Inside:

- New programs offered, including a Purdue Master of Science in Technology degree
- Profiles of new faculty
- New equipment and facilities including state-of-the-art “collaboratory”
- Dean’s message: Growth, innovation, and transformation
Purdue Master of Science in Technology

The Master of Science with a concentration in technology is expected to begin in fall 2006. The proposal was approved by the Purdue Graduate School in November 2005. The following courses will be offered this year. In addition to these courses, other graduate courses will apply toward the degree.

- CPT 555: Advanced Network Security. This course in the Computer Engineering Technology specialty will be taught by Prof. Gary Steffen.
- IT 507: Measurement and Evaluation in Industry and Technology. This course is required in the curriculum and will be taught by Prof. Ramesh Narang.
- IT 508: Quality and Productivity in Industry and Technology. This required course will be taught by Prof. Ramesh Narang or another faculty member.
- C&IT 581: Wireless Sensor Network Systems and Applications. This course is in the Computer and Information Technology area and will be taught by Prof. Paul Lin.

If you would like to take a course or begin work toward this M.S. degree, please contact Sarah Merchant (merchants@ipfw.edu). If you have questions about the program, please contact Prof. Hal Broberg (broberg@ipfw.edu). Additional information and details are available at www.etcs.ipfw.edu/MastersDegreeInTechnology.

A baccalaureate degree will be required for admission, and courses in a technical area will prepare you for some of the more specialized courses that you may choose. This Purdue M.S. degree requires 33 credit hours, including a directed project designed to provide students with knowledge and skills in applications of technology. Graduates will be prepared for technical leadership positions in industry, for faculty positions in technology and engineering technology programs at the community college and university levels, or to continue for a doctorate in technology. Currently, proposed primary areas of study are:

- Information Technology/Advanced Computer Applications
- Industrial Technology/Manufacturing
- Facilities/Construction Management

From the Editor

This is the inaugural issue of TechTalk in our new full-color format. We plan to publish it twice a year so there will be ample opportunities for you to share in all the exciting news that is happening at ETCS/OLS. Please let us know what you are doing and what you would like to see in our future issues: alumni, research, industry collaboration, students, faculty profiles, programs, outreach, lifelong learning opportunities, projects, distance learning, and any other significant activities you can think of. Comments on the publication’s format are also welcome. Thanks for everyone’s support!
Life is always about change. The challenge, of course, is to ensure that the changes in our lives are positive for us and for those whom we serve.

IPFW’s School of Engineering, Technology, and Computer Science (ETCS) is moving forward to better serve northeast Indiana with new degree programs, additional research and education centers, two newly established endowed professorships, a variety of curricular innovations, and enhanced operations. We are in an exciting time of growth and transformation—so much so that I can only highlight a few of these developments in this issue.

We have initiated new degree programs, including B.S. degrees in computer engineering technology and in interior design, together with a new M.S. degree in organizational leadership and supervision (the first M.S. OLS degree in the entire Purdue system). And we expect to formally launch a B.S. degree in civil engineering during the next year, together with M.S. programs in engineering and in technology.

Endowed professorships provide wonderful opportunities for a university to recruit prominent individuals who can act as catalysts for both curricula innovations and advanced research initiatives. The Department of Engineering now has two endowed professorships: the Steel Dynamics Chair in Engineering for which we are currently recruiting nationally renowned candidates and the IPFW Distinguished Professorship in Systems Engineering, which will be held by outstanding researcher Steven Walter. Walter will also be the director of our new Center of Excellence in Systems Engineering—the mission of which is to be a national model for industry-university collaboration in systems engineering education and research, to serve as a locus for inter-industry collaborations, and to foster the development of systems engineering processes through the sponsorship of professional and technical symposia.

In addition, we are about to launch our new Center of Excellence in Industrial Innovation and Design. As a joint venture of ETCS and IPFW’s School of Visual and Performing Arts, this center will provide a broad range of technical support services and faculty expertise to local industry in concept design, simulation, animation, prototyping, testing, assembly methods, materials handling, hazards analysis, logo design, packaging and other aspects of product development. The center will be administratively housed within ETCS.

To better serve our students, we have enhanced our facilities by constructing the ETCS Collaboratory in which cross-disciplinary teams of students, faculty, and professionals from industry can work together more effectively with the aid of videoconferencing equipment, smartboard capabilities, and modular furniture that encourages teamwork, among other tools. Moreover, our new ETCS Student Success Center is tangible evidence of our deep commitment to students throughout their academic careers. Sarah Merchant (our Director of Student Services) and Penny Pereira (Academic Advisor) have created a truly friendly and supportive environment, with hot cocoa, tea, cookies and an open door for all who want academic and career counseling advice or who simply want to revive between classes.

In 2005, our ETCS Scholarships exceeded $100,000 thanks to the generosity of donors throughout the community, including $25,000 received from Northrop Grumman Corporation. These funds helped many of our most deserving students continue toward their academic and professional goals. I will never be able to adequately thank those who donated or describe the importance of their contributions for our students.

Our ETCS programs continue to be nationally accredited by the Accreditation Board in Engineering and Technology (ABET), and our faculty were justly praised by ABET evaluators for the academic rigor and high quality of their curricula. Such objective external reviews ensure that our programs are both robust and rigorous.

Research and scholarship by the ETCS and OLS faculties continue to increase, with external funding from the National Science Foundation, the National Institutes of Health, and other groups reaching unprecedented levels in 2005.

Finally, ETCS will be hosting the first joint meeting of the Indiana-Illinois and North Central (Michigan, Ohio, Pennsylvania and West Virginia) sections of the American Society for Engineering Education on March 31–April 1, 2006. Faculty from universities throughout six states will be joining us at IPFW for this major event.
New Bachelor of Science in Interior Design

The new B.S. degree in interior design was approved by the Purdue Board of Trustees and approval is expected by the Indiana Commission for Higher Education soon. Interior design is a field that not only provides aesthetic design solutions, but also applies knowledge of business and technology. The new B.S. program will feature courses in design, computer graphics, professional practice, and an interdisciplinary senior design project.

The new interior design sequential design studios form the foundation of the interior design major. Basic design principles and methods are the initial foci and these soon shift to issues of people and space. Programming, critical analysis, creative design, and evaluation of how interior space meets the needs of people are some of the core learning objectives. Within the instructional setting of upper level design studios, students will learn about dynamic interactions between people and space in hospitality, healthcare, residential facilities, and other types of commercial projects. Students will develop competency in specific interior design subject areas as they learn how to creatively make the world a better place for people.

Prof. Suining Ding joined the Department of Civil and Architectural Engineering Technology in 2003 as assistant professor of interior design. Her solid academic background and extensive practice experience in interior design and architecture help her bring fresh ideas into the classroom. Ding holds NCIDQ (National Council for Interior Design Qualification) certification, which is the highest level of professional certification currently available in the interior design profession and is equivalent to any other professional licensing. She is a professional member of the Interior Design Educators Council and the American Society for Engineering Education. She has been actively engaged in innovative teaching and design methodologies and is presenting and publishing research papers at national and international conferences.

Prof. Ding holds NCIDQ (National Council for Interior Design Qualification) certification, which is the highest level of professional certification currently available in the interior design profession and is equivalent to any other professional licensing. She is a professional member of the Interior Design Educators Council and the American Society for Engineering Education. She has been actively engaged in innovative teaching and design methodologies and is presenting and publishing research papers at national and international conferences.

DEPARTMENT NEWS

• The Interior Design Summer Rome Program is celebrating its 15th year, July 7–21, 2006. Students, faculty, and other travelers spend two weeks in Rome, studying the architecture, interiors, and art of the Eternal City. Alumni and professionals are invited to participate. Previous participants have included engineers, architects, city planners, interior designers, and artists. For information, call the CAET office at 260-481-6797.

• More than $20,000 in scholarships was presented to CAET students in April 2005 for use during the 2005-06 academic year. This included a new $1,000 scholarship donation from the International Facilities Management Association. This award ceremony amount tops the $19,300 awarded in April 2004. The CAET faculty members and donors hope to award a similar amount to deserving CAET students in April 2006.

• TAC/ABET accreditation visit during fall 2004 resulted in re-accreditation of all three degree programs.

• Fall 2005 marked the highest number of credit hours taken by students in CAET courses in the history of the department.

• Mastodons invaded the ETCS Building during spring 2005 as faculty participated in the IPFW-sponsored community art project, Mastodons on Parade. Three ETCS faculty participated in the project, and all were from the CAET interior design program: Suining Ding, Flaim Cupp, and Matthew Kubik. The projects were sponsored by Shenkel and Schultz, Architects; Cap and Cork; and the City of Fort Wayne. Kubik’s entry was selected as one of the top ten designs.

DEPARTMENT EVENTS

• For more than 20 years the International Masonry Institute has provided academic support to the Architectural Engineering Technology program. The IMI sponsors the sophomore-level class project in masonry design through the donation of academic materials, lectures, and a field trip to Chicago. Student projects are presented in Chicago to a committee of architects and contractors at the Palmer House Hotel.

• Prof. Dennis Marshall will be coordinating a one-day architectural tour of Columbus, Ind., in the spring. Details will be available soon.

• Prof. David Devine is leading efforts to re-establish the American Society of Civil Engineers student chapter at IPFW. The department has paid the national dues and membership is growing. New members are being recruited and activities are planned, which include attendance at the ASCE Indiana Section Annual Meeting.

• The American Society of Interior Designers student organization had a guest speaker from Allen County Habitat for Humanity during fall 2005. They also had a work day for Allen County Habitat for Humanity. Prof. Suining Ding is the advisor for ASID.

Equipment/Lab/Other Funding or Donations

The Soils and Bituminous Laboratory was consolidated over the past summer. The extra room became the home to a rapid prototyping machine that will be used by faculty and industry.

Other News

The CAET Industrial Advisory Board has been reorganized and enlarged to include alumni representatives and representatives or members from the following construction-related professional organizations and government regulation agencies: American Institute of Architects, American Institute of Building Designers, American Society of Civil Engineers, American Society of Heating, Refrigerating and Air-conditioning Engineers, American Society of Interior Designers, American Society of Professional Estimators, Associated Builders and Contractors, Building Contractors Association, Construction Specifications Institute, Home Builders Association Indiana Concrete Masonry Association, Indiana Redimix Concrete Association, International Facilities Management Association, International Interior Design Association, International Masonry Institute, and the Indiana Society of Professional Land Surveyors.

Contact: Hal Broberg, Associate Professor and Interim Chair of CAET 260-481-6341 broberg@ipfw.edu
Agent-based Models (ABMs) provide a means for modeling conflicting forces in scenarios that capture more real-life complexity than possible through verbally-stated theories or simplified mathematical models. ABM simulations allow researchers to program theoretical processes, and test whether or not these processes lead to observed phenomena in the context of simulated social systems. Using the Swarm framework, we have developed a simulation platform, called NOMAD, to model the dynamic trading and raiding interactions between animal herding pastoralists and their agrarian peasant partners. We have extensively researched ethnographic and other data sources to incorporate as much realism as is possible. Our primary aim is the testing of anthropological and historical theories of pastoralism. We have applied our high-fidelity model to two scenarios: (1) a generalized Middle Eastern setting; and (2) the volatile region of Darfur, Sudan. In developing these models, we have paid close attention to environmental features, the ecological relationships between population growth and land use, and demography. We added special consideration of how terms of trade would evolve between nomad and peasant agents, and how such terms can tip relations from peaceful trading to violent raiding. In this presentation, we describe the architecture of our model, the results of applying it to these two scenarios, on-going work in model refinement, and the prospects for creating a reusable agent library for studying these interactions in a wide variety of settings, both geographic and historical.

NOMAD is a collaborative effort between Prof. Lawrence Kuznar (Anthropology), Prof. William Frederick (Mathematical Sciences) and Prof. Bob Sedlmeyer (Computer Science). Computer science graduate students Alyson Kreft and John Bryan have made important contributions to the Swarm and RePast implementations of NOMAD.
ETCS Outreach Programs Continue to Grow

In fall 2002, the Outreach Programs Office for the School of Engineering, Technology, and Computer Science opened for business. The main priority of the ETCS Outreach Office is to engage elementary, middle, and high school-aged students in activities that promote interest and enthusiasm for engineering, technology, and computer science. During the last three years, the ETCS Outreach programs have impacted thousands of students, teachers, and community members in northeast Indiana. Some highlights from the 2004-2005 school year include:

• 1,962 students and 741 adults were involved in outreach programs. The total of 2,703 people who were actively involved is only the tip of the iceberg. Each event also included many observers and parents who attended to see their children perform and receive recognition.
• Last year’s outreach events involved 85 IPFW faculty and staff volunteers and 177 community volunteers as judges, presenters, and event workers.
• An estimated $29,000 was donated by 32 community sponsors in support of ETCS Outreach events.
• Students from 21 counties in Indiana participated in our four major events (FIRST Lego League, Future City Competition, Middle School Career Days, and the Regional Science and Engineering Fair), with the majority being from northern Indiana.
• The excitement and enthusiasm demonstrated at outreach events is noticed by local media as well as media from the participants’ communities. Twenty-eight articles or news briefs appeared during the 2004-2005 school year.

If you are interested in learning more about established events or have an idea for a new program, please contact: Carol Dostal, ETCS Outreach Director, 260-481-6905, dostalc@ipfw.edu.

FINDING SUCCESS AT THE ETCS STUDENT SUCCESS CENTER

“When can I register for spring classes?”
“I’m so slammed; I don’t have time to sleep!”
“Cool, I love green tea.”

These are just a few of the comments I heard outside of my office door as I began to write this article.

Division of Continuing Studies

The Division of Continuing Studies works with regional partners to enhance the economic development of northeast Indiana, providing training to more than 250 area companies in 2005. Credit and noncredit programs are customized to suit training needs. Courses for professional development, corporate training, and degree completion are offered on campus, off-site, or in the workplace. Alternative delivery methods, including Internet, teleconferencing, DVD, and blended-learning options, make professional development and corporate training available any time and anywhere.

Courses and certificates offered:

Business/Management:
The Art of Business: Growing Your Business to the Next Level (NxLevel™ Level training)
Project Management
Supervisory and Leadership Development Series*
Management Certificate Program*
Production and Inventory Management Certificate*
Managing for Morale: Effective Techniques to Retain Your Staff
Land Title Services Certificate*
Mastering Customer Service: Taking It to the Next Level
Essentials of Human Resource Management*
Recruiting and Interviewing the Top Talent in the Marketplace
Immigration for the Employer
Energizing Your Organization
The Art of Eloquent Feedback
Xers, Dot-com.ers, and Boomers—Introduction to Generational Diversity
SHRM Learning System*
Customer Care in the New Millennium

“...IPFW Division of Continuing Studies developed a highly flexible program...teaching the skills employers look for.”
Rob Young, President, Fort Wayne-Allen County Economic Development Alliance
Sound like a hodge-podge of commotion to you? Well, it is comments like these that provide me the immense pleasure of coming to work each day.

Allow me to introduce myself. My name is Sarah Merchant, and I am the director of student services for the School of Engineering, Technology, and Computer Science. My office moved a year ago from the dean’s suite on the second floor of the ET Building to room 105 on the first floor. The new ETCS Student Success Center is conveniently located just around the corner from the main lobby.

Now that you know who I am and where I am, let me outline a little more about what happens in the ETCS Student Success Center.

In a nutshell, the center advocates for students by providing academic, financial, and personal guidance while simultaneously familiarizing them with the network of services available on campus.

It is often difficult for students to realize the unique similarities and program course requirements of all five departments within ETCS. By developing a relationship with students during the freshman summer registration process (often earlier than that), I can counsel students intensely in the hope that they get off on the right start with the degree program that fits both their interests and abilities to the fullest.

Penny Pereira is also located in the Success Center. She is a part-time academic advisor, working primarily with computer science and information system majors. Her ability to learn and implement new projects and campuswide initiatives, coupled with her compassion for students, has quickly made her a valuable asset at the center.

Lastly, but certainly not least, Alicia is our part time student worker and usually is the first smiling face you see upon entering the center. She is a senior studying audiology and speech sciences and will be sorely missed once she graduates. A full-time campuswide intensive search is currently underway in hopes of finding her replacement. Did I say that Alicia will be missed?

Please stop by the ETCS Student Success Center. You are always welcome!

Dean’s Office Scholarships

ETCS Scholarships for Excellence

The School of Engineering, Technology, and Computer Science presented more than $100,000 in scholarships at its annual awards luncheon in April 2005. Thirty-eight students from ETCS received a total of sixty-eight scholarships. The recipients included full- and part-time students, as well as incoming freshmen.

Donations can be made to “Indiana-Purdue Foundation at Fort Wayne” and reference ETCS Scholarships for Excellence. Please send such donations to ETCS, Indiana University–Purdue University Fort Wayne, 2101 E. Coliseum Blvd., Fort Wayne, IN 46805-1499.

For more information, please contact: Mary Jane Casiano, Administrative Assistant, 260-481-6839, fax: 260-481-5734, casiano@ipfw.edu.

Computer:
AutoCAD 2004: Level I
QuickBooks: How to Work the Numbers
Computer Network and Infrastructure Design
Manufacturing Courses:
Strategic Cost Management for Improved Profitability
Advanced Manufacturing Technology Seminar
World-Class New Product Development: Creating and Launching Superior New Products with a Competitive Edge
Quality Certificate Program*
Lean Manufacturing: The Flex Series*

* Certificate courses are open to anyone interested in attending. Individual courses in any certificate series are available without enrolling in the series.

For complete course descriptions, visit learn.ipfw.edu

Current training partners:
Alcoa Automotive
The Alliance
ARC Inc.
BAE
Belmont Beverage
Bendix
BF Goodrich
Biolab
Century Title Services
City of Fort Wayne

Do It Best
Dekko
Dutch Made
Federal Mogul
Fort Wayne Metals
ITT
Kosciusko County Community Foundation
Maple Leaf Farms
Paragon Medical Inc.
SBDC
Steel Dynamics
Superior Essex
TI Automotive
Titan Title
TRIN
Waterfield Mortgage
Wayne Metals
Wells Fargo

2005-06 scholarship sponsors include:
- American Electric Power
- American Society for Professional Estimators (ASPE)
- Armed Forces Communications and Electronics Association (AFCEA)
- Bonar Group
- Department of CAET
- Ross Caldwell Architectural Engineering
- CTS Corporation
- DePuy Orthopaedics, Inc.
- Fort Wayne Mechanical Contractors
- Fred Gideon Memorial
- Theodore F. Hagerman Memorial
- ITT Industries
- International Facility Management Association (IFMA)
- International Truck and Engine Corp.
- John W. Johnson Memorial
- Dr. Maurice S. M. Lam Memorial
- Northrop Grumman
- PhD, Inc.
- Raytheon Systems
- A. W. Schenkel
- Lloyd W. Smith Memorial
- Carl W. Steeg Jr.
- Fred Zollner Foundation

www.ipfw.edu/dcs
Ronald C. Emery Memorial Scholarship Established

The Department of Electrical and Computer Engineering Technology, along with the Office of Development, have announced the official establishment of the IPFW Ronald C. Emery memorial scholarship. This named scholarship, which will be awarded at the annual ETCS Scholarships for Excellence Awards Luncheon in the spring, has been funded by contributions from family members, friends and colleagues, and other gifts from our community.

Emery, who taught at IPFW for 35 years, headed the department from 1983 to 1995. From 1995, he was professor and associate dean until his death in October of 2001. He also served as interim dean to the school in 1996-97. He was a tireless and dedicated professor who was instrumental in the development of the department and was well loved and respected by many students, alumni, and faculty member friends.

For further information about donating to this scholarship, please contact Prof. Paul Lin (260-481-6339), ECET chair, or Jay Thayer (260-481-6963), assistant director of development.

DEPARTMENT NEWS

• A successful TAC/ABET accreditation visit during fall 2004 resulted in re-accreditation of both A.S. and B.S. electrical engineering technology degree programs. The next ABET visit will be during Fall 2010.

• The department is currently offering two new courses. The CPET/ECET 470: Technology Project Management course better prepares students for industry by studying topics in project management, project life cycle, team building, planning, review, execution, and risk management. This unique new course that uses both traditional class lecture and Web-conferencing will be team taught by both full-time and associate faculty.

• A new course in problem solving with MATLAB was offered. This course is designed to further student programming skills by providing a study of principles and practice in problem solving using MATLAB.

DEPARTMENT LAB IMPROVEMENTS

• During summer 2004, several of the ECET laboratories went through reorganization. The ETCS building changes occurred to accommodate the move of computer science into the building. One laboratory is specially designed for use by our growing distance-learning students.

• In addition to the laboratory moves, ECET has recently made capital investments totaling nearly $58,000 in new equipment for laboratory use. This has included a TIMS telecommunications learning system, a PCB milling system for circuit board creation, a MOTOR torques testing equipment, and the upgrading of nearly 55 computer stations.

Contact: Paul Lin, Professor and Chair of ECET
260-481-6339 lin@ipfw.edu

Above: Former IPFW Professor Ronald C. Emery. Below: ECET student Mike Bracht uses the T-Tech CNC mill to fabricate printed circuit boards. The mill is capable of fabricating copper conductive traces as small as .005’ wide.
NEW ENGINEERING PROGRAM AT IPFW

On November 3, 2005, the Purdue Board of Trustees approved the proposal to establish a program in civil engineering at IPFW. The proposal is now under consideration by the Indiana Commission of Higher Education. This is the final step of the approval process. The projected starting date for the civil engineering program is fall 2006.

The civil engineering program focuses on the latest advances in the design, construction, and maintenance of society’s infrastructure — buildings, bridges, roads, airports, dams, water supplies, and environmental systems. These areas are of great interest to industries nationwide, including northeast Indiana. A very important objective is to provide a degree that complies with the guidelines of our accrediting agency, ABET.

Graduates of the program will have excellent professional career opportunities due to the large present and projected demand for civil engineers. For the period 2002-2012, the U.S. Bureau of Labor Statistics projects 81,000 civil and environmental engineering jobs nationwide. As a reference for the same period of time, the number of jobs projected for electrical and electronic engineers is 74,000 and for mechanical engineers is 69,000.

Examples of job roles that graduates with the civil engineering degree will be qualified to fill include:

- project engineer
- design engineer
- construction manager
- environmental engineer
- highway engineer
- government engineer
- plant engineer
- structural engineer
- technical sales representative
- field representative

Civil engineering will be the fourth engineering program offered by the Department of Engineering at IPFW. The other three programs are computer engineering, electrical engineering, and mechanical engineering. These three programs underwent a comprehensive review process by ABET in October 2005. It was the first review for computer engineering. Electrical and the mechanical engineering programs have been ABET-accredited since 1993.

For more information about any of the engineering programs at IPFW, visit our Web site www.engr.ipfw.edu, or call the Department of Engineering office at 260-481-6362.

New faculty

During fall 2005, the Department of Engineering welcomed the following new faculty:

**Dr. Chao Chen**, assistant professor in computer engineering. Prof. Chen’s area of expertise is in wireless communications networks. She received her doctorate from the Georgia Institute of Technology.

**Dr. Yanfei Liu**, assistant professor in electrical and computer engineering. Prof. Liu’s areas of expertise are in robotics, computer vision, and image processing. She received her doctorate from Clemson University.

**Dr. Tianxia Zhao**, assistant professor in electrical engineering. Prof. Zhao’s area of expertise is in electromagnetic applications at ultra high frequencies and above. She received her doctorate from the University of Houston.

With the addition of these new faculty members, IPFW has arguably the highest ratio of female faculty of any engineering school in the nation and almost surely the highest ratio of female faculty of any electrical and computer engineering program.

DEPARTMENTAL NEWS

The graduate curriculum committee is currently working on a full proposal for a Master of Science in Engineering program (MSE).

**Contact:** Carlos Pomalaza-Raez, Professor and Chair of Engineering
260-481-6353  raez@ipfw.edu

From left to right: New Department of Engineering faculty members Yanfei Liu, Tianxia Zhao, and Chao Chen pose with the Indiana-Purdue Student Government Association’s Mastodons on Parade artwork.
DEPARTMENTAL NAME AND LOCATION CHANGE

In February 2004, the department received approval to change its name from the Department of Manufacturing Technology to the Department of Mechanical and Industrial Engineering Technology. The new department name better describes the mission of the department since the department does not offer a degree program in manufacturing technology. In fall 2004, the department moved into a new office suite on the second floor of the ETCS building to make room for the CS department to move into the first floor suite that the department had occupied since moving into the building in 1993. With the decline in enrollments and resulting decline in the number of faculty due to retirements, the first floor suite was larger than required to meet the department’s office needs.

Industrial Advisory Committee Collaboration

The department sponsored a combined “Senior Design Presentation Day” and an Industrial Advisory Committee meeting on April 29, 2005. This allowed the Industrial Advisory Committee members to attend and comment on the senior presentations. This combined meeting led to improved relations and feedback between industrial representatives and senior design students.

DEPARTMENT NEWS

• In November 2004, Penny Leavitt (now Penny Pereira), our outstanding department secretary, received a promotion to serve as a half-time academic advisor for the CS department and to serve quarter-time in the new ETCS student success center as Sarah Merchant’s assistant. As a result, the department searched for and hired an excellent new department secretary. The new secretary is Tammy Southern, who has served in various positions at the university for more than 15 years.

Faculty News

• In spring 2005, Don Schmidt retired from the department after 41 years of dedicated service to IPFW. However, he is not totally lost; he has agreed to teach HVAC in spring 2006.

• Prof. Al Pugh started half-time retirement in spring 2006, thus he will be teaching only in the fall semesters in the future. He is currently writing a book on the simulation of economic systems and will be dedicating his retirement time to the completion of the book on an accelerated schedule.

• The department is currently recruiting a new IET faculty to replace Prof. Pugh half-time, to teach quarter-time in the new Master of Technology program, and quarter-time in the new Systems Engineering Center.

• Under the dean’s direction, the department is recruiting a new department chair to replace Ken Perry, who is returning as a faculty member. The department is also recruiting a new MET faculty member to assume Prof. Don Schmidt’s duties.

Contact: Ken Perry, Professor and Chair of MIET
260-481-6386 perry@ipfw.edu

Cross-disciplinary teams of engineering and education students from ENGR 199: Introduction to Engineering Design (taught by Gerard Voland) and EDUC Q200: Introduction to Scientific Inquiry (taught by Jeffrey Nowak for future science teachers) are working together on an electrical energy learning project for Indiana Michigan Power and Science Central. Some of these students are shown in the new ETCS Collaboratory in which videoconferencing systems, a smartboard, modular furniture to facilitate creative teamwork, and other resources are available for student-faculty-industry project teams. Professor Nowak is shown before the smartboard, while Jill Korte (Manager of Community Affairs at Indiana Michigan Power) can be seen on the computer screen. This project will be profiled in the next issue of TechTalk.
New OLS master’s degree

In August 2005, the Indiana Commission on Higher Education approved a new master’s degree in Organizational Leadership and Supervision at IPFW. This is the first master’s degree in OLS in the Purdue system.

The M.S. in Organizational Leadership and Supervision will provide a strong foundation in organizational behavior and a choice of specialization in either human resources or leadership. It is a 36 credit-hour program composed of 12 credit hours of core requirements, followed by 18 credit hours in either the leadership or the human resources option, and 6 credit hours in research. Graduates of the program will be prepared for leadership and human resources roles in a wide variety of settings including industrial, medical, service, and other profit and nonprofit organizations.

The program is founded on objectives common to both the leadership and human resources options. In the core courses, students will enhance their ability to:

• understand the complexity and interrelated nature of organizational phenomenon
• see possibilities beyond the present state of the organization
• develop and enhance organizational diversity
• create positive organizational climates and cultures
• develop employees, teams, and leaders at every level
• create a workforce that is a source of competitive advantage

In addition, students in the leadership option will learn to:

• promote organizational diversity and quality
• develop and manage compensation plans
• develop and maintain human resource policies and procedures

The division currently is accepting applications to the program. For more information regarding the program, visit our Web site at www.ipfw.edu/ols or contact Director of Graduate Studies Linda Hite at 481-6416 or hitel@ipfw.edu.

Students in the human resources option will learn to:

• promote organizational diversity and quality
• develop and manage compensation plans
• develop and maintain human resource policies and procedures

Division News

• The student chapter of the Society for Human Resource Management competed in the HR games at the University of Illinois in Champaign–Urbana in March 2005. Two teams from IPFW consisting of three players each competed with 27 teams from universities throughout the Midwest. This year’s competition will be at Indiana Tech in Fort Wayne.

• The division sponsored the second annual Girls Leading Others (GLO) camp during summer 2005. Twenty middle school-aged girls participated in this weeklong camp to further develop their leadership skills.

Contact: Kim McDonald, Associate Professor and Chair of OLS 260-481-6418 mcdonalk@ipfw.edu

Faculty News

• Professor Brad Gilbreath was tenured and promoted to the rank of associate professor.

• Two OLS faculty members were awarded sabbaticals in 2004-05: Prof. Max Montesino and Prof. Kim McDonald.

• Prof. Montesino was awarded a Fulbright-Hayes summer seminar abroad grant. The 2005 program was titled, “Asia in Microcosm: Cultural Diversity at the Crossroads of Asia.” As a participant in the program, he spent six weeks traveling and studying in Malaysia and Singapore in the summer.

Above: Prof. Max Montesino spent six weeks traveling and studying in Malaysia and Singapore on a Fulbright–Hayes grant. Below: Second annual Girls Leading Others (GLO) camp
In this half-day seminar you will connect with industry experts who will explore the latest and most effective techniques used to advance manufacturing success and return on investment. Real world applications on Six Sigma, lean manufacturing, and real-time logistics and asset tracking will be shared. This program promises to provide you a very positive return on your investment.

**Speakers and Topics:**

**Lean and the Modern Day Supply Chain** — *Wayne R. Scott, president of Pro-Improvement Inc.*
This presentation will highlight opportunities and challenges in merging Lean into traditional Supply Chain activities of Plan, Source, Make, and Deliver.

**Six Sigma 101** — *Wayne R. Scott, president of Pro-Improvement Inc.*
A high-level overview of Six Sigma designed for those who have had minimal exposure to this powerful process improvement methodology.

**Advanced Manufacturing and Marketing Concepts: Success in a Small Business Manufacturing Company** — *Larry Davis, president of Daman Products Co. Inc.*

**Automating Logistics in a Just-in-Time Environment** — *Mike Fritsch, president of Zoom Information Systems*
Presentation will focus on knowing where physical assets are and how to measure their actual utilization. Gain an understanding of how assets can be tracked using satellite GPS systems.

**Who Should Attend:** This program is for decision makers in manufacturing operations who are looking to strengthen their competitive advantage by connecting with industry experts.

**Seminar Moderator:** *Robert Palevich, director of the Business Enterprise Systems and Technology (BEST) Institute, IPFW*

**Fee:** $85 (includes materials). Send three or more people from your organization and receive a corporate rate of $75 per person.

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