watch robotic systems demonstrations.
- Program a robot and "battle" against students.
- Participate in a robot-program challenge.
- Discover opportunities in vehicle electrification and alternative fuels from design to manufacture to service.

Registration*
Information available at www.macomb.edu/RET

Where
Macomb Community College
Sports & Expo Center - Building P
14500 E 12 Mile Road Warren, MI 48088

When
Monday, Dec. 3
(11:30 a.m. - 2 p.m.)
Tuesday, Dec. 4
(8:30 - 11 a.m. and 11:30 a.m. - 2 p.m.)
Wednesday, Dec. 5
(8:30 - 11 a.m. and 11:30 a.m. - 2 p.m.)

The event is geared toward grades 6-12 and is open to all students who are U.S. citizens.
*Register by Friday, November 2, 2012.

Macomb Community College
MIA
Lawrence Tech
Center for Advanced Automotive Technology

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- **Hybrid Military Vehicle** – Students will get up close and personal with the Army’s renowned Clandestine Extended Range Vehicle. CERV demonstrates the very latest in hybrid-electric vehicle technology and military stealth. The prototype CERV was designed for quick-paced mobility operations such as reconnaissance, surveillance and target designation. CERV pairs an advanced all-wheel-drive diesel hybrid-electric powertrain with a light-weight chassis to produce a torque rating that exceeds 5,000 foot-pounds. The unit can maintain speeds of 80 miles per hour and climb 60 percent grades – all while reducing fuel consumption by up to 25 percent compared with conventional vehicles of comparable size.
- **Operational Robots** – Students will have chance to operate some of the same robots being used today by Soldiers and first responders.
- **EV Auto** – Students will learn about different types of electric vehicles and batteries and oversee the different components of a model electric vehicle along with some participating in a model vehicle race.
- **Renewable Energy** – Students will have the opportunity to examine four renewable energy technologies – biofuel, wind, solar and hydrogen fuel cells. Students also will observe a practical application demonstration using solar thermal energy.



Robots are prepping for RET Days at the Detroit Arsenal.

“The Army, Macomb Community College and our industry partners are all committed to strengthening the nation’s STEM skill set” explains TARDEC’s Derhun Sanders, Communications and Outreach director. “What is challenging to us is that many students don’t know fact from fiction about being a scientist or engineer. To them, science and math are not seen as doorways to possible careers, but as difficult subjects that bring hours of homework.”

“RET Days provides middle and high school students the opportunity to engage in meaningful ways with the practical applications of science, technology, engineering and math,” says Joseph Petrosky, dean, Engineering and Advanced Technology, Macomb Community College. “Macomb sees this partnership with TARDEC and industry partners not only as a way to help create interest in career areas of promise for young people, but as a benefit to our community by building a local workforce that supports economic vitality.”

Media is welcome to attend but must RSVP. Please contact either ...

- John Wray – TARDEC (via contract): 248.310.7231
- Tish Wirth – Macomb Community College 586.445.7560

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PRESS RELEASE



ABOUT TARDEC

Headquartered at the U.S. Army Detroit Arsenal in Warren, Mich., TARDEC is a major research, development and engineering center for the Army Materiel Command's Research, Development and Engineering Command and an enterprise partner in the TACOM Life Cycle Management Command. TARDEC is the Nation's laboratory for advanced military automotive technology and serves as the Ground Systems Integrator for all Department of Defense (DOD) manned and unmanned ground vehicle systems. With roots dating back to the World War II era, TARDEC is a full life-cycle, systems engineering support provider-of-first-choice for all DOD ground combat and combat support weapons, equipment and vehicle systems. TARDEC develops and integrates the right technology solutions to improve Current Force effectiveness and provides superior capabilities for Future Force integration. TARDEC's technical, scientific and engineering staff lead cutting-edge research and development in Ground Systems Survivability; Power and Mobility; Ground Vehicle Robotics; Force Projection; and Vehicle Electronics and Architecture.

www.tardec.army.mil

ABOUT MACOMB COMMUNITY COLLEGE

Macomb Community College is one of the nation's leading community colleges, providing learning experiences to nearly 48,000 students annually. Macomb nationally ranks among the top 25 awarders of associate degrees and as the largest grantor of associate degrees in Michigan. The college's comprehensive educational programming includes pre-collegiate experiences, university transfer and career preparation programs, bachelor degree completion and graduate degree programs, workforce training, professional education and certification, and continuing education and enrichment opportunities.

www.macomb.edu

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