



MECHANICAL ENGINEERING NEWS

January 24, 2006

A newsletter for the UML Mechanical Engineering community (also available online at <http://mechanical.uml.edu>)

Contact john_mckelliget@uml.edu with any items you would like to see included in the newsletter

Calendar

Jan 27	Ice skating at Tsongas Arena, 2.00-4.30
Feb 3	Deadline for Order of the Engineer signup
Feb 6	End Add-Drop
Feb 20	University closed
Feb 21	Monday schedule
Feb 23	Order of the Engineer Induction
Mar 1	Deadline to sign up for FE exam
Apr 16	FE Exam

Errata

The last newsletter gave incorrect deadlines for registration for the FE exam. Please see calendar above.

New Website.

The university has standardized the format and appearance of its Websites. At some point within the next couple of weeks a new ME Website will be available at mechanical.uml.edu. The old Web site will continue to be available at m-5.uml.edu. The new site is very much a work-in-progress, and needs a lot of work done to it – so please be patient!

Order of the Engineer

Seniors and graduate students are urged to go to the Dean's office and sign up for the Order of the Engineer Induction Ceremony (deadline February 3). The induction ceremony will be held on February 23, during Engineer's Week. Participation in the ceremony, and taking of the engineer's oath, is a recognition of the ethical responsibility of engineers. You will receive an iron "engineer's ring". You can bring your loved ones, and we will feed you. There is a \$10 fee for the ring

Electric Transportation

On November 29, 2005 the Office of University Advancement and the College of Management hosted a seminar by Peter Hughes (ECE'72) VP of Technology for Vectrix USA. Peter described a "zero

emission" electric motor scooter. Motorized scooters are a popular form of town and city travel in Europe. Although Vectrix is a US company, they will initially be manufacturing the vehicle in Poland and targeting the European market. There are, however, plans to introduce the scooter into the US and to manufacture in New Bedford MA. The scooter runs on a battery that can be partially recharged during braking. Peter bought a scooter with him and Matt Massey tried it out in the parking lot. For more information go to www.vectrixusa.com.



The Vectrix maxi-scooter is fun to ride and easy to operate. Its top speed of 62 mph (100 km/h) and fast acceleration make it safe and easy to zip in and out of traffic. The onboard charger plugs into any standard electrical outlet to quickly charge the batteries, which provide up to 70 miles (110 km) of travel on a single charge. A low center of gravity and stiff frame provide excellent handling, and the multi-function throttle allows riders to accelerate and slow down with a simple twist of the throttle.

Does anyone know the difference between a motor scooter and a motorbike?

Combined BS/MS Program

If you are a junior or a senior with >3.0 cumulative GPA you are encouraged to apply for the combined BS/MS program. Upon completion of this program you end up with both a BS and an MS in mechanical engineering. In this program you typically take 6 credits of graduate courses in your senior year and (with grades of B or better) you can count these 6 credits toward *both* the BS (as tech electives) and the MS degree. You *can* take more graduate courses in



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your senior year, but only 6 credits can count toward both degrees.

The MS degree in mechanical engineering at UML has both thesis and non-thesis options. If you are on the thesis option you stand a good chance of being awarded a 1/2 Teaching Assistantship (TA). The stipend for a 1/2 TA is typically \$6000 - \$7000 per year + full tuition and fee remission. 1/2 TAs are committed to 9 hours/week teaching during the semesters. The professor who is directing your research might also be able to add a 1/2 Research Assistantship (RA) to this stipend. The stipend for RAs is the same as for TAs, but RAs have no teaching responsibilities.

If you apply to the BSMS program you do not have to take the Graduate Record Exam (GRE), and you do not have to pay the application fee. Note that you do not have to complete the MS degree in order to get the BS degree. We strongly urge all eligible students to apply. You commit yourself to nothing by applying and being accepted into the program, but it will widen your options upon graduation. Once you graduate it will be too late to apply. Application is made through the graduate school Website.

New Interdisciplinary Service-Learning Courses

The College of Engineering now has three new one-credit courses for interdisciplinary projects in service-learning. The courses are primarily intended for sophomore, junior, and senior level project work in service-learning. You *can* combine two of the courses in the same year, however. Completion of all three courses can qualify as an ME technical elective. There is also an interdisciplinary service-learning capstone design course that you can do in place of the usual ME capstone design course. Talk to Prof. Duffy for more details.

New Engineering Project Courses

The mechanical engineering department has set up three new one-credit courses for undergraduate engineering projects. These projects are done under the supervision of a faculty member. Acceptable project work could include club-based activities (such as SAE) or undergraduate work in a graduate

lab. Completion of all three courses could count as a technical elective.

Community Engineering Project 1 (1 cr)	25.200
Community Engineering Project 2 (1 cr)	25.300
Community Engineering Project 3 (1 cr)	25.400
Engineering Capstone Design (3 cr)	25.401

Engineering Project 1 (1 cr)	22.200
Engineering Project 2 (1 cr)	22.300
Engineering Project 3 (1 cr)	22.400

A Special Christmas Present

Nels Wirkkala (ME '05, currently grad student in the Modal Lab) and his wife Karen have a new addition to their lives. They wanted to share the news of their daughter's birth, Annika Elizabeth! She was born at 8:39 pm on Tuesday, December 13th. Now that's a special stocking stuffer for sure. Congratulations!



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MECHANICAL
ENGINEERING

University of Massachusetts at Lowell