WINTER CARNIVAL: What we love the most

The theme of this year's Winter Carnival was "What we love the most from Coast to Coast." The snow statues adorning the campus depicted a McDonald's restaurant, a Harley motorcycle, a zoo, a circus, and many more. But it seems what we love the most was, after all, the winter carnival itself. It brought out the best in the MEEM department.

(Photocaptions, clockwise from the top)
- Jim Mattson, Academic Advisor, and Margaret Lassperger, Manager of Computer User Support, as classical "Houghton Gothic".
- The fabulous members of FAB (MEEM first-year advisory board) at their first ever snow statue building.
- Andy Pastula, secretary of FAB, mixing up a red slash for colorful lettering.
- Jerry Don, Lab Supervisor, with his ultra secret acrylonitrile torch ice sculpturing tool (first ever at Tech, we believe).
- The 1957 Chevy pickup truck which was built by the FAB and which won 4th place in class 2.
- The MEEM faculty, staff, and families with their snow statue of the UP, which won 4th place in its class.

(Foto's courtesy of Peck Cho)

FAB Corner

By Nicholas Link

The First-Year Advisory Board had a great time last week with many fun filled events. As shown in the above photo, we kicked the week off with a meeting with Les Cook, Vice-Provost & Dean of Student Affairs, and Bonnie Gorman, Associate Dean & Director of First Year Programs.

We discussed many issues that first-year students are concerned with and the deans were glad to hear our feedback. Thanks to all of you who placed comments in our suggestion boxes. Your comments helped us direct our efforts.

For winter carnival FAB constructed a snow sculpture of a 1957 Chevy pick-up truck. We won fourth place in class 2 all-nighters—an excellent achievement considering it was our first try ever! We enjoyed pizzas and pop and had a great time. Thank you to all who helped and helped us with supplies.

If you are missing anything, see James Zimmermann jrzimme@mtu.edu

MY FAVORITE CLASS:

"The Foundation" - Statics

By Drew Even

My interviewee this week was Laura Koning, a junior ME student from Capac, Michigan. When Laura isn't studying for her classes, you can find her involved on the student leader for this year's Future Truck Competition, and preparing an informational booth as the world congress chairperson for SAE. In her free time, Laura enjoys snowboarding, brommel and other intramural sports.

I asked Laura what her favorite class was throughout her time here at Tech. Laura really enjoys the Future Truck Enterprise program, but she also liked Engineering Statics (MEEM 2110). For those unfamiliar with the class, Statics is concerned with principles of equilibrium regarding two and three dimensional force systems.

Laura took Statics last semester under the instruction of Dr. Carl Vilman. "The class size was very large, filling up all of the Distance Learning Center. For each class we would have a lecture on the theory, then somewhere around 2-4 problems that he solved and asked us questions about."

It was easy to fall behind copying down the solution, but I quickly realized how essential they were in understanding the analysis techniques." Laura pointed out that the majority of the material in the class was straightforward; the workload was reasonable and consistent with the material covered in lecture.

She also noted that all of the concepts from Statics are built heavily upon in her current classes.

"Probably the most significant concept in the class is the addition of friction to the sometimes oversimplified free body diagrams."

From that point on, I always find myself wondering whether friction is truly "negligible," and how much I am sacrificing in assuming such things."

Laura noted that besides developing equations for moments of inertia, there really weren't any equations to memorize. "All of the analysis came down to whether or not you had practiced drawing free body diagrams."

Statics is a class that relies on understanding the big picture, not the minute details. Laura had quite a few good remarks regarding the outside of class help that Dr. Vilman offered to students. She added that he was very helpful giving help to confused students and was willing to take a few minutes out of his schedule to help on a homework problem.

The final note that Laura left me with was that Statics had changed her perspective on certain things. "When I look at the world around me, I can't help but think of the concepts that I've learned so far. I think that Statics is the foundation for almost all Mechanical Engineers, and I am proud to say that I've enjoyed the class."
FACULTY PROFILE:

Madhu Vable

By Eric Lobinewicz

A camper, swimmer, soccerball player, bridge fanatic, and excellent teacher, Professor Madhukar (Madhu) Vable is all of these and so much more. There is an energy that excites and challenges students when he teaches.

"One of the greatest benefits of being a teacher [here at Michigan Tech] is working with such high caliber students and interacting with them. Seeing them exceed beyond their and my expectations," quoted Professor Vable when asked what he loves most about teaching. Some of the "fruits of teaching" that Professor Vable enjoys include removing possible barriers in thinking and that the interaction with students constantly gives him a new perspective on old problems.

After moving out on the east coast for some years, Madhu had a choice between working in San Francisco or teaching at Michigan Tech. Why would anyone choose here over sunny California?

The answer to that is three-fold. He had studied and lived in family and after living on the east coast for several years, the big city life was not what he wanted to go back to. He also wanted to live in a place where he and his wife could both work. His wife is currently chair and professor for the chemistry department at Tech. Vable also really likes the mix of recreation and professionalism that Michigan Tech and the surrounding area has to offer.

As for the winters up here, Madhu enjoys the natural beauty of the area but...come March I begin to question my sanity, although by June or July I have forgotten about March already.

Another reason Madhu enjoys Tech so much is that, "The pressures that come onto you are your own," there are no big city distractions here in Houghton.

Madhu is also an avid traveler, making many trips with his family to India, his home country, and they often stop in Europe when they get the chance. His experiences here and throughout Europe, he really pushes that "every student should take advantage of the opportunity if they can. It's where your expected norms don't matter -- even if it's only to Canada or Mexico it is a very helpful experience."

Currently Madhu is working on a program called "BEAMUP...to automate stress analysis for two-dimensional problems." He has also written one book in Mechanics of Materials that is used at Tech and will have a test for the Intermediate course soon. To find out more about Dr. Vable, check out his site at www.mtu.edu/~mvalve.

ENTERPRISE UPDATE:

Robotic Systems Enterprise

By Hwa Kim

Want to learn how to work with students from other disciplines? Want to learn how to operate systems and robots? Want to learn to work as a team of different disciplines and take active roles? In fact, RSE is comprised of a team of ME, EE, GENERAL ENG, BME students and more!

RSE has 2 divisions -- Competition and ISP (Industry and Project). Major components of the competition division are participation in FIRST Lego League and the FIRST Robotics Competition. The purpose of these competitions is to promote the interest of elementary and high school students in math, science and technology.

The teams have been doing great. They made it to the championship last year. This year, the competition division focuses on the education of the upcoming generation and ISP works on projects that have potential use in society. So far, ISP successfully built and ran the Grab-a-Rowe machine that makes grilled cheese sandwiches by simply pushing a button. It was up and running for Spring Break last year.

Brickbot is the first Artificial Intelligence machine that ISP has built. It is a robotic arm that can manipulate Lego blocks -- bricks, to build a structure according to the map that has been coded into the system. ISP is also building a Demonbot, a demonstration robot, and developing a new project for the food industry.

Robotics requires knowledge from both ME and EE. So how do ME students in RSE feel about working with students from different disciplines? "They're okay" Andy Zobor, BSEIE and EE graduate student, laughed. "It helps to figure out what you really want to do because you are learning not only ME, but other sides, too." David Mathers, senior ME major, said after working with students from other majors, "I have more respect towards them."

RSE is growing and needs more people to work on developing projects. When Jonathan Branson, freshmen ME major, was asked if he would recommend RSE to other ME students, he responded, "Of course it will. It fills gaps." He added, "You learn many things in the class and apply these right away without going on co-op. This is a great experience."

RSE meets every Wednesday at 7pm on even numbered weeks in Dimlan 202. For more information on RSE, visit www.engineer.mtu.edu/robotics

If you want your Enterprise featured in the ME Newsletter, please email Hwa Kim at hkim@mtu.edu

STUDENT SUCCESS CENTER

By Danise Jarney

You could join one of our many organizations like: American Society of Mechanical Engineers (ASME), Society of Automotive Engineers (SAE), or Women Engineers (SWE) to name a few, or become a member of an Enterprise team, to move on in our students are deciding to study

Academic and Professional Organizations

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<th>Academic/Professional Org</th>
<th>Faculty Advisor</th>
<th>Student Contact</th>
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<tr>
<td>Alpha Society</td>
<td>Dr. M. Cho</td>
<td>Dr. M. Misson (dimission)</td>
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<td>American Indian &amp; Engg. Soc.</td>
<td>Dr. S. D'Souza</td>
<td>Henele Hiner (thiner)</td>
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<td>Am. Soc. of Mechanical Engineers</td>
<td>Dr. M. McKimpton</td>
<td>Mr. Morris (morrison)</td>
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<td>Entrepreneurs &amp; Investments Club</td>
<td>Dr. K. S. Isheng</td>
<td>Thomas Hogan (khoogan)</td>
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<td>National Soc. of Black Engineers</td>
<td>Dr. P. Cho</td>
<td>Dr. Robinette (drobinet)</td>
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<td>Pi Tau Sigma</td>
<td>Dr. C. Anderson</td>
<td>Dr. Jeff Schull (jillschul)</td>
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<td>Society of Automotive Engineers</td>
<td>Dr. J. B. Trefton</td>
<td>Dr. B. Harnett (b.harnett)</td>
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<td>Aero Club</td>
<td>Formular Car</td>
<td>Dr. Josh Lousky (<a href="mailto:jloesky@mtu.edu">jloesky@mtu.edu</a>)</td>
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<td>Clean Snowmobile Challenge</td>
<td>Furr Yuck</td>
<td>Dr. B. Harnett (b.harnett)</td>
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<td>Mini Baja</td>
<td>Formula Car</td>
<td>Dr. B. Harnett (b.harnett)</td>
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<td>Society for Experimental Mechanics</td>
<td>Dr. J. Ligon</td>
<td>Dr. G. Parker (<a href="mailto:gparker@mtu.edu">gparker@mtu.edu</a>)</td>
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<tr>
<td>Society of Manufacturing Engineers</td>
<td>Dr. S. Anderson</td>
<td>Dr. H. Holsten (hholsten)</td>
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<tr>
<td>Tau Beta Pi</td>
<td>Dr. N. Hutter</td>
<td>Dr. J. Hutto (<a href="mailto:jhutto@mtu.edu">jhutto@mtu.edu</a>)</td>
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Secondary organizations for ME students:


Academic Professional Org

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<th>Did you know...</th>
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<td>that the ME student Chris Conner is one of the top scorers in NCAA Division I hockey? Fan voting to select the Top 10 finalists for the Hobey Baker Award runs from Jan. 20 – Mar. 7 at <a href="http://www.hobeybaker.com">www.hobeybaker.com</a></td>
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<td>that Dr. L. Brad King just received a prestigious National Science Foundation Career Award? The title of the research is &quot;Electron Fluid Dynamics in a Hall-effect Accelerator&quot;, with a total project value of $602,000</td>
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Pi Tau Sigma Engineering Fraternity

Honorary Mechanical Engineering Fraternity

The following Pi Tau Sigma members are volunteering as Student Success Center coaches. They assist other students with understanding core courses in engineering, such as statics, dynamics, strength of materials, and thermodynamics.

- John Osborne
- Chris Thompson
- William Ulrich
- Blake Fecteau
- Scott Baldwin
- Jerry Anderson
- Stuart Mclver
- Jacob Stack
- Michael Stuckman
- Zach Gay

You all have the ability to be successful here, or you would not have been accepted. But, having the ability is only a part of what it takes. The following quote from Lao Tzu tells us the rest of the story.

"Ability is what you are capable of doing. Motivation determines what you do. Attitude determines how well you do it."

I hope that you all embrace this philosophy and make the most of your career at MITU.