

## SAE International to Conduct Courses on Engineers' Professional Development

SAE International will offer four new professional development courses in conjunction with the SAE 2013 World Congress & Exhibition.

The courses will be held Monday-Friday, April 15-19 from 8:30 a.m. to 4:30 p.m. at the Marriott Renaissance Center in Detroit.

The courses include one titled, "Robust Design." At this course, engineers will be taught to create designs that meet customer specifications. When creating these designs, the focus is usually on the nominal values rather than variation. Robustness refers to creating designs that are insensitive to variability in the inputs.

Much of the literature on robustness is dedicated to experimental techniques, particularly Taguchi techniques, which advocate using experiments with replications to estimate variation.

This course presents mathematical formulas based on derivatives to determine system variation based on input variation and knowledge of the engineering function. If the function is unknown, experimental techniques are presented to efficiently estimate a function.

At the "Corrosion Engineering and Prevention" course, attendees will learn about the transportation industry, including motor vehicles, aircraft, rail, marine, commercial, off-road and defense vehicles, as well as infrastructures, energy sectors, raw materials, manufacturing, health and food industries, all of which experience significant issues with corrosion that results in billions of dollars of loss each year.

Corrosion education and prevention is essential to improve and increase the service life of parts and components, which may have a significant impact on the economy of various industries and nations.

The focus of this course will be on the fundamentals of corrosion engineering and corrosion prevention of metallic and alloy structures, as well as on non-metallic composites and hybrid materials.

Recent challenges and opportunities in corrosion of advanced composites used in the automotive, aerospace, and marine industries, as well as for underground structures for oil, gas, geothermal and tidal wave technologies, will also be included.

There also will be a course on "Applying Automotive EDR Data to Traffic Crash Reconstruction." EDRs are not new, but are becoming more prevalent in part due to a new federal regulation. 49 CFR, Part 563, which affects vehicles

produced after Sept. 30, 2012, will result in a standardized and publicly available EDR in 90 percent of new vehicles.

Accident Reconstructionists frequently have trouble reconciling EDR data with other data sources, and improvements in ABS technology result in fewer tire marks visible at the scene of crashes to allow calculation of pre-crash speeds without an EDR.

This course will provide the participant with the skills necessary to analyze EDR data that has already been imaged, apply it to crash reconstruction, and reconcile it with calculations using other data sources.

The course will enable the participant to analyze any current and future EDR data set without

regard to manufacturer.

Another course is titled, "High-Performance Differentials, Axles and Drivelines." Every automobile has a differential and most have axles, yet the exact function of these is not common knowledge. This comprehensive seminar introduces participants to the function and interfaces of axles and their individual components. As we modify cars for street performance or all-out race applications, it is important to know the trade-offs in the drivetrain system.

For more information, contact SAE Customer Service at: 1-877-606-7323 (U.S. and Canada only) or 1-724-776-4970 (outside U.S. and Canada), or by email at customerservice@sae.org.

## \$4.00 BUFFET ALL YOU CAN EAT!



• PIZZA • SALADS • PASTAS • DESSERTS  
**MON. THRU FRI. 11:30 AM-1 PM**  
 31315 VAN DYKE (Just North of Chicago Rd) 586-979-0405  
 - PLEASE MENTION AD FOR BUFFET SPECIAL -

Up to Two People  
 Drinks  
 Not Included

**WE CATER**  
**ORDERS OF \$50 OR MORE**  
**PLACE ORDERS**  
**24 HOURS IN ADVANCE**  
 FOR FASTER SERVICE (2280 E. 14 MILE) 586-979-8080



## ED RINKE CHEVROLET BUICK GMC

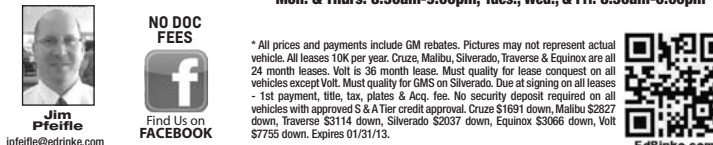


**YOUR CHOICE \$69\***  
**24 MO. LEASE\*/10K PER YEAR**

**GM Select Card Members**  
**Top Off Up To \$3,000\***

<p><b>2012 CRUZE LS</b>            No GMS Required  <b>\$13,827*</b></p>	<p><b>2013 MALIBU LS</b>            No GMS Required  <b>\$19,786*</b></p>
<p><b>2013 EQUINOX LS</b>            No GMS Required  <b>\$20,995*</b></p>	<p><b>2013 TRAVERSE LS</b>            No GMS Required  <b>\$25,995*</b></p>
<p><b>2013 SILVERADO 1LT</b>  <b>\$24,106*</b></p>	<p><b>2013 VOLT</b>            36 MO. LEASE            No GMS Required  <b>\$34,254*</b>            0% for 72 mo.</p>

See us for your GM employee purchases.  
**1-877-451-7707**  
 26125 Van Dyke at 10 1/2 Mile Rd.  
 Visit our website: [edrinke.com](http://edrinke.com)  
**SHOWROOM HOURS:**  
 Mon. & Thurs. 8:30am-9:00pm; Tues., Wed., & Fri. 8:30am-6:00pm



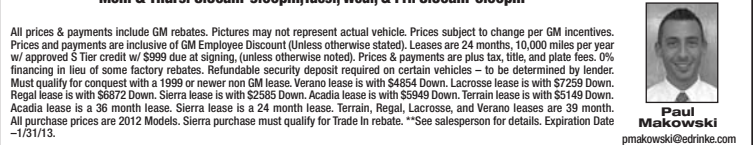
**ED RINKE** • FAST • FRIENDLY • DISCOUNTS  
**GM SERVICE CENTER**  
 MICHIGAN'S LARGEST  
 •SERVICE DEPT. •PARTS •BODY SHOP  
**866-452-1547**  
 26125 Van Dyke @ 10 1/2 Mile  
 Center Line, MI 48015  
**SERVICE HOURS:** Monday & Thursday 6:30am-9:00pm; Tuesday, Wednesday & Friday 6:30am-6:00pm • Shuttle at 6:30am - Pick-up Both Ways • All Day starting at 6:30am.

**GMC EXPERIENCE BUICK ((XM))**  
**Special 24 Month Leases**  
 2 Years of Onstar Directions & Connections  
 2 Years of SiriusXM Radio • 2 Years of Maintenance

**YOUR CHOICE \$69\***  
**LEASE FOR**

<p><b>VERANO</b>            GM EMPLOYEE PRICE  <b>\$20,735*</b></p>	<p><b>REGAL</b>            GM EMPLOYEE PRICE  <b>\$22,450*</b></p>
<p><b>LACROSSE</b>            GM EMPLOYEE PRICE  <b>\$23,625*</b></p>	<p><b>SIERRA 1500 EXT CAB</b>            GM EMPLOYEE PRICE  <b>\$16,845*</b></p>
<p><b>ACADIA</b>            GM EMPLOYEE PRICE  <b>\$25,965*</b></p>	<p><b>TERRAIN</b>            GM EMPLOYEE PRICE  <b>\$20,530*</b></p>

See us for your GM employee purchases.  
**1-866-452-1300**  
 24231 Van Dyke at 9 1/2 Mile Rd.  
 Visit our website: [edrinke.com](http://edrinke.com)  
**SHOWROOM HOURS:**  
 Mon. & Thurs. 8:30am-9:00pm; Tues., Wed., & Fri. 8:30am-6:00pm



**Quick Oil Change EXPRESS LANE**  
**LUBE OIL FILTER \$23.95**  
 Up to 5 qts.  
 Fluid Level, Brake & Alignment Check Included.  
 We use Genuine GM Oil & Filter  
 No additional or hidden charges.  
 Out the door pricing.  
 Open Mondays & Thursdays until 8:30pm  
 Excludes synthetic, Diesel & Med. Duty Trucks.  
 Most GM cars & trucks. One coupon per customer. Must present coupon with order. Plus tax. Expires 1-31-13.

**BODY SHOP**  
 586-754-7000 ext 1231  
**INSURANCE WRECK AMENDED**  
**TRANSPORTATION AVAILABLE**  
 During Scheduled Repairs  
**FREE OIL CHANGE**  
 With Each Major Repair

**\$\$\$WANTED\$\$\$**  
**Automobile Service Manuals**  
*Any Years, Auto Memorabilia, Auto Dealership Items Ect..., Car Parts from 1940 thru 1975.*  
 Call  
**586-215-1737**

**HOT! HOT! HOT!**  
**I.T. PROFESSIONALS NEEDED**  
 Contract, Contract to Hire and Direct Placement Sponsorship Available  
 Contact Mark Harrison  
**248-761-3851**  
[MarkH@itworksintl.com](mailto:MarkH@itworksintl.com)