

## Nick Reitter Reminisces about the Electromechanical Engineering Technology Program at Alfred State College

I joined the EET department and became associated with the EMET program in the Fall of 1991. Previously I taught at the Vocational School in Wellsville. I taught in the Electromechanical Systems Mechanic curriculum. The course topics there were similar to the EMET program. The difference being that there we were concerned with understanding and trouble shooting the equipment while here we were involved with the design. I left behind fine faculty members like Ray Jordan, Bob Selden, Bill Zacher, Lefty Miller and Arlen Smith.

Gene Staiger was the EET department chair when I arrived. I was excited to work with Al Cocchetto in the EMET program. Other department members were Bob Rees, Rick Hardman, Don Weimann, Klaus Wersig, Dick Hand and Ron Ellis. The labs and offices for the EET department were on the 4<sup>th</sup> floor and Al along with the EMET program were on the 3<sup>rd</sup> floor. The mechanical department also inhabited the 3<sup>rd</sup> floor. (Who can forget Room 363 ?) You could sense the “friction” between the 3<sup>rd</sup> and the 4<sup>th</sup> floor. As time went on, this was “lubricated” and eventually disappeared.

Al was the Intel 8085 microcontroller expert. This was the heart of all the projects the students made. I recall many, many times students meeting with Al as he patiently discussed and made diagrams explaining the intricacies of their project. Al had that wonderful ability to relate to the student and explain the details of the microcontroller in a manner that would make sense to them. Al was also the faculty advisor for the student section of the SME, Society of Manufacturing Engineering. He was instrumental in taking the students on many industrial tours. Some of the companies visited were Cummings Engine in Jamestown, Chevy Tonawanda, Moag, Hardinge Brothers and Toshiba Horseheads.

In the middle 1990s, the SME sponsored several student competitions. The Mountain Goat competition challenged the students to design a motor driven vehicle to climb up and over a mountain constructed of ¼ inch screen. Another competition required the students to construct a vehicle that raced 30 feet down a board with a slot in the middle. The Technobot Challenge was a day long event that required the students to modify a radio controlled, RC, truck. Twelve teams of students took part in the competition that consisted of six events. Each event paired off two vehicles in challenges like: Sumo wrestling, an obstacle course, drag racing and a “see saw”.

Room 363, a lot more than just a lab. This was where students would go and just “hang out”. Do home work, talk, use the computers to do “whatever” or have their lunch. There were large benches along the windows that provided a lot of room to spread out. Many students really liked this. Quite a few took advantage of the room and did their BS project there. Carl DelSavio built his automated windshield wiper system, Marcie Ellis constructed the control system for the hydraulic robot controlled with Visual Basic and Jeff Williamson did his data acquisition system for the forces on his jeep’s hitch just to mention a few. The store room in 363 was a wealth of hard to find parts for the projects.

It was not uncommon for students to spend the night here, even before there was a sofa. A WEB cam was placed in the front of the lab. This was used to “check in” on the lab activities. It was also used by parents and students. I’ll never forget one time I “looked” at the lab about 11:00 PM and there was a piece of paper hanging in front of the lens that said, “Hi Mr. R.” The cleaning lady  
over

"took care" of the stalwart students and became their "mum". Room 363 was used for the last time in the spring of 2004. The building rehab finally caught up. The entire room was stripped and the lab equipment was taken to the 2<sup>nd</sup> floor. Even the room numbers were changed. The new room 363 is located some place else.

As time went on, the courses were changed. The college changed the rules so that minimum lab sizes were 16. Courses were eliminated and new ones created. Unique course for curriculums were reconfigured so that they served several curriculums. EM Systems I, II and III were combined with the EET courses and became The Fundamentals of Microcontrollers and Microcontroller Applications. The EM flavor was not lost. Labs included pneumatic robots, various types of wheeled vehicles and an autonomous line follower for Microcontroller Applications. Why the BASIC programming course was even transformed into Visual BASIC.

A major curriculum change took place in 2000 when the first year of the EMET program joined all the other programs in the EET department to have a common first year. Well almost, the EMETs had one course different in the 2<sup>nd</sup> semester, Mechanics of Materials.

When I retired in the spring of 2004, Bob Rees was the only faculty member remaining from when I started 13 years earlier.

*Nash P. Smith*  
*08/16, 2005*