**Focus: HOPE**
*Celebrating Diversity Since 1968*

REPORT TO THE STATE OF MICHIGAN

# *Fiscal Year 2005 Funding*

## Center for Advanced Technologies
## First Step, FAST TRACK
## High School Program

*Submitted to the*
Michigan Legislature and
the Michigan Department of
Labor and Economic Growth

January 26, 2006

Michigan Legislature
Michigan Department of Labor and Economic Growth
Lansing, MI

Dear Legislators and Fiscal Agents:

It is my honor to submit to you the Focus: HOPE Fiscal Year 2005 Report to the State of Michigan. With your support, Focus: HOPE has sustained its commitment to investing in Michigan's manufacturing infrastructure through the rigorous education of men and women in manufacturing technologies and advanced manufacturing engineering. At a time when Michigan's unemployment rate continues to be unacceptably high and current research highlights the need to increase the educational and technical skills of our workforce, our programs are more critical than ever.

Focus: HOPE supports Michigan industry's global competitiveness by responding to industry-driven demand in the development of our curriculum. Throughout Fiscal Year 2005, our educational and training program staff engaged in a world class strategic review process, conducted with industry partners, to benchmark best practices and incorporate them into our programs. Over the course of Fiscal Year 2006 we will complete that process and, in close collaboration with our State partners, restructure some of our programs to assist even more underrepresented individuals moving into the economic mainstream.

Focus: HOPE continues to be a resource for both the state and federal governments as policymakers work to respond to critical workforce issues. As such, I continue to serve on the board of directors of The Workforce Alliance, a national association devoted to workforce development policy. On the state level, I am privileged to serve on the Governor's Council for Labor and Economic Growth and recently chaired a meeting of the Council's Advanced Manufacturing Subcommittee which is formulating recommendations for the state government. We deeply appreciate the opportunity to serve in these important ways and enjoy contributing to workforce development policy outcomes.

The following report describes the many ways in which Focus: HOPE continues to meet its objective of providing opportunity to underrepresented individuals who help Michigan be increasingly competitive in today's global economy. Despite challenging economic times, Focus: HOPE continued to help its graduates secure exciting career opportunities with corporations such as General Motors, Cummins, and Detroit Diesel.

These are just a few of the activities we have undertaken to pursue our mission of engaging in intelligent and practical action to overcome racism, poverty and injustice. With passion, persistence and partnership, Focus: HOPE will continue to contribute to the good of this great State and its citizens.

Sincerely,

Eleanor Josaitis
Chief Executive Officer and Co-Founder

**Focus: HOPE**

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# FOCUS: HOPE
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# Focus: HOPE

***Celebrating diversity since 1968***

## FOCUS: HOPE OVERVIEW

The Beginning: Focus: HOPE was founded in 1968 in the wake of the devastating Detroit riots. Co-founders Father William T. Cunningham (1930-1997) and Eleanor M. Josaitis were inspired by the work of Dr. Martin Luther King Jr., and started an organization committed to bringing together people of all races, faiths and economic backgrounds to overcome injustice and build racial harmony.

The Focus: HOPE mission statement, adopted on March 8, 1968, can be found on our walls and in our hearts throughout the 40-acre campus and provides the primary focus for the organization and all of its programming:

**Recognizing the dignity and beauty of every person,**
**we pledge intelligent and practical action**
**to overcome racism, poverty and injustice.**
**And to build a metropolitan community where all people**
**may live in freedom, harmony, trust and affection.**
**Black and white, yellow, brown and red**
**from Detroit and its suburbs**
**of every economic status,**
**national origin and religious persuasion**
**we join in this covenant.**
Adopted March 8, 1968

Originally an interracial movement of volunteers, Focus: HOPE today employs about 400 colleagues and involves more than 23,000 volunteers annually who provide roughly 350,000 hours of time in support of its programs. Over the years, Focus: HOPE has initiated intelligent and practical solutions to the problems of hunger, economic disparity, inadequate education, and racial divisiveness. The success of Focus: HOPE centers on leveraging public and private sector resources and partnerships, as well as extensive community outreach, to provide practical answers to social problems. These can be found in Focus: HOPE's high technology training and education programs, its community and corporate partnerships, as well as in its food programs. The following provides a brief overview of the many programs currently operated by Focus: HOPE.

The Commodity Supplemental Food Program: Starting with research that showed the permanent damaging effects of babies and children not having proper nutrition, the co-founders were driven to find a solution to hunger in the Detroit area. As a result of persistent research and testimony, Focus: HOPE convinced the U.S. Congress to create the U.S. Department of Agriculture's Commodity Supplemental Food Program (CSFP), which was later expanded to include assistance to low-income senior citizens. This program is currently offered in 32 states nationwide, as well as the District of Columbia and a number of Native American entities. Of these, Michigan is the 2nd largest program in the nation, serving 83,000 pregnant and post partum mothers, children under the age of six, and senior citizens every month. Focus: HOPE serves 43,000 of these individuals, more than 80% of whom are seniors, in four counties of Southeast Michigan. In fact, Focus: HOPE is the largest and oldest distributor of commodities for this national program.

**African Americans, Hispanics and other ethnic and racial minorities account for only 6 percent of the science and engineering workforce – a figure far below their demographic presence. Women represent only a quarter of the science and engineering workforce, even though they make up nearly half of the total U.S. workforce. By 2020, more than 40 percent of college-age students will be ethnically and racially diverse. If America is to strengthen its base of science and engineering talent, it must act to recruit the fastest growing segments of the workforce.**

*"Innovate America: National Innovation Initiative Report: Thriving in a World of Challenge and Change,"* Council on Competitiveness, December 2004, p. 24

The Machinist Training Institute (MTI): The Machinist Training Institute was established in 1981 to bridge industry needs for precision machinists with community needs for well-paying and career employment. This state licensed and accredited training institute provides comprehensive basic and advanced precision machining and metalworking skills. The program provides opportunity for minority youth, women, and others to gain access to the financial mainstream and learn in-demand skills. Of the hundreds of businesses that hired the first MTI graduates, most had never previously hired either a woman or minority as a machinist. This hiring thus furthered the Focus: HOPE mission of breaking down racial and gender barriers.

We believe the MTI provides more than half of all new formally trained machinists in Michigan and, to that end, enrolled 290 individuals in Fiscal Year 2005. Since its inception the program has graduated nearly 3,000 machinists. Starting hourly wages range between $8.50 and $12.00 per hour and often include benefits. Graduates of the MTI may go directly into jobs as precision machinists, into other advanced manufacturing classifications or pursue additional post-secondary education.

FAST TRACK/FIRST STEP: Many individuals obtain high school degrees and GED certificates but are not functionally capable of performing at a high school graduate level in the workforce or successfully pursuing post-secondary education. Focus: HOPE requires students to have either a high school diploma or a GED in order to apply to enter its programs. Students then take the Test of Adult Basic Education (TABE) to determine their incoming level of competency. In order to enter the Machinist Training Institute, incoming students must functionally test at a minimum of 9th grade reading and a minimum of 10th grade math. The Information Technologies Center requires a minimum of 12th grade reading and 9th grade math skills. For those students who do not have the necessary competency levels to go directly into these programs, they may enter either the FAST TRACK or First Step program in order to raise their math and reading levels.

The FAST TRACK program[1] is designed to raise math skill levels from 8th grade to a minimum of 10th grade and reading skill levels from 8th grade to a minimum of 9th grade within 7 weeks. In order to better serve individual educational needs, students may take either the math or reading programs separately as needed to improve the respective skill area, or both programs can be taken as a complementary set. These stated grade level increases are minimum numbers and can increase further to grade level 12 or beyond depending on the individual student's personal objectives. The four-week First Step program was created to immediately precede FAST TRACK for those who need to raise their math skill levels from 6th to 8th grade. A total of 154 individuals participated in these programs in Fiscal Year 2005.

**A Serious, Persistent Shortage**

**The details behind the talent shortage reveal a stark reality. More than 80 percent of respondents indicated that they are experiencing a shortage of qualified workers overall – with 13 percent reporting severe shortages and 68 percent indicating moderate shortages. Also worrisome is the finding that 90 percent of respondents indicated a moderate to severe shortage of qualified skilled production employees, including front-line workers, such as machinists, operators, craft workers, distributors, and technicians. As expected, the research showed that engineers and scientists are in short supply, with 65 percent of manufacturers reporting deficiencies – 18 percent severe and 47 percent moderate.**

**In addition to shortages of various types of employees, manufacturers surveyed reported they are also dissatisfied with the skills of their current employees. Among respondents to this national survey, nearly half indicated that their current employees have inadequate basic employability skills, such as attendance, timeliness and work ethic, while 46 percent reported inadequate problem solving skills, and 36 percent indicated insufficient reading, writing, and communication skills.**

*"2005 Skills Gap Report – A Survey of the American Manufacturing Workforce,"*
National Association of Manufacturers and Deloitte Consulting LLP, December 2005, p. 1

Once admitted to either of these programs, emphasis is placed on the "4 A's" of "Attendance, Academics, Attitude, and Appearance," in order to prepare students for the expectations of a professional work environment. Students attend classes from 8:00 a.m. to 4:00 p.m., Monday through Friday. Focus: HOPE provides a mandatory drug-free educational environment, life and financial management counseling, and other student services, including bi-weekly access to a Family Independence Agency social worker. In addition to self-paced learning, small group sessions are held with instructors in the following subjects: math concepts, computer utilization, and communication skills; direction and practice of successful employment discipline thorough

[1]The State of Michigan created a state-wide program called Fast Break, based in large part on the success and model of Focus: HOPE's FAST TRACK program.

the use of productivity schedules and performance evaluations; and exploration of technical career options. In short, Focus: HOPE provides a wide range of supportive wrap around services to ensure that its students are capable of success when they enter the workforce.

High School Program: Begun in 1999, the Focus: HOPE High School Program offers students the opportunity to get a jump-start on post-secondary education and technical skills training while they earn their high school diploma through dual-enrollment partnerships with their high schools of origin. While participating in our program during their junior and senior years, students build and accelerate their foundation skills in math and reading through the proven First Step and FAST TRACK programs, then move on to Machining and Pre-Engineering training.

Focus: HOPE recruits from seven Detroit area high schools. Tuition is paid by the State of Michigan and via private support. Enrollment for 2005 was 43 students, 30% of whom participated in the First Step/FAST TRACK programs and 70% of whom participated in the MTI program. To date, 259 students have participated in the High School program. Upon program completion, students may enter the workforce in a wide variety of machining and engineering related fields, or continue their post-secondary education at our Center for Advanced Technologies. Twelve of the High School students are now participating at the CAT where they receive a tuition-free associates or bachelors degree, while working full-time on manufacturing contracts.

Students may also earn articulation credits toward their associates and bachelors degrees through agreements with Macomb, Oakland and Wayne County Community Colleges. If they choose to go into the renaissance engineering program at the Center for Advanced Technologies, their credits articulate to our partnering universities, including Lawrence Technological University Wayne State University, and University of Detroit Mercy.

The Center for Advanced Technologies: Opened in 1993, the Center for Advanced Technologies (CAT) integrates hands-on manufacturing training and academic learning within a state-of-the-art production setting and educates advanced manufacturing engineers at world-competitive levels. Focus: HOPE partners with five universities and six industry partners (formerly known as the Greenfield Coalition) to offer this unique 21st century curriculum resulting in a student receiving an associate's degree in manufacturing engineering technology (offered by Lawrence Technological University) or a bachelor's degree in engineering technology or manufacturing engineering (offered by Wayne State University and University of Detroit Mercy, respectively). The CAT enrolled 130 students (known as Candidates) in Fiscal Year 2005. The CAT program has the largest African-American enrollment in manufacturing engineering in the nation. And, according to the National Science Foundation, it is the nation's largest producer of minority graduates in manufacturing engineering.

Through a rigorous program in which students get both work experience and academic course work, Candidates work on actual manufacturing and research & development contracts for GM, Ford, DaimlerChrysler, the U.S. government and others. This renaissance engineering program is receiving national prominence for establishing a new paradigm for manufacturing engineering education from which it is producing highly skilled engineers who have real world experience combined with strong analytical and problem-solving skills.

Because of the CAT's unique educational pedagogy, last year's average starting salary of a Focus: HOPE bachelor degree graduate was $57,000. This salary is above the national average because of the real world hands on experience our graduates have when compared to other university graduates.

Focus: HOPE graduates gathered on stage for special congratulations from LTU President Charles M. Chambers.

Information Technologies Center: Established in January 1999, the Information Technologies Center (ITC) currently provides a broad range of industry-certified training programs in network, desktop and server administration. The extensive curriculum includes classroom and lab assignments in 25-52 week long programs, based on the proven MTI/CAT model. The ITC is providing minorities and women, in particular, access to high paying careers in information technology which continues to change how we work, learn and play. The ITC has graduated 658 students from its programs thus far, and 285 individuals were enrolled in these programs in Fiscal Year 2005. Current starting wages are typically $10 to $15 per hour. Graduates with 2-3 years worth of experience and who continue to earn related certifications can earn salaries in the range of $40,000 to $60,000. Focus: HOPE is now in the process of creating a state-of-the-art bachelor's degree program in information management and systems engineering.

**Today's state leaders face two economic challenges: to maintain national leadership in job and wealth creation and to successfully compete in a global economy. The key to both of these is innovative capacity as innovation drives productivity growth, driving prosperity and justifying higher wages.**
The National Governor's Association

Volunteer and Community Outreach: Focus: HOPE coordinates volunteer and community outreach events and activities throughout the year. In Fiscal Year 2005, 23,000 volunteers contributed their time and effort to Focus: HOPE activities, including the contribution of 15,000 volunteer hours to pack food supplement boxes for the Focus: HOPE Commodity Supplemental Food Program, and 35,000 additional volunteer hours assisting in our food centers. Volunteers also devoted over 250,000 hours to delivering 100,000 pre-packed boxes of food supplements to homebound senior citizens throughout Southeast Michigan. Over 4,500 people toured Focus: HOPE to learn about its mission, activities, and employment and training programs.

Every October, the annual Focus: HOPE WALK brings together thousands of diverse people in a display of interracial harmony. At the Journalism Challenge, media professionals mentor high school students through a day-long writing competition for college scholarships and awards as they learn about human and civil rights. Holiday programs bring hope to low-income families and senior citizens through community generosity. Volunteers are important contributors to every aspect of Focus: HOPE.

The Community Arts Program: Focus: HOPE's Community Arts program was established in 1995. The program presents multicultural arts programming and gallery exhibitions designed to educate and encourage area residents, mainly youth, while fostering integration in a culturally diverse metropolitan community. The on-campus gallery is dedicated to increasing understanding of different cultures through the sharing of art exhibits and photography. Other programming includes dance and music. A pen pal program between urban and suburban children encourages and facilitates shared understanding. Nearly 27,000 people viewed Focus: HOPE sponsored exhibits or participated in its programs in Fiscal Year 2005. The program also works with Detroit Public Schools and others to promote post-secondary education and raise career awareness concerning science, technology and creativity.

The Center for Children: Begun in 1987, the Focus: HOPE Center for Children offers infant and toddler care (beginning at 6 weeks of age through 2 year olds), Montessori and early childhood preschool education (age 3 through kindergarten), and before and after-school programming and a summer day camp for 6-12 year olds. The Montessori approach to early childhood education stresses the needs and basic development of the young child, including social and intellectual activities aimed at enhancing self-confidence and independence in an atmosphere of love and respect for the child. Admission is open to the children of parents enrolled in Focus: HOPE training programs, the community-at-large, and Focus: HOPE colleagues. Since its opening, the Center for Children has provided child-care and educational services to over 5,600 children. Enrollment in Fiscal Year 2005 was 115 children.

Focus: HOPE Enterprises, LLC**:** A new company called Focus: HOPE Enterprises, LLC, was formed in 2004 as a joint venture between Hollingsworth Enterprises and Focus: HOPE Companies, a wholly owned for-profit subsidiary of Focus: HOPE. Focus: HOPE Enterprises is a for-profit company that provides warehousing services to industry. Focus: HOPE Enterprises has been designated as a minority business enterprise by the Michigan Minority Business Development Council.

Community & Economic Development**:** With a commitment to rebuilding the surrounding community, Focus: HOPE works with community groups, local governments, block clubs, churches, and others on a wide range of community revitalization projects, including new construction, housing rehabilitation projects, demolition of unsafe structures, clean-up of illegal dumping, and other community building projects. It has also worked hard to make its campus a community anchor, and to improve open space in the community. A community pocket park has been installed in the center of Focus: HOPE's campus, complete with a koi fish pond, gardens and a wide variety of annuals and perennials. This park was the result of several private donations and stands where buildings were destroyed from the devastating tornado of 1997. In addition, the small park located two blocks south of Focus: HOPE's campus received a new playscape in 2005, as a result of collaboration between Focus: HOPE, the community, and the City of Detroit. Focus: HOPE is now collaborating with Presbyterian Villages of Michigan on the construction of a 55-unit low-income senior apartment complex adjacent to our campus, which will be completed in the fall of 2006, and is funded through several public and private funding sources.

A scene from the Focus: HOPE Pocket Park on campus

Conclusion: Focus: HOPE is a unique organization that has made a significant impact on metropolitan Detroit and the State of Michigan, as well as on national perspectives regarding workforce development and educational programming. As Focus: HOPE celebrates its 38th anniversary year, plans are in place to further increase awareness and enrollment in the education and training programs.

Focus: HOPE's Co-Founder and CEO, Eleanor M. Josaitis, often summarizes the organization's success in these simple words: Passion, Persistence and Partnerships. Focus: HOPE colleagues are passionate about what they do, persistent and committed to carrying out the organization's mission, and committed to building partnerships and relationships that make it possible to accomplish these critical goals even in times of economic constraint. In short, Focus: HOPE expects to persist as a critical community and industry resource dedicated to overcoming racism, poverty and injustice and building a community of freedom, harmony, trust, and affection.

# PROGRAM REPORT
# FISCAL YEAR 2005

## INTRODUCTION

The initial sections of this Program Report present a Fiscal Year 2005 overview of each program that receives funding support from the State of Michigan and accompany the more specific response to legislatively requested information (referred to as the "Response to Legislatively Requested Specifics") provided immediately following this Program Report. The programs that currently receive funding from the State of Michigan are the Focus: HOPE Center for Advanced Technologies (CAT), the High School Program (overlays with First Step/FAST TRACK and the Machinist Training Institute), and the First Step/FAST TRACK programs. Each of these will be described in detail in the following pages.

In order to assist those readers who may be less familiar with Focus: HOPE, an organizational overview (Part III) is included immediately preceding this Program Report, briefly outlining the history of the organization and its major programs and activities. A list of Focus: HOPE select recognitions and citations is listed in Appendix A. An educational flowchart of all of the Focus: HOPE career-training programs (First Step/FAST TRACK, Machinist Training Institute, Information Technologies Center, and the Center for Advanced Technologies) can be found in Appendix B that illustrates the overall relationship of the programs to each other and to industry. Also included are a map of the 40-acre main campus (Appendix C), a general organizational chart (Appendix D) and the lists of Focus: HOPE's very active Board of Directors and Advisory Board members (Appendix E). Please see Appendix O for a list of articles highlighting the recent work of Focus: HOPE. After describing the Michigan-funded programs below, we have included descriptions of other Focus: HOPE programs and activities in order to provide the State of Michigan with a more complete understanding of the interrelationships between the various programs, as well as the depth and breadth of Focus: HOPE as an institution serving Michigan citizens.

## BACKGROUND

By partnering with industry, universities, government and others, Focus: HOPE has created a pipeline of programs that offer both the technical and educational knowledge critical for a 21st century workforce, as well as the necessary hands-on experience. Through a unique partnership with area colleges and universities, students earn associate and bachelor of science degrees in manufacturing engineering/technology while working on actual manufacturing and R&D contracts for the automotive industry and others on the Focus: HOPE campus. Our newest career ladder program prepares students to attain the industry-based certifications necessary for a broad array of information technology professions.

**Our students work, study, and earn university degrees and highly prized and recognized industry certifications while receiving hands-on experience.**

Focus: HOPE's advanced manufacturing and technology career pipeline includes the only "manufacturing teaching hospital" in the nation – combining training, education, vocational/high tech skills, soft skills and real world experience, while paying a wage. This proven pathway is very effective at graduating highly skilled individuals, particularly underrepresented minorities and women. And, Focus: HOPE has made outstanding contributions toward increasing diversity within the traditionally homogeneous science, technology, engineering and math fields (known as STEM). **In fact, in Fiscal Year 2005, 96% of Focus: HOPE's engineering associate and bachelor degree candidates were African-American, which accounts for more than half the number of African-American students in the entire United States pursuing a bachelor of science degree in manufacturing engineering, according to the American Association of Engineering Societies.**

This innovative training and education pipeline is a national model for workforce development in the new millennium. It addresses employer needs and constraints, America's shifting demographics and the nation's critical need for advanced postsecondary training and education in information technologies and advanced manufacturing, as well as provides a career ladder into the economic mainstream for many disenfranchised and displaced workers. Last, it effectively demonstrates how partnerships can be formed between government, industry, community organizations and trade associations to lead America to a new level of global competition.

Focus: HOPE, with the strong support of the State of Michigan and our industry and academic partners, is proud to be a solution to the critical Michigan labor shortages looming over the coming decade by providing this much needed training and education, as well as the placement assistance necessary to link these highly skilled workers with the employers who seek them.

## THE CENTER FOR ADVANCED TECHNOLOGIES

Background: Focus: HOPE's Center for Advanced Technologies (CAT) is a unique university-level engineering program that integrates hands-on skill mastery and interdisciplinary engineering knowledge within an applications context. The CAT had its grand opening in 1993. It is a designated national demonstration project with roots in an historic Memorandum of Understanding (MOU) between the U.S. Departments of Defense, Commerce, Education, and Labor. The Memorandum declared a critical national shortage of advanced manufacturing implementation skills.

Today, this crisis continues, with high level government policy and think tank reports enumerating the critical skills shortages in science, technology, engineering and math fields, particularly as they relate to the manufacturing sector, e.g., The National Association of Manufacturers' *2005 Skills Gap Report – A Survey of the American Manufacturing Workforce* (December 2005); The Business Roundtable's *Tapping America's Potential: The Education for Innovation Initiative* (July 2005); the American Electronics Association's *Losing the Competitive Advantage: The Challenge for Science and Technology in the United States* (February 2005); The Council on Competitiveness' *Innovate America* (December 2004); the U.S. Department of Commerce's *Manufacturing in America: A Comprehensive Strategy to Address the Challenges to U.S. Manufacturers* (January 2004); and the Executive Office of the President's report entitled *Sustaining the Nation's Innovation Ecosystems, Information Technology Manufacturing and Competitiveness* prepared by the Council of Advisors on Science and Technology (PCAST, January 2004).

> **In the past, the skills workers learned were good for decades. Now, workers need to constantly adopt new skill sets. Increasingly, the success of an individual, a company, or a nation will be measured by how well they can adapt to new conditions and potential career shifts.**
>
> **Formal education from kindergarten through college will remain crucial in preparing future generations of workers, but education will not end there. The flexibility of the American workforce has served the United States well, and it will have to become even more flexible. This will require creative solutions to stimulate continuous education and retraining programs to prepare workers and employers to compete in the knowledge-based economy.**
>
> *"Losing the Competitive Advantage: The Challenge for Science and Technology in the United States,"* American Electronics Association, February 2005, p. 18

In response to the unprecedented MOU, the CAT was designed to provide the engineering equivalent of a "teaching hospital." Engineering students (known as "Candidates") pursue their engineering education within an environment of actual production and research & development contracts. Candidates learn the expert use of advanced technologies required by industry for 21st century global competition. Academic coursework uses the experiential context of cost, quality, and delivery to apply theory.

Three university partners – Lawrence Technological University, Wayne State University, and University of Detroit Mercy – award the associate and bachelor degrees in engineering technology and manufacturing engineering. These and other affiliate academic partners helped

to establish the program and its curriculum, known as the "Greenfield Coalition," and included Lehigh University, Michigan State University, Walsh College, the University of Michigan, Ohio State University and others. (See Appendices F and G for listings of degree curriculum and course scheduling). Partial support for the initial curriculum and development of university-level computer-based learning tools for engineering came from the National Science Foundation (NSF) over a 10-year period, completed during Fiscal Year 2004, and which resulted in over $30 million brought into the State of Michigan and its universities for the work at Focus: HOPE. In Fiscal Year 2005, another full year of academic offerings was scheduled and conducted at the Center for Advanced Technologies by our academic partners.

The CAT Model of Experiential Learning – a Teaching Hospital for Manufacturing Engineers: This internationally-recognized program provides a national cutting edge leadership model for engineering education. Strong partnerships with industry, academia, government, foundations, and others provide continuing support, direction and focus. Candidates in the CAT earn their engineering degrees by integrating actual experiential knowledge with rigorous academic studies. Key elements of the CAT include:


a) a futuristic 220,000 square foot learning-manufacturing facility that was completely renovated for that purpose with $23 million in federal and private sector support. All education, training, research and work activities occur in this facility;
b) manufacturing equipment and information systems representing a federal and corporate investment of well over $80 million; and
c) automotive, government, and research and development contracts of roughly $23 million that provide the experiential base and opportunity for degree Candidates to work and learn simultaneously.

Degree Candidates develop as engineers by integrating academic work and real experience. In order to provide Candidates with the means to support themselves and their families during their tuition-free degree studies, they work eight hours/day, Monday through Friday, on manufacturing and research & development contracts, earning hourly wages, while carrying a mandated minimum course load of 6 credit hours, with many of our students carrying more.

The academic curriculum addresses such learning modules as: fundamentals of machine operations, tool geometry, chip formation, process planning, time studies, process estimating,

cutting fluids, non-traditional tools, mechanics of chip formation, chip morphology, forces/energy, thermal performance, machining economics, and many other required areas.

As full-time employees, candidates advance within the program by rotating through responsibilities that provide wide exposure to the world of manufacturing, as well as build a depth of hands-on experience. Production experiences may range from weeks to months in duration, and progressively higher order assignments are sequenced over time. Accordingly, such cross-training exposure leads to high-level problem-solving skills and a sophisticated understanding of manufacturing processes, technologies, techniques, quality control methodologies, as well as team building, communication and leadership skills.

The manufacturing experiences within the CAT are critical and integral to the learning environment. The educational model is often compared to a "teaching hospital" where future doctors and surgeons learn within clinical settings. Industry contracts range from larger scale Tier One automotive OEM (original equipment manufacturer) production for such companies as General Motors Corporation, Ford Motor Company and DaimlerChrysler, to short order replacement part orders for the U.S. Government. The support that these contracts provide is paramount to the CAT and also representative of our strong industry partnerships.

For Fiscal Year 2005, 130 candidates were enrolled in the CAT. To date, 117 students have received associate degrees and 43 have received their bachelor degrees.

External Rotations: In Fiscal Year 2005 we continued to expand the external rotation program for CAT Candidates. Two Candidates began external rotations with General Motors Corporation (GMC) in January 2004 and continued through 2005, one working in the Powertrain Division and the other in the Metal Fabrication Division. Moreover, the success of these initial external rotations has resulted in the creation of five more positions at GMC, for a total of seven positions. In addition to these year-round positions, Candidates were placed in summer external rotation positions with Ford, Harley Davidson, and Cummings, and four Candidates spent the summer in external rotations at the U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC). Focus: HOPE is now working closely with other corporate partners to create more external rotation opportunities for our Candidates, with the hope of eventually placing students in 50 external rotation positions per year. In contrast to traditional internships or co-ops, these positions are negotiated with the host organization to ensure that the Candidates are gaining valuable hands-on experience and contributing to the work environment to which they are assigned.

Placement: Focus: HOPE is strongly committed to assisting all of its graduates find gainful employment. Last year our bachelor degree CAT graduates earned an average starting salary of $57,000. According to fall 2005 salary survey data from the National Association of Colleges and Employers, the average starting salary for manufacturing engineers was $49,678. Thus, CAT graduates are earning roughly 15% more than their peers because of the 4+ years worth of real world hands-on manufacturing experience they receive while at Focus: HOPE. Denise Ankofski Scheid, the General Motors' engineer pictured below, completed the program in May 2002. She and fellow Focus: HOPE graduate, Khalilah Johnson Oliver, won two of twelve coveted positions from a field of 400 nationwide applicants with General Motors Metal

Fabrication Division, where they are in a 3-year fellowship training program of its Tool & Die College. Within this program, Ms. Scheid was promoted from second shift front line supervisor for finishing in the die cell to third shift front line supervisor for blocking. She received compensation in excess of six figures in 2005. Glenn Johnson, a recent WSU graduate (December 2004), was also selected for the same highly prestigious program.

Many of our graduates have moved on to exciting engineering careers with General Motors, DaimlerChrysler, Ford, Visteon, Lear, and others. (See Appendix I for a partial list of industry partners who have hired Focus: HOPE graduates). Moreover, still others have gone on to complete graduate degrees. For a firsthand account of what has happened to just a few of our graduates, please see Appendix J, which contains student profiles.

In addition to our year-round activities to support students' career planning efforts, in April 2005 Focus: HOPE hosted its first annual Job Fair to help match graduating students with employment opportunities at leading companies in the machining, advanced manufacturing engineering and information technologies industries. The Job Fair was sponsored by Accenture and was attended by recruiters from General Motors, Honda, Comcast, EDS, Paint Tech International, Tech Team and many other companies. In Fiscal Year 2005, over 85 Focus: HOPE graduates were hired by the companies represented at the Job Fair. Please see Appendix I for additional information about the 2005 Job Fair.

**Given the painful realities of the current talent shortage, changes in the economy and business environment, increasing international competitive pressures, and other complex challenges that manufacturers face, respondents were asked to indicate what would be the most important to their success over the next three years.**

**Although many expect that overall employment levels in manufacturing will rise appreciably, an overwhelming majority of respondents stated that their workforce is the most important factor for future business success – 74 percent of respondents indicated that having a 'high-performance workforce' will be key to their business success.**

*"2005 Skills Gap Report – A Survey of the American Manufacturing Workforce,"*
National Association of Manufacturers and Deloitte Consulting LLP, December 2005, p. 6

Laptop and Blackboard Initiatives: Focus: HOPE, in partnership with business partner EDS, the Greenfield Coalition, and our university partners, has enhanced the computer-based, interactive learning experience for the CAT Candidates through two interrelated initiatives coordinated by the Focus: HOPE Learning Technologies Supervisor.

The partners worked together to acquire, configure, and distribute to all of the Candidates previously used EDS laptop computers loaded with Focus: HOPE-licensed software. In exchange, Candidates pay a small continuing user fee to support the Focus: HOPE laptop program. Through the use of wireless network cards and installation of a wireless network environment on the Focus: HOPE campus, Candidates use their laptops collaboratively, both during classes and individually throughout the CAT. At home, Candidates have access to the Internet at no cost via the laptop's built-in modem and the Wayne State University ISP.

Supplementing these expanded learning options, an ongoing collaboration of the university partners coordinates and provides the Blackboard Web-based learning management application for the Greenfield Coalition curriculum. Blackboard provides a means for faculty-Candidate and Candidate-Candidate communications, access to learning resources, discussion groups, e-mail facilities, and even a virtual classroom for live interaction with the instructor via the Web. Through Blackboard, Candidates have improved access to the Web-based learning modules, as well as other Internet-based resources—any time, anywhere.

The marriage of Web-enabled laptops with an Internet-based learning management system provides Focus: HOPE Candidates with state-of-the-art learning tools that give them the means to learn better, faster, and more comprehensively.

Achieving Candidate Laptop Program Self-Sustainability: The original computers used by the Candidates were aging Compaq laptops that had formerly been EDS corporate staff computers, long-ago turned in for new replacements. Through the initiative of the EDS unit which manages the Focus: HOPE Information Systems Department, these used Compaq laptops were provided to Focus: HOPE at no cost in order to launch the Candidate Laptop Program. The old Compaqs served well in that they proved the value and viability of the Candidate Laptop Program. But by Fiscal Year 2005, these old computers began to fail physically and their level of technology was proving too obsolete to support the advanced operating system and applications now required to support the Candidates' studies. In the meantime, the EDS Corporation could no longer provide turned-in staff laptops since that organization was now leasing rather than purchasing laptops.

However, the Society of American Engineers (SAE)-Detroit Section provided a "start-up" grant of $130,000 to Focus: HOPE for the sole purpose of replacing all of the Candidate Program's now-obsolete laptops with new state-of-art Dell laptops. The SAE-Detroit Section's grant funds, together with the continuing candidate user fee program and the technology support of the Focus: HOPE EDS unit, has put Focus: HOPE in a position to provide a financially self-sustaining Candidate Laptop Program that will now be able to fund the acquisition of future generations of computers for all of the Candidates in coming years.

Six Sigma: In wide use throughout American industry, Six Sigma was adopted by Focus: HOPE as part of its long partnership with the Ford Motor Company, a major proponent of the Six Sigma methodology. Six Sigma is a highly structured, customer and data-driven methodology for solving quality related problems in manufacturing and business operations. Its objective is to improve quality through process improvements that reduce or minimize variability. It relies heavily on a clear understanding of customer requirements and the process variables that affect those requirements.

Incorporation of Six Sigma into Focus: HOPE and the CAT is a prime example of how Focus: HOPE continuously strives to incorporate industry best practices into its education and manufacturing environments. As American industry strives to maintain its global competitiveness, Focus: HOPE makes every effort to stay at the cutting edge of advanced technologies in order to provide its students with outstanding opportunities, as well as to fill the workforce pipeline with individuals capable of contributing to corporate and global competitiveness.

Five Focus: HOPE colleagues (three CAT Candidates and two full-time employees) have completed Black Belt training. Two CAT Candidates were recently certified by the Ford Motor Company as Six Sigma Black Belts, after having fulfilled the company's rigorous certification requirements. One of those students was recently hired by Ford following graduation from the CAT, partly on the strength of that student's Six Sigma training and experience.

Focus: HOPE has developed its own internal Six Sigma Green Belt training capabilities and trained approximately 30 CAT candidates as Green Belts in 2004. Two of those Candidates were enrolled in the Ford Motor Company's Six Sigma Black Belt training program for 2005, and these Candidates worked onsite at the Ford-Livonia transmission plant. In 2006 we look forward to these Candidates passing the exam for their Black Belt certification.

Focus: HOPE Contribution to the STEM Pipeline: Focus: HOPE has made outstanding contributions toward increasing diversity within the traditionally homogeneous science, technology, engineering and math fields (known as STEM).

**African Americans, Hispanics and other ethnic and racial minorities account for only 6 percent of the science and engineering workforce – a figure far below their demographic presence. Women represent only a quarter of the science and engineering workforce, even though they make up nearly half of the total U.S. workforce. By 2020, more than 40 percent of college-age students will be ethnically and racially diverse. If America is to strengthen its base of science and engineering talent, it must act to recruit the fastest growing segments of the workforce.**

*"Innovate America: National Innovation Initiative Report: Thriving in a World of Challenge and Change,"* Council on Competitiveness, December 2004, p. 24

Focus: HOPE is succeeding against such downward ethnic and racial minority recruitment trends – 96% of currently enrolled engineering associate and bachelor degree students are African-American, more than doubling the number of African-American students in the United States pursuing a bachelor degree in manufacturing engineering. Therefore, it is not surprising that the National Science Foundation refers to the CAT as the nation's largest enroller of minority students in manufacturing engineering.

Research and Development (R&D): Like other teaching hospitals, the CAT has been engaged in R&D activities for many years. High-tech R&D is at home in the CAT because of its emphasis on evolving renaissance engineers whose primary focus is on solving manufacturing problems, whether for the U.S. Government of for our nation's auto industry. Focus: HOPE's unique

program provides an unparalleled opportunity for undergraduate engineers to experience, collaborate, and actually develop new technologies and methodologies of the highest national significance. Student degree Candidates have been involved with the development of military sponsored R&D projects since their inception and compete to rotate through these assignments. Few undergraduate programs offer students the firsthand opportunity to work on R&D typically reserved for graduate students.

The Mobile Parts Hospital: With funding from the U.S. Department of Defense, Focus: HOPE has worked with the U.S. Army Tank-automotive and Armaments Command (TACOM) and its National Automotive Center (NAC), headquartered in Warren, MI, to develop a "mobile parts hospital" (MPH) for the creation of spare and repair parts at the military point of need. The mobile army surgical hospitals, or MASH units of the past, inspired this rapid manufacturing system concept.

As of Fiscal Year 2004, the MPH is on a fully aircraft transportable containerized platform. These units are the nation's only known transportable and agile manufacturing units fully integrated with digital satellite engineering capability. The MPH has the capacity to make spare, repair and other much needed manufactured parts by utilizing such high-tech methods as stereo lithography and laser engineered net shaping (LENS), and multi-tasking machine tools. The MPH has been designed to travel with Army units thereby obviating the lengthy logistics pipeline, reducing substantially the Army's spare parts inventory and logistics costs and enhancing military vehicle readiness.

In October 2003, the Army deployed the Mobile Parts Hospital's Rapid Manufacturing System (RMS) to Camp Arifjan, Kuwait, in support of American forces in Iraq. In short, the RMS is a 27,000-pound, self-contained, self-sustaining, mobile, design simulation and mini-manufacturing center, capable of being deployed anywhere in the world to produce parts in the field in less than an hour. The MPH is currently producing a variety of critically needed replacement parts for military vehicles, as well as responding to other military manufacturing needs. Among its capabilities, the MPH can send and receive digital manufacturing-ready data to make a replacement part for a variety of military vehicles, create manufacturing data, as well as produce and verify parts before they are released. Focus: HOPE has been manning the unit with two-man rotations that spend a minimum of three months on site in Kuwait.

Thus far, the MPH team has the capability of manufacturing over 500 different parts and has produced over 15,000 of these parts all together, through a combination of work being conducted in Kuwait, as well as with the assistance of the Focus: HOPE-based Agile Manufacturing Cell in Detroit. Focus: HOPE has received many personal e-mails from soldiers and officers who are deeply appreciative of the work that the Focus: HOPE team is doing under very challenging and difficult circumstances, as they work around the clock, often 7 days a week, in a very hot climate. In fact, many have expressed the view that the Focus: HOPE MPH team's work has greatly contributed to "saving their lives."

In June 2004, the MPH Team received a 2003 "Army's Top 10 Greatest Inventions Award" for inventing a new Squad Automatic Weapon (SAW) Pintle Mount Assembly for the HMMWV. The mount is now being used by hundreds of soldiers to defend convoys moving back and forth between Kuwait and Iraq.

Because of the huge success of the initial MPH deployment, in 2005 the U.S. Army requested the production of three more units, two of which have been deployed in Iraq and Afghanistan, respectively, and the third of which was delivered to Focus: HOPE to be upgraded and to provide operational training for military personnel. Thus far, Focus: HOPE has trained two soldiers and 10 Defense Department civilian personnel to operate the units.

To date, the collaborative MPH project with the TACOM's National Automotive Center (NAC) represents a minimum federal investment of over $35.0 million that has been brought into the State of Michigan, including funds from the Global War on Terrorism. The federal appropriation for Fiscal Year 2005 was designated at $4.5 million. The National Automotive Center is the Army's official link to working with commercial and academic partners to generate vehicles that will provide the Army with the mobility, survivability and agility it needs to operate efficiently and effectively in today's new threat environment.

Other Defense Department Sponsored R&D: On a related front, Focus: HOPE received a separate Fiscal Year 2005 appropriation of $1.9 million to create a lean manufacturing facility in support of the Defense Department's MANTECH program. (See Appendix O for additional information on the MPH and its deployment).

In addition, Focus: HOPE recently received separate Fiscal Year 2006 appropriations of $2.8 million in second year funding to support further development of the Army Manufacturing Systems Demonstration (MSD) project and $3.5 million in support of a new Navy Mobile Manufacturing and Repair Cell project. The Manufacturing Systems Demonstration project is designed to conduct the research, planning, designing, and potential sourcing activities that will define and specify the critical elements of an agile, efficient manufacturing cell that reduces the cost and shortens the lead time for producing critical machined parts for military systems and platforms. The new Mobile Manufacturing and Repair Cell project will improve both the efficiency and flexibility of mobile manufacturing concepts achieved by the highly successful Army Mobile Parts Hospital project by adapting lessons learned to Navy environments and constraints.

Professional Development: In addition to academic coursework and manufacturing experience, Candidates may choose to participate in a Professional Development Workshop Series each

semester, with in-depth exposure to such subjects such as resume preparation, interviewing skills, professional presentation, networking, and so forth (see example Workshop Series' semester descriptions in Appendix H). This Workshop Series is designed to give Candidates not only a strong foundation for knowing what is expected in the work place, but also how to go about identifying, interviewing for, obtaining and performing in a job once they have received their degree. Focus: HOPE leverages industry in-kind contributions for these activities that would otherwise cost over $50,000 per year.

**For most of the 20th century, the American education system provided a substantial part of the talent and proficiency needed to sustain and improve our way of life….Today, however, as the U.S. economy becomes even more reliant on workers with greater knowledge and technological expertise, the domestic supply of qualified workers is not keeping up with the skill demands. Employers are increasingly interested in hiring people who not only can execute well but also can create the next wave of innovation.**

*"Tapping America's Potential: The Education for Innovation Initiative,"*
Business Roundtable, July 2005, p. 6.

## THE HIGH SCHOOL PROGRAM (MACHINIST TRAINING INSTITUTE AND FAST TRACK/FIRST STEP)

The Focus: HOPE High School Program is a pioneering advanced placement, dual enrollment program that provides high school students the opportunity to learn career skills and gain college credits while pursuing their regular high school diploma. The program currently overlays with the FAST TRACK/First Step programs and the accredited curriculum of the Machinist Training Institute (MTI). Students who are in their junior and senior year dually enroll at Focus: HOPE, and subsequently graduate from high school and from the Machinist Training Institute simultaneously. The MTI provides in-demand skills training for careers in machining and advanced manufacturing areas to its graduates. It also can provide a route to degree level education through the Center for Advanced Technologies.

Since opening in 1981, the Machinist Training Institute has graduated nearly 3,000 advanced manufacturing/precision machining students, nearly all of them minorities and women. The MTI offers state-licensed, ACCET accredited courses in precision machining and metalworking. During the full-time 31-week basic course, students receive 1,108 contact hours of formal instruction in applied mathematics, manufacturing theory, blueprint reading and graphics, statistical process control and metrology, and communications. Of this, industry experts teach 549 hours of practical experience in machine processes. (See the attached curriculum and schedule in Appendix K). The Fiscal Year 2005 starting wage for graduates of Focus: HOPE Machinist Training Institute averaged nearly $11.00 per hour. New classes start every 8 weeks.

The renovated 59,000 square foot shop floor at MTI is equipped with nearly 100 conventional and computer-controlled machine tools, a complete tool room, metrology laboratory, and two 20-station CAD laboratories. Trainees learn the set-up, operation, and maintenance of conventional lathes, mills, and grinders commonly used in industry. An introduction to the programming, set-up, and operation of computer numerical controlled Bridgeport mills and machining centers is included.

Focus: HOPE believes the Machinist Training Institute to be the country's largest such program and provides a considerable advantage to the Michigan manufacturing industry in supplying skilled workers. In a report released by the Michigan Department of Career Development in May 2002 an analysis of Michigan's skilled production occupations shows that labor supply will lag demand. The largest supply/demand gap appears in the high growth machinist and related occupations area. This same report shows that the Focus: HOPE MTI programs provide Michigan industry with over 50% of the new machinist entrants from formal training programs. The report goes on to find that looking to the future, Michigan manufacturing industries are projected to generate more than 200,000 jobs over the next decade in order to replace workers retiring from the manufacturing labor force. Clearly, Focus: HOPE's manufacturing career-focused programs will continue to provide a competitive advantage for Michigan.

The high school students are not charged any tuition for participation in this program. Students typically attend regular high school classes five hours per day and MTI classes three hours per day, five days per week, for a total of 15 high-school credits per semester. All other high school requirements are met through attendance at the home school. As such, while the traditional MTI adult program is a 31-week program, high school students complete the MTI curriculum over the course of their junior and senior years of high school, usually including summer sessions.

Under the High School Program, if a student tests below 9$^{th}$ grade reading and 10$^{th}$ grade math levels, the student will enroll in either the First Step or FAST TRACK program (13 High School students participated in these programs in Fiscal Year 2005). If the student tests at 9$^{th}$ grade reading and 10$^{th}$ grade math levels or greater, the student enrolls directly into the MTI program (30 High School students participated in the MTI program in Fiscal Year 2005). Under the first scenario, students may complete the MTI certification program at the same time they graduate from high school.

The High School program gives graduates career options and opportunity – an MTI certificate along with a high school diploma, career opportunity in a high-skill, high-wage arena and as many as 30 advanced college credits at Wayne County, Oakland and Macomb Community Colleges (via articulation agreements). They may then go on to enroll in the Focus: HOPE pre-engineering program, which leads into the Center for Advanced Technologies.

The 24-week part-time (5.5 hours/day) Pre-Engineering program (560 contact hours) provides students who plan to enroll as Candidates in the Center for Advanced Technologies (CAT) with a very strong math foundation, necessary in order to be successful in the undergraduate engineering programs. Students who successfully complete the Vestibule, Basic Precision and Advanced Precision Machining coursework may receive as many as 14 credits toward their Lawrence Technological University associate degree.

The student may then choose to immediately become a Candidate at the Center for Advanced Technologies, take employment, or begin post-secondary education elsewhere with articulated college credits in hand.

Focus: HOPE is still planning to expand offerings to high school students to include entering the Information Technologies Center (ITC) to participate in its certification programs. In order to enter the ITC, students will have to demonstrate 12th grade competency in English and 9th grade competency in math.

To date, twenty-one high schools have partnered with Focus: HOPE. For Fiscal Year 2005, enrollment in the High School Program was a total of 43 students. Significantly, 16 former High School Program enrollees have moved on to participate in other Focus: HOPE programs.

Over the past year, Focus: HOPE has been working with the Detroit Public Schools (DPS) to refine our recruitment strategy to best serve the needs of our target high school student population. In this effort, Focus: HOPE is aligning its recruitment efforts with the vocational programs which are ongoing within DPS. Focus: HOPE looks forward to reporting on a more strategically focused plan of working with DPS to increase recruitment, enrollment, retention and a greater diversity of career options for these young learners.

## FAST TRACK/FIRST STEP

Many individuals obtain high school degrees and GED certificates but are not functionally capable of performing at a high school graduate level in the workforce, and often they are also not capable of successfully pursuing post-secondary education. Consequently, Focus: HOPE has designed a competency-based pathway that requires incoming students to have a high school degree or GED and to functionally test at a minimum of 9th grade reading and a minimum of 10th grade math in

order to enter the Focus: HOPE Machinist Training Institute. The Focus: HOPE Information Technologies Center requires a minimum of 12th grade reading and 9th grade math skills.

Because of the minimum requirements noted above, Focus: HOPE initially designed the highly successful and widely mimicked FAST TRACK program to raise math skill levels from 8th grade to a minimum of 10th grade and reading skill levels from 8th grade to a minimum of 9th grade within seven weeks. Michigan created a state-wide program called Fast Break, based in large part on the success and model of Focus: HOPE's FAST TRACK program.

Additionally, in order to better serve the needs of individual students', the FAST TRACK program was revised in 2005 to offer math-only or reading-only skill enhancements to students who only required improvement in one area.

These stated grade level increases are minimum numbers and can increase further to grade level 12 or beyond depending on the individual student's personal objectives. Following the success of FAST TRACK and upon the initiation of welfare-to-work requirements, Focus: HOPE found that an additional program was needed to raise many individuals' math skill levels from 6th grade to 8th grade. Thus a four-week First Step program was created to immediately precede FAST TRACK for those individuals needing extra assistance. (See Appendix L for First Step and FAST TRACK program materials).

Instructors assign math and reading modules, schedule weekly productivity goals for each person, monitor and record progress on a daily log, and provide individualized attention. Tutors are available as required. Instructional effectiveness is key to Focus: HOPE's overall capacity to prepare low-income individuals and others for employment opportunities through a coordinated and linked system of effective career and life preparation programs.

Emphasis is placed on the "4 A's" of "Attendance, Academics, Attitude, and Appearance," in order to prepare students for the expectations of a professional work environment. Students attend classes from 8:00 a.m. to 4:00 p.m., Monday through Friday, and have access to a wide range of counseling, testing, and career preparation services. Moreover, Focus: HOPE provides a mandatory drug-free educational environment, life and financial management counseling, and other student services, including bi-weekly access to a Family Independence Agency social worker. In short, Focus: HOPE provides a cadre of wrap-around supportive services to fully meet the special challenges faced by these students.

In addition to self-paced learning, small group sessions are held in the following subjects: math concepts, computer utilization, and communication skills; direction and practice of successful employment discipline thorough the use of productivity schedules and performance evaluations;

and exploration of technical career options. Historically, about 80% of students successfully complete these programs. For Fiscal Year 2005, enrollment in the FAST TRACK and First Step programs was 154 students, with completion rates of 79% and 78% respectively. To date, 4,669 individuals have participated in FAST TRACK and 1,285 have participated in First Step.

As indicated, the Focus: HOPE First Step and FAST TRACK programs address the general readiness of high-school graduates and GED holders for success, linking graduates with opportunities in the key job-generating and wealth-producing sectors of the Michigan economy – manufacturing and information technologies. Graduates may continue on to advanced job training in Focus: HOPE or elsewhere in post-secondary education, including two-year or four-year degree granting institutions, or move directly to employment.

## OTHER FOCUS: HOPE PROGRAMS AND ACTIVITIES (NOT FUNDED BY THE STATE OF MICHIGAN)

Focus: HOPE operates a number of other programs that are essential to carrying out its civil and human rights mission, many of which impact or relate to the state funded programs. They are described in the following pages.

**The Information Technologies Center (ITC):** The Information Technologies Center was established in January 1999 to provide a broad range of industry-certified training programs and currently offers programs in network, desktop and server administration. The extensive curriculum includes classroom and lab assignments in 25-52 week long programs, based on the proven MTI/CAT model (see Appendix M for highly descriptive ITC program materials). The ITC is providing minorities and women, in particular, access to high paying careers. The Department of Labor's Occupational Handbook projects growth in computer support network and systems administration jobs in this decade. IT professionals in these fields support physical infrastructure where support jobs are not easily sent off-shore. The ITC has graduated 658 students from its programs thus far. Current starting wages are typically $10 to $15 per hour. Graduates with 2-3 years worth of experience and who continue to earn certifications in this area can earn salaries in the range of $40,000 to $60,000.

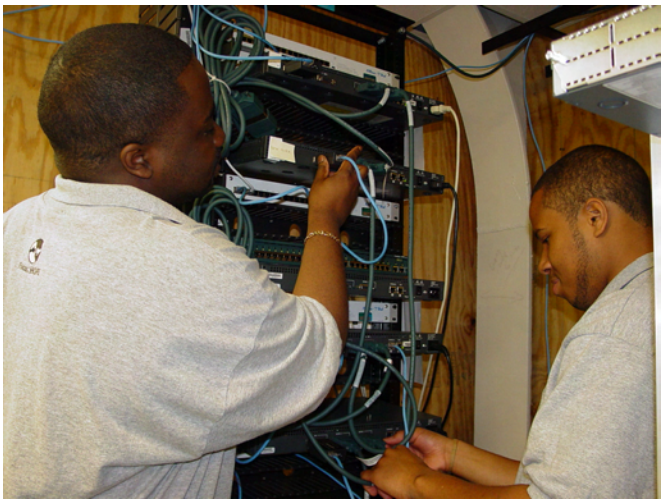
> **If the U.S. is to remain a leader in information technology, IT workers must remain at the vanguard of their profession. Whether for IT careers specifically, or to use IT to reach advances in other fields, U.S. IT workers must be the best to build the best. That means education, training and professional development. For individual workers, it means developing a career strategy that puts one in the best possible position for success. For organizations that utilize IT, that means having broad information about general IT hiring trends and how these may affect internal operations, recruiting directions, and training plans.**
>
> *"Adding Value…Growing Careers: The Employment Outlook in Today's Increasingly Competitive IT Job Market,"* Information Technology Association of America Annual Workforce Development Survey, September 2004, pg. 5

*Accreditation Process* – The ITC program is accredited with the Accrediting Council for Continuing Education & Training (http://www.ACCET.org). The ACCET, officially recognized by the U.S. Department of Education since 1978, has been deemed a reliable authority as to the

quality of education and training provided by the institutions it accredits. The ITC Network Administration and Desktop & Server Administration programs have been approved by the Education Department for qualifying students to receive Pell Grants.

*Design of Information Management Systems Engineer Degree* – Focus: HOPE is now in the process of creating a new breakthrough program. The Bachelor of Science degree in Information Management Systems Engineering (IMSE) will prepare graduates for leadership roles with companies that use information technology for competitive advantage. The curriculum will be not just a mix of engineering and business classes, but classes that truly integrate IT engineering and business. A partnership of Focus: HOPE, Wayne State University as academic partner and Data Consulting Group (DCG) as business partner has been formed to implement this new program. WSU currently has a BA in Information Systems Technology which is based on business and technology courses. DCG, a Detroit-based, minority-owned IT company with 14 years experience, will manage IMSE students in experiential and IMSE contract work. The IMSE team is currently working with Ford Motor Company on the development of a Systems Thinking course that includes both theoretical and practice content. Pending funding support, it is hoped that this program will enroll its first class of students directly from the Focus: HOPE certification programs.

*Incumbent Worker Training for Comcast* – In a continuing partnership with Comcast, Focus: HOPE conducted computer literacy classes for Comcast employees in Fiscal Year 2005. Over 270 individuals received classes in Microsoft Office products, e.g., Word, Excel, PowerPoint, Access and Outlook. Focus: HOPE expects to continue running 20 classes per year for Comcast with an estimated 250 people trained per annum.



Moreover, Comcast established a Call Center on the Focus: HOPE campus to support their Ann Arbor offices during peak times, hiring only ITC students. The Call Center provided Focus: HOPE students with valuable work experience and hourly wages. During 2005, Comcast hired ITC students to fill nine internship and five permanent positions.

Three students were awarded CompTIA's IT Merit award for passing their A+ certifications and excellence in class. And, Ford's IT department continues to support monthly mentor meetings, providing IT professionals for presentations, discussions and tours of their IT-related facilities.

During 2005, the ITC upgraded its programs to include preparation for a CBP-Customer Service certification administered by IBTA [International Business Training Association] and the MCSA certification [Microsoft Certified Systems Administrator].

**"…The technical support and network system design categories saw the largest year to year increases in employment, both up five percent;**

**"…In terms of future demand, technical support scored the largest number of jobs with approximately 67,000, followed by network systems development and programming;**

**"…In terms of adding value to the enterprise once on the job, hiring managers indicated that best methods for internal advancement included participation in formal on the job training (56 percent) and certification programs (55 percent). Seventy-one percent of survey respondents said certification or continuing education is either important or very important for advancement;…"**

*"Adding Value…Growing Careers: The Employment Outlook in Today's Increasingly Competitive IT Job Market",* Information Technology Association of America Annual Workforce Development Survey, Executive Summary, September 2004, pg. 2.

**Focus: HOPE Quality Systems:** Focus: HOPE is firmly committed to establishing quality processes for every program and activity in which it engages. These efforts were begun in 1998 in response to relationships with manufacturing customers, e.g., the big three automakers, and an increasing desire to improve the quality of their products. However, Focus: HOPE has since voluntarily committed to initiating such processes throughout the remainder of the organization in order to ensure proper stewardship of its resources and excellence in fulfilling its mission.

QS 9000 certification, applying solely to Focus: HOPE's manufacturing operations, was achieved in 1998 and has been migrated into the new industry-wide ISO/TS 16949 standard. Focus: HOPE completed the implementation of its Quality Management System, and has achieved ISO 9001:2000 certification for the entire non-manufacturing organization. All of the quality systems being utilized by Focus: HOPE to improve its operations have been integrated into a comprehensive, campus-wide quality and environmental management system.

Achieving such certifications illustrates a level of organizational quality that few other non-profit, training, or childcare organizations have obtained. According to the International Organization for Standardization, in the ISO 9001 context:

> the standardized definition of quality refers to all those features of a product (or service) which are required by the customer. Quality management means what the organization does to ensure that its products or services satisfy the customer's quality requirements and comply with any regulations applicable to those products or services. In addition, ISO 9001 requires organizations to improve their performance continually in quality management. http://www.iso.org

The certification scope description is: "This registration covers the Quality Management System for the provision of career training and machining, engineering and information technology as well as the provision of conference facilities, childcare and early childhood development and nutritional food packages for low income families and seniors." The Focus: HOPE Quality Policy Statement is stated below:

### *Focus: HOPE Quality Policy Statement*

- *This policy statement demonstrates Focus: HOPE's commitment to its mission statement and customers through its quality management system.*

- *Focus: HOPE affirms that exceeding customer expectations is out top priority business objective.*

- *Our commitment to exceed customer expectations in QUALITY, DELIVERY, and COST will be achieved through continual improvement of all Focus: HOPE programs, activities and systems in concert with ISO 9001, ISO 14001 & TS 16949 standards. It will also be achieved through the commitment and determination of our colleagues, as well as dedication to training and professional development of colleagues with emphasis on teamwork.*

- *With Passion, Persistence and Partnerships we strive for Perfection… This commitment we Pledge to our Customers.*

On a related front, Focus: HOPE achieved ISO 14001 certification in 2004. ISO 14001 is primarily concerned with 'environmental management.' Focus: HOPE implemented an Environmental Management System (EMS) which is a collection of programs, manuals, procedures, work instructions, forms, records and practices that address control of all work activities to minimize adverse environmental effects; for example, contamination of on-site surface water discharged to local streams and creeks, or emissions of fine particles into the air.

**Safety**: The Focus: HOPE Safety Department supports management of the organization in reducing the number of accidents and injuries; advises management on compliance with applicable government regulations; and provides emergency assistance, safety training, safety consultation, accident investigation, injury case management and provides useful safety metrics. The Safety Department promotes the continuous improvement of the quality and environmental effort at Focus: HOPE by looking for ways to increase productivity and reduce waste and commits available time on value-added projects and initiatives.

In fall 2005 Focus: HOPE was recognized by the Michigan Occupational Safety and Health Administration (MIOSHA) Division for Consultation Education and Training (CET) for outstanding safety and health records. Three CET awards were presented to Focus: HOPE by MIOSHA Director Doug Kalinowski: the Bronze Award to Focus: HOPE Manufacturing; the Silver Award to the Focus: HOPE Center for Children; and the Silver Award to the Machinist Training Institute. These awards recognize Focus: HOPE's exemplary efforts in developing and implementing written safety and health policies and procedures, the establishment of a safety and health committee, and other criteria that support a safe and secure work environment campus-wide. Focus: HOPE's dedication to safety and health is closely aligned with its commitment to quality noted above, and its focus on continual improvement in all of its learning environments. Please see Appendix O for a copy of the awards press release.

**Center for Children (CFC):** Begun in 1987, the Focus HOPE Center for Children offers infant and toddler care (beginning at 6 weeks of age through 2 year olds), Montessori and early childhood preschool education (age 3 through kindergarten), and before and after-school

programming and a summer day camp for 6-12 year olds. The Montessori approach to early childhood education stresses the needs and basic development of the young child, including social and intellectual activities aimed at enhancing self-confidence and independence in an atmosphere of love and respect for the child. Admission is open to parents enrolled in Focus: HOPE training programs, the community-at-large, and Focus: HOPE colleagues. Since its opening, the Center for Children has provided child-care and educational services to over 5,600 children. Enrollment in Fiscal Year 2005 was 115 children.

In Fiscal Year 2004-2005 the CFC engaged in an intensive Child Development Training Plan process to ensure that 14 of its staff members (teachers, assistant teachers, and aides) achieved their Child Development Associate Credentialing (CDA), a nationally recognized credential awarded to individuals who have demonstrated competency through both experience and education in working with young children ages 0-5. Staff members were required to complete 120 hours of formal childcare education in early Fiscal Year 2005. These credentials are required to meet upcoming revised State of Michigan child care licensing rules. The revised child care rules are to become effective by June 2006. In addition to providing this valuable training opportunity to CFC staff members, Focus: HOPE also opened its doors to nearly 100 members of the Detroit metropolitan child care community to participate in the CDA education program.

*Accreditation Process* – The Center for Children was among the first organizational subunits to receive ISO certification. The certification was awarded to the Center in 2003. The Center is in the process of pursuing its National Association for the Education of Young Children (NAEYC) accreditation. The NAEYC administers a national, voluntary, professionally sponsored accreditation system to help raise the quality of preschools, child care centers, home day care and school-age child care programs. There are currently about 8,000 NAEYC-accredited programs nationwide, serving nearly 700,000 children and their families. Only five programs are currently accredited within the City of Detroit, while an additional 143 other programs, serving 13,874 children, are accredited throughout the State of Michigan. The entire CFC accreditation process is expected to take 2-3 years.

**Student Loan Fund**: Most Focus: HOPE training and education programs have associated tuitions, with the exception of the CAT associate and bachelor degree programs and the High School program. Because the vast majority of Focus: HOPE students are low-income, minority individuals, they do not have the ability to pay for their own education; therefore, the Student Loan Fund was established to assist them with financing. Capitalized with approximately $11.8 million of private sector contributions, the Loan Fund Program enables students to obtain quality education that will result in a career, not just a job. Once a student enters a training program, s/he signs an agreement to repay tuition costs upon graduation and job placement.

The first of its kind in the country, the Loan Fund is unique in a number of ways:

1) it is capitalized with private sector dollars including a $3 million Program Related Investment (PRI) from the Ford Foundation, New York;
2) it complements currently available government aid;
3) the payment terms are more flexible than government loans;

4) it provides access to capital to a population of students who are otherwise unable to qualify for traditional student loans and, therefore, gives them the tools to be self-sufficient;
5) unlike loans for housing and micro-enterprise development, Focus: HOPE's fund is secured by the development of "human capital"; and
6) while at Focus: HOPE, students participate in programs designed to educate them on credit and debt management (e.g., partners, such as Ford Motor Credit, conduct workshops for students in this area ).

In 2006, we anticipate that approximately $2 million in tuition will be loaned to students in Focus: HOPE training and education programs. To date, the Loan Fund has enabled over 4,100 students to participate in our technology and manufacturing training programs, moving into jobs with starting salaries ranging from $10 to $13 per hour.

**Student Loan Fund Study:** Focus: HOPE implemented the private Student Loan Fund in July 1998. With six years of experience administering the fund, Focus: HOPE has initiated a three-year longitudinal study to review and assess its effectiveness. Through this effort, we expect to determine the following:

- Is there such a thing as a low-income "good credit risk";
- If so, what are the characteristics that can predict who will repay their loan;
- What are the terms and conditions of a loan that will optimize its repayment;
- Can appropriate investment in human capital, i.e. training, pay for itself in the future; and
- What is the net impact of the Student Loan Fund on Focus: HOPE's training programs.

Answers to these questions have profound implications for the non-profit, private and public sectors. The introduction of a new financial model for underwriting tuition would offer thousands of low-income individuals an opportunity to access training programs. Additionally, dissemination of this data to conventional lenders, such as Ford Motor Credit, would provide a new basis for reviewing loans to a low-income population currently denied credit or subjected to predatory rates. Last, a thoughtful study of this model would inform the national debate on workforce development, creating the potential for increased access to funding.

With an initial investment of over $1,100,000 from the Ford Foundation, Focus: HOPE began work last year on the three-year study, budgeted at approximately $1.5 million for research and upgraded data collection systems. An Advisory Committee, made up of consultants and specialists in the field of credit, labor economics and workforce development policy-making and Focus: HOPE staff are now working with Dr. Kevin Hollenbeck and the W.E. Upjohn Institute for Employment Research in Kalamazoo, MI, documenting loan data and programmatic outcomes from the past six years. In 2005, the study focused on the following:

- Comparison of Focus: HOPE enrollees versus non-enrollees (those who passed the admission tests, but chose not to enroll) from FY2001-2003. Reviewing both the

economic and non-economic outcomes of these two groups, Focus: HOPE will evaluate the net impact of its adult training programs and the viability of the Student Loan Fund as a model for financing education and career training; and

- Documentation and review of Focus: HOPE programmatic outcomes during the past six years, including placement, promotions, and earnings information for all students.

At the completion of the study, Focus: HOPE and the W.E. Upjohn Institute intend to market and disseminate the results of the study through a publication, marketing, and distribution network. Additionally, chapters will be available on both the Focus: HOPE and Upjohn websites. Upjohn will also train Focus: HOPE staff to replicate and continue the analyses undertaken.

Focus: HOPE's study will realize a number of long-term results:

- A comprehensive evaluation of our Student Loan Fund operations will determine if loans secured by "human capital" are viable. Unlike loan funds for micro-enterprise, for example, where assets are available as collateral, the Student Loan Fund is based solely on the future development of human capital through skills-based training. With no assets attached, the fund is particularly vulnerable, making a comprehensive study imperative for future success.

- The study will begin to create a picture of what constitutes a low-income "good credit risk." The dissemination of this information to credit institutions could have a dramatic impact on current predatory lending practices.

- Policy makers continue to debate the future of workforce development. This includes a vast array of proposed funding solutions, none of which have been deemed successful. An informed presentation on the positive impact of a student loan fund can have a beneficial effect on the current dialogue.

- Non-profit organizations are routinely asked for outcomes data by funding sources. In addition, internal review of programmatic outcomes is critical in determining the efficacy of programs as they develop and evolve. The Student Loan Fund study will provide readily accessible information for both internal and external utilization.

**Strategic Program Reviews:** Adopted in 2004, the Focus: HOPE strategic plan recommended that a detailed, strategic review be conducted of each of the organization's training and education programs to assess their current relevance and effectiveness, and to determine what program changes, if any, should be implemented.

Strategic reviews for the Information Technologies Center (ITC) and the Center for Advanced Technologies (CAT) were completed in 2004 and 2005 respectively. These reviews involved multi-disciplinary teams composed of stakeholders and subject matter experts, both internal and external, and market research firms conducting data mining activities and focus groups on a *pro bono* basis. Operational models and financial plans are now being developed for both the ITC and the CAT programs, with completion anticipated in early spring 2006. Thus far, these

reviews have resulted in considerable insight into the degree to which Focus: HOPE's programs are unique and a much stronger understanding of Focus: HOPE's value-add. This information is being utilized to further focus on Focus: HOPE's strengths and to grow the programs to serve Michigan residents.

Strategic reviews of the Machinist Training Institute (MTI) and First Step/FAST TRACK (FS/FT) were undertaken in Fiscal Year 2005-2006. A first phase of data mining and focus group market research has been completed for the MTI review. A consulting firm has been engaged (on a *pro bono* basis) to conduct a second, more detailed market research effort for MTI. The strategic review of First Step/FAST TRACK has just gotten underway with preliminary market research just getting underway at this writing. These reviews should result in preliminary recommendations for revised program models by the end of February 2006.

The total value of *pro bono* assistance with the strategic review process provided to Focus: HOPE in 2005 has been estimated at over $950,000.

**Recruitment and Marketing Activities**: Focus: HOPE education and training programs enjoy strong support from a number of industry partners in many of its efforts to secure eligible students and candidates. A radio advertising campaign was conducted in late summer 2005 that targeted individuals in the age range of 18 to 34 in the Detroit area. The radio ads were developed to alternately focus on the machinist the information technology training programs. The ads were developed at Focus: HOPE and aired through the Radio One organization, which owns several stations in the Detroit market. The Radio One stations were selected as a result of surveys conducted of the Focus: HOPE student population earlier in 2005 which identified three key stations (all owned by Radio One) as the most listened to in the target demographic. The campaign ran for just under two weeks on three stations leading up to an open house event at Focus: HOPE in August 2005. The contract with Radio One also included the appearance at the open house of a prominent and popular on-air personality from one of the stations. At the same time, a 30 second TV ad, developed by Comcast for Focus: HOPE (on a *pro bono* basis) in 2004, ran several times during the week leading up to the August open house event.

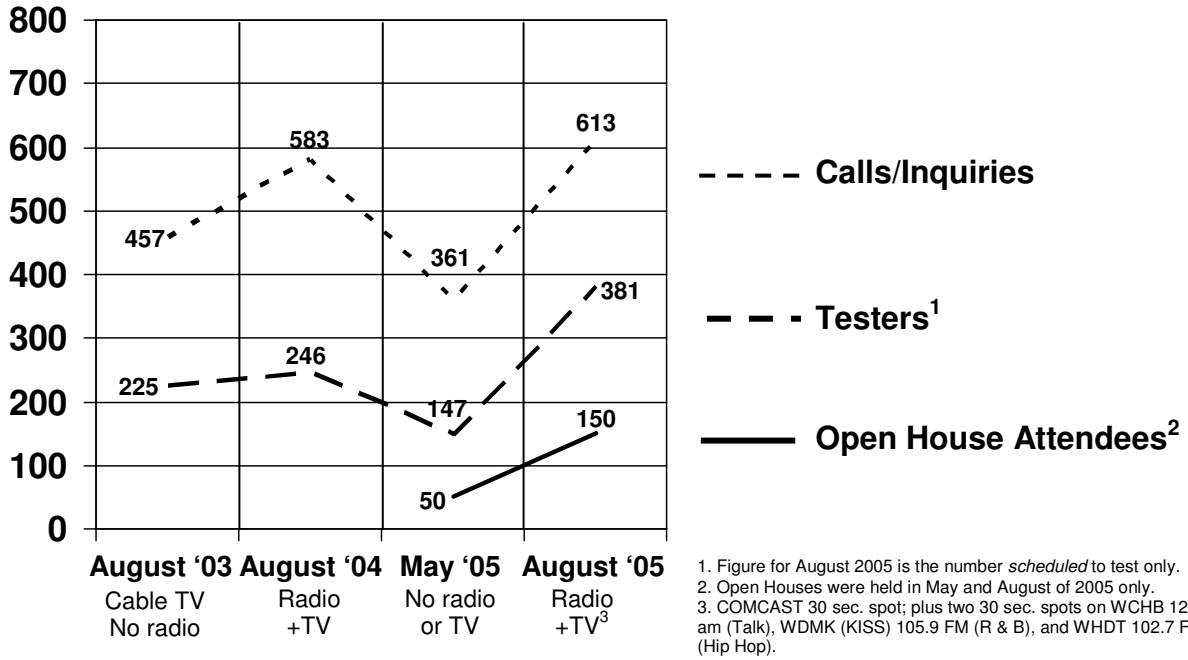
As a result of the combined radio and TV advertising efforts, attendance at the open house was markedly higher than had been Focus: HOPE's previous experience with events of this kind. Overall attendance and contacts seeking information or expressing interest in our training and education programs rose considerably (see the data in the graph below).

Focus: HOPE has a full-time admissions staff responsible for reaching out to both traditional and nontraditional student populations of all backgrounds, ages, etc. The recruiting staff considerably increased their outreach activities during Fiscal Year 2005, particularly targeting populations that have not traditionally been as familiar with Focus: HOPE in the past.

In 2004, the Director of Education established a team to strategize on different ways to increase enrollment. The "Enrollment Task Force" executed many ideas in the areas of curriculum, outreach, and advertising that also helped to increase enrollment. The Admissions department

engaged in many new initiatives in FY 2005, which included open houses, expanded outreach to the community at large, and planned outreach in high schools for graduating seniors.

## Impacts of Radio/TV Advertising on Recruiting Initiatives 2005




1. Figure for August 2005 is the number *scheduled* to test only.
2. Open Houses were held in May and August of 2005 only.
3. COMCAST 30 sec. spot; plus two 30 sec. spots on WCHB 1200 am (Talk), WDMK (KISS) 105.9 FM (R & B), and WHDT 102.7 FM (Hip Hop).

**Partnerships:** Since its inception, Focus: HOPE has worked tirelessly to engage a wide variety of partners in achieving its mission. Over the years, we have forged strong relationships with the corporate partners who hire our training and education program graduates. We have done so by deeply engaging them in curriculum development to ensure that our programs are current and relevant in today's globally competitive environment. And, we have done so by producing high quality manufacturing products for them in our "manufacturing teaching hospital."

On another front, Focus: HOPE has deeply engaged its government partners – federal, state, and local – to leverage public resources in support of the individuals to whom Focus: HOPE is offering a foothold on the ladder of economic success. Moreover, Focus: HOPE is utilizing its vast experience to provide critical and timely information to public policymakers on workforce development issues, i.e., how to create successful sector specific career ladders that meet industry-driven demand.

The academic community continues to be a critical partner to Focus: HOPE, both in the delivery of many of our education programs, but also in the process of designing new curriculum and learning modules for our students.

As indicated earlier, Focus: HOPE is also strongly sustained by the philanthropic and nonprofit communities and enjoys the support of such nationally recognized foundations as the Kresge

Foundation, the Ford Foundation, and the Charles Stewart Mott Foundation. All of these relationships are critical to the success of our students and our overall mission.

Over the past year, Focus: HOPE has begun a highly structured strategic planning process in conjunction with program reviews of all of its training and education activities. Several dozen corporate partners have offered significant *pro bono* services to assist us in benchmarking our programs to ensure that we continue to offer exactly what our clients and customers most need. As a result of this process, we expect to make enhancements to our curriculum in a number of areas in Fiscal Year 2006.

In all of the ways noted immediately above, we are committed to growing our partnerships to further sustain the critical mission of Focus: HOPE. Below please find the chart that outlines the breakdown of public and private funding streams that support Focus: HOPE.

**Revenues (as a percent of Total Revenue)***

| | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|
| **Federal Grants** | 13% | 12% | 14% | 13% |
| **State & Local** | 6% | 4% | 4% | 3% |
| **Contributions** | 17% | 20% | 18% | 21% |
| **Manufacturing** | 56% | 55% | 55% | 53% |
| **Tuition** | 4% | 5% | 4% | 5% |
| **Food Program** | 4% | 4% | 4% | 5% |
| | | | | |
| **Total Revenue** | 100% | 100% | 100% | 100% |

Source: Focus: HOPE Financial Statements
Note: Research & Development is reflected in federal grants

**Conclusion:** Despite the challenges of our state and national environment (slowed economy, war on terrorism, corporate turmoil, donor fatigue, etc.), Focus: HOPE has accomplished its objectives for Fiscal Year 2005. As with most organizations, corporate and non-profit, we must remain agile and responsive to changing conditions. While weathering current economic conditions, the organization remains committed to positioning Detroit and Michigan to be competitive today and in the future by providing an unparalleled highly skilled and motivated workforce.

We share our mission, commitment and experiences with all who have an interest in learning how Focus: HOPE has become the institution that it is today, as well as where we are heading in the future (see Appendix N for a select list of distinguished visitors over the years). In fact, 4,500 people toured the Focus: HOPE campus in Fiscal Year 2005 and over 23,000 volunteers spent roughly 350,000 hours contributing their time and energy to a myriad of campus programs and activities. This collaborative activity helps to fuel the passion that keeps Focus: HOPE growing, changing and evolving as it serves the citizens of Michigan.

The individuals served by Focus: HOPE represent a vast untapped labor pool. They may be people looking for work, single parents who lack skills or face barriers to employment, minorities or women underrepresented in critical professional occupations, or those who are underemployed. They may be individuals adjusting to major welfare reform, people with very low adult basic education, or those who have never turned on a computer. They may be students who have performed well academically in the past who became disenfranchised with traditional post-secondary education. Focus: HOPE breaks down barriers to success for these individuals with tools of empowerment including: education, training and supportive services. As such, we bridge the gap between the state and nation's need for a technically trained workforce and individuals desperately and persistently seeking economic prosperity.

The reasons why our partners continue to support our work can be summarized as follows:

- By partnering with industry, universities, government and others, the training and education pipeline of programs offers both the technical and educational knowledge critical for a 21st century workforce, as well as the necessary hands on experience.

- The advanced manufacturing and technology career pipeline includes the only "manufacturing teaching hospital" in the nation – combining training, education, vocational/high tech skills, soft skills and real world experience, while paying living wages.

- Through a unique partnership with area colleges and universities, students earn associate and bachelor of science degrees in manufacturing engineering/technology while working on actual manufacturing contracts for the automotive industry on the Focus: HOPE campus.

- The newest career ladder program prepares students to attain the industry-based certifications necessary for a broad array of information technology professions.

- Students work, study, and earn university degrees and highly prized and recognized industry certifications while gaining hands-on experience.

- This career ladder is effective at graduating highly skilled individuals – particularly underrepresented individuals, i.e., minorities and women.

- Focus: HOPE has made outstanding contributions toward increasing diversity within the traditionally homogeneous science, technology, engineering and math fields. Ninety-six percent of Focus: HOPE's currently enrolled engineering associate and bachelor degree students are African-American, more than doubling the number of African-American students in the United States pursuing a bachelor of science degree in manufacturing engineering, according to the American Association of Engineering Societies.

- This innovative training and education pipeline is a national model for workforce development in the new millennium.

- The pipeline:
  - Addresses employer needs and constraints;
  - Responds to America's shifting demographics;
  - Contributes to the nation's critical need for advanced postsecondary training and education in information technologies and advanced manufacturing;
  - Provides a career ladder into the economic mainstream for many disenfranchised and displaced workers; and
  - Demonstrates how partnerships between industry, community organizations and trade associations lead America to a new level of global competition.

The successes experienced through the Focus: HOPE training programs for citizens and Michigan industry are only possible through the many partners and supporters of the organization and its programs. Support for Focus: HOPE is a mosaic of government agencies, corporations, philanthropic organizations, and individuals. It is truly partnership along with passion and persistence that provides on-going success. ***No partner and support is more important than the State of Michigan.*** The state appropriations investment provides a critical foundational support for leveraging the other federal, philanthropic, and corporate investments that flow into or remain within Michigan. On behalf of all of the Focus: HOPE students, employers, and other stakeholders, we thank the Michigan Legislature, Governor, and Fiscal Agencies for continued support and partnership as we strive together to make and keep Michigan and its citizens at the forefront of national prosperity.

# FOCUS: HOPE

## RESPONSE TO LEGISLATIVELY REQUESTED SPECIFICS

This overall report provides a Fiscal Year summary of the education and training programs at Focus: HOPE that receive legislative support from the State of Michigan (Fiscal Year 2005 funding of $5,860,200). The information is intended to be descriptive and detailed in order to provide the reader with a thorough understanding of the operations, results and program impact. The following information is specifically excerpted from accounts and records and presented in a point-by-point format as prescribed and required by Public Act 354 of 2004.

### a) Detailed expenditures for administration, including salaries and wages of employees.

The detail of specific individual salaries and percentage allocations can be found in the Budget Reporting section of the overall report immediately following (Part V).

No funding was allocated to administration expenses.

### b) Amount allocated for education and training programs including the number of students served by each program.

All of the $5,860,200 is allocated for the education and training programs. The total amount is sub-allocated as follows:

| | | |
|---|---|---|
| Center for Advanced Technologies | | $5,229,300 |
| First Step/FAST TRACK | | $ 325,000 |
| High School Program | | $ 305,900 |
| | Total | $5,860,200 |

The number of students served by each program for FY 2005 (October 1, 2004 to September 30, 2005) was:

| **Program** | **FY05 Enrollment** |
|---|---|
| Center for Advanced Technologies | 130 |
| First Step/FAST TRACK | 154 (85/69) |
| High School Program | 43 |

**c) Amount allocated for job search assistance and career planning including the number of students served by each program.**

Focus: HOPE provides career planning across all of its education and training programs. The programs have been specifically developed to be employment-oriented and have been developed with industry partnerships. Career planning topics are integrated within the subject material presented and used for coursework and skills training. For example, within the communications components of the FAST TRACK program, exercises are done in resume writing, employment cover letter composition, interview thank you letters, and employment applications. Additionally the employment interview process and interview questions and responses are covered within the program. This pervasive employment skill focus becomes the responsibility of all of the individuals involved in the education process, from instructors and supervisors to administrators. For this reason, career planning does not appear as a separate allocation within the budget. The activities correlated with career planning are integrated within the training and education services.

Job search assistance is a distinct activity within the Focus: HOPE programs. Expected outcomes for all programs are advancement into higher-level training or employment. The ultimate outcome expectation is employment. For the Center for Advanced Technologies, the following amount was allocated:

| Program | Placement Allocation |
|---|---|
| Center for Advanced Technologies | $28,325 |
| First Step/FAST TRACK and the High School Program | $67,480 |

The CAT item can be found in Attachment A of Part V – the Budget Report. This charge represents one half of the allocation of one individual (identified as the Student Affairs Manager in the Budget Report) with job placement responsibility for the CAT. The remaining portion of this individual's time was directed at providing counseling services to students. Additional work beyond this one individual occurs within the CAT but is charged to other funding, is integrated with other responsibilities, or is in-kind contribution from other partners. Similarly, the $67,480 item represents an aggregation of time from 4 individuals engaged in placement activities for the MTI, FAST TRACK and First Step programs (noted as 3 placement staff and 1 student services manager in the Budget Report).

As noted in the accompanying narrative, CAT students participate in a Professional Development Workshop Series each semester, that includes subjects such as resume preparation, interviewing skills, professional presentation, networking, and so forth (see sample CAT Professional Development Workshop Series' schedule in Appendix H). This Workshop Series is designed to give students not only a strong foundation for knowing what is expected in the work place, but how to go about identifying, interviewing for, obtaining and performing in a job once they have received their degree. Focus: HOPE leverages industry in-kind contributions for these activities that would otherwise cost over $50,000 per year.

The expected outcome for FAST TRACK and First Step is advancement into a career training program. Completers of the First Step, FAST TRACK, or High School Programs who choose to enter employment directly at graduation will use the placement services of the Machinist Training Institute.

Since career planning is integrated within the program curriculum, the number of students served by each program is consistent with the FY2005 enrollment for each program (CAT – 130, First Step/FAST TRACK – 154, High School Program – 43).

Center for Advanced Technologies bachelor degree graduates were placed at an average starting salary of $57,000 in Fiscal Year 2005. We know that our students make at least 15% more in starting salary than comparable graduates of other institutions because of their experientially-based education and training. See Appendix I for a list of employers who have hired Focus: HOPE graduates.

The average starting wage for graduates of Focus: HOPE's Machinist Training Institute ranged between $8.50 and $12.00 per hour in Fiscal Year 2005. Graduates of the Information Technologies Center (ITC) typically start between $10 and $15 per hour. ITC internship placements typically range from $8 to $11 per hour.

**d) Detailed expenditures for any contracts entered into with the use of these funds.**

Expenditures for on-going services have been allocated to FY 2005 funding as follows:

| Service Arrangement | Allocation |
|---|---|
| Information Technology Services | $150,000 |
| Transportation (High Schools) | $114,560 |
| Universities | $725,061 |

Focus: HOPE provides the support services for the information technologies/computer infrastructure throughout the campus. The amount allocated to the CAT, FS&FT, and HS programs for this funding is $150,000. The EDS Corporation is the current provider of IT services for the Focus: HOPE infrastructure.

Transportation services in the amount of $114,560 were allocated for transporting high school students back and forth from their home schools to the Focus: HOPE campus. DHT Transportation was the transportation provider during this time period.

Focus: HOPE has existing arrangements with university partners to deliver services within the Center for Advanced Technologies. The universities included in this allocation are Wayne State University, Lawrence Technological University, and University of Detroit-Mercy. See Appendices F and G for detail concerning course curriculum, schedule and description of the CAT academic program.

**e) Detailed expenditures for any program enhancements including number of new hires and capital expenditures.**

No program enhancements or capital expenditures for any of the programs were charged or allocated to this funding. No new hires in new positions were charged to this funding.

While no enhancements or capital were allocated to this funding, there have been changes and renovations to these or other Focus: HOPE programs that have started or been completed during this reporting period and have been paid by other grants or sources. These investments will positively impact all of the programs and are discussed in other areas of this report.

Most significantly has been the renovation of the Machinist Training Institute building, which also houses the First Step and FAST TRACK programs. Completion of the fourth and fifth phases of building renovations occurred in spring 2005. The fourth phase of the renovation involved repaving of the east parking lot adjacent to the 1920's era former industrial facility, replacement of underground utilities, and installation of fencing and gates. The fifth involved significant work on its roof. The first phase dealt with renovation of the building facades, including complete window replacement and brick restoration. The second and third phases of the renovation updated classrooms, the shop floor and offices to support the advanced training and education environment of the 21st century.

# PART V – BUDGET REPORT

**FISCAL YEAR 2005**
**October 1, 2004 through September 30, 2005**

**FOCUS: HOPE**
**1355 Oakman Blvd.**
**Detroit, MI 48238**

| CURRENT BUDGET | WIA ADULT | WIA STATEWIDE | GF/GP | TOTAL |
|---|---|---|---|---|
| 1 Program Administration | $ - | $ - | $ - | $ - |
| 2 Program Cost: | | | | |
| a. Core Services | - | - | - | - |
| b. Intensive Services | - | - | - | - |
| c. Training Services | 1,500,000 | 3,500,000 | 860,200 | 5,860,200 |
| Total Cost | $ 1,500,000 | $ 3,500,000 | $ 860,200 | $ 5,860,200 |
| **Program Administration** | | | | |
| Salaries and Wages | $ - | $ - | $ - | $ - |
| **Training and Education** | | | | |
| Salaries and Wages | | | | |
| Student Services | 111,714 | 260,663 | 190,801 | 563,178 |
| Training Supervisors | 35,020 | 81,713 | 190,630 | 307,363 |
| Instructors | 12,854 | 29,994 | 242,797 | 285,645 |
| Coaches-Eng/Manuf | 203,647 | 475,167 | - | 678,814 |
| Candidates Wages | 393,148 | 593,602 | - | 986,750 |
| Total Training & Education Salaries/Wages | 756,383 | 1,441,139 | 624,228 | 2,821,750 |
| **Fringe Benefits** | | | | |
| FICA | 57,863 | 110,247 | 47,753 | 215,863 |
| MESC | 14,371 | 27,382 | 11,860 | 53,613 |
| Health | 60,511 | 115,291 | 49,938 | 225,740 |
| Dental | 6,051 | 11,529 | 4,994 | 22,574 |
| LT Disability/Life Insurance | 6,051 | 11,529 | 4,994 | 22,574 |
| Workman Comp | 2,269 | 4,323 | 1,873 | 8,465 |
| Total Fringe Benefits | 147,116 | 280,301 | 121,412 | 548,829 |

**FISCAL YEAR 2005**
**October 1, 2004 through September 30, 2005**

**FOCUS: HOPE**
**1355 Oakman Blvd.**
**Detroit, MI 48238**

| CURRENT BUDGET | WIA ADULT | WIA STATEWIDE | GF/GP | TOTAL |
|---|---|---|---|---|
| 1 Program Administration | $ - | $ - | $ - | $ - |
| 2 Program Cost: | | | | |
| a. Core Services | - | - | - | - |
| b. Intensive Services | - | - | - | - |
| c. Training Services | 1,500,000 | 3,500,000 | 860,200 | 5,860,200 |
| Total Cost | $ 1,500,000 | $ 3,500,000 | $ 860,200 | $ 5,860,200 |
| **Program Administration** | | | | |
| Salaries and Wages | $ - | $ - | $ - | $ - |
| **Training and Education** | | | | |
| Salaries and Wages | | | | |
| Student Services | 111,714 | 260,663 | 190,801 | 563,178 |
| Training Supervisors | 35,020 | 81,713 | 190,630 | 307,363 |
| Instructors | 12,854 | 29,994 | 242,797 | 285,645 |
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| LT Disability/Life Insurance | 6,051 | 11,529 | 4,994 | 22,574 |
| Workman Comp | 2,269 | 4,323 | 1,873 | 8,465 |
| Total Fringe Benefits | 147,116 | 280,301 | 121,412 | 548,829 |

| | WIA ADULT | WIA STATEWIDE | GF/GP | TOTAL |
|---|---|---|---|---|
| **Consultants** | | | | |
| Engineering | - | - | - | - |
| Education | - | - | - | - |
| Total Consultants | - | - | - | - |
| **Equipment and Supplies** | | | | |
| Equip Maintenance & Repair | 90,000 | 210,000 | - | 300,000 |
| Manufacturing Equipment | 30,000 | 70,000 | - | 100,000 |
| Manufacturing Supplies | 15,000 | 35,000 | - | 50,000 |
| Books and Program Supplies | 12,000 | 28,000 | - | 40,000 |
| Other Supplies | - | - | - | - |
| Total Equipment and Supplies | 147,000 | 343,000 | - | 490,000 |
| **Services** | | | | |
| Information Technology | 45,000 | 105,000 | - | 150,000 |
| Transportation | - | - | 114,560 | 114,560 |
| University Services | | | | - |
| Wayne State | - | 60,000 | - | 60,000 |
| Lawrence Tech | 101,501 | 343,560 | - | 445,061 |
| Univ of Detroit Mercy | - | 220,000 | - | 220,000 |
| Total Services | 146,501 | 728,560 | 114,560 | 989,621 |
| **Facilities** | | | | |
| Natural Gas | 90,000 | 210,000 | - | 300,000 |
| Electricity | 18,000 | 42,000 | - | 60,000 |
| Water | 9,000 | 21,000 | - | 30,000 |
| Security | 30,000 | 70,000 | - | 100,000 |
| Insurance | 30,000 | 70,000 | - | 100,000 |
| Repair, Maintenance & Other | 12,000 | 28,000 | - | 40,000 |
| Total Facilities | 189,000 | 441,000 | - | 630,000 |
| **Allocated Overhead** | | | | |
| Human Resources | 24,000 | 56,000 | - | 80,000 |
| Purchasing | 18,000 | 42,000 | - | 60,000 |
| Accounting & Finance | 42,000 | 98,000 | - | 140,000 |
| Government & Public Affairs | 30,000 | 70,000 | - | 100,000 |
| Legal | - | - | - | - |
| Subtotal | 114,000 | 266,000 | - | 380,000 |
| Total | $ 1,500,000 | $ 3,500,000 | $ 860,200 | $ 5,860,200 |

**Attachment A**

| Department | Position | FY 2005 Actual | WIA Adult Percent Allocation | WIA Adult Amount | WIA Statewide Percent Allocation | WIA Statewide Amount | GF/GP Percent Allocation | GF/GP Amount |
|---|---|---|---|---|---|---|---|---|
| **Program Administration** | | | | | | | | |
| **Sub-total 1 - Program Administration** | | | | - | | - | | - |
| **Student Services** | | | | | | | | |
| Student Affairs | Counseling Manager | 56,650 | 30% | 16,995 | 70% | 39,655 | 0% | - |
| * Student Services | Staff | 33,948 | 0% | - | 0% | - | 33% | 11,316 |
| Student Services | Staff | 31,000 | 0% | - | 0% | - | 33% | 10,333 |
| * Student Services | Staff | 29,973 | 0% | - | 0% | - | 33% | 9,991 |
| * Student Services | Staff | 28,114 | 0% | - | 0% | - | 33% | 9,371 |
| * Student Services | Staff | 28,800 | 0% | - | 0% | - | 33% | 9,600 |
| * Student Services | Staff | 27,295 | 0% | - | 0% | - | 33% | 9,098 |
| * Student Services | Staff | 29,705 | 0% | - | 0% | - | 33% | 9,902 |
| Student Services | Manager | 60,500 | 0% | - | 0% | - | 50% | 30,250 |
| * Student Services | Staff | 29,705 | 0% | - | 0% | - | 33% | 9,902 |
| Placement | Staff | 45,320 | 0% | - | 0% | - | 33% | 15,107 |
| Placement | Staff | 29,869 | 0% | - | 0% | - | 33% | 9,956 |
| Placement | Staff | 36,500 | 0% | - | 0% | - | 33% | 12,167 |
| Recruiting/Admissions | Staff | 35,535 | 10% | 3,554 | 23% | 8,292 | 0% | - |
| Recruiting/Admissions | Staff | 30,870 | 10% | 3,087 | 23% | 7,203 | 0% | - |
| Recruiting/Admissions | Staff | 31,930 | 10% | 3,193 | 23% | 7,450 | 0% | - |
| Recruiting/Admissions | Staff | 53,000 | 10% | 5,300 | 23% | 12,367 | 0% | - |
| Recruiting/Admissions | Staff | 30,000 | 10% | 3,000 | 23% | 7,000 | 0% | - |
| Recruiting/Admissions | Staff | 12,000 | 10% | 1,200 | 23% | 2,800 | 0% | - |
| Recruiting/Admissions | Staff | 23,504 | 10% | 2,350 | 23% | 5,484 | 0% | - |
| * MTI | Adm. Asst. | 29,520 | 0% | - | 0% | - | 20% | 5,904 |
| * MTI | Adm. Asst. | 25,000 | 0% | - | 0% | - | 20% | 5,000 |
| * MTI | Attendance | 30,850 | 0% | - | 0% | - | 20% | 6,170 |
| First Step/Fast Track | Adm. Asst. | 26,734 | 0% | - | 0% | - | 100% | 26,734 |
| CAT | Experiential Coordinator | 42,034 | 30% | 12,610 | 70% | 29,424 | 0% | - |
| CAT | Program Manager | 56,650 | 30% | 16,995 | 70% | 39,655 | 0% | - |
| CAT | Academic Coordinator | 52,015 | 30% | 15,605 | 70% | 36,410 | 0% | - |
| CAT | Electronic Library | 49,056 | 30% | 14,717 | 70% | 34,339 | 0% | - |
| CAT | Program Leader | 43,692 | 30% | 13,108 | 70% | 30,584 | 0% | - |
| **Sub-total 2 - Student Services** | | | | 111,714 | | 260,663 | | 190,801 |

* No cost can be charged to line item without a detail written description of job duties and approval of payment by the MWA.

**Training Supervision**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Director of Education | Director | 133,900 | 10% | 13,390 | 23% | 31,243 | 0% | - |
| * MTI | Asst. Manager | 55,000 | 0% | - | 0% | - | 100% | 55,000 |
| * MTI | Manager | 66,950 | 0% | - | 0% | - | 20% | 13,390 |
| * MTI | Program Manager | 46,350 | 0% | - | 0% | - | 20% | 9,270 |
| * MTI | Program Manager | 46,350 | 0% | - | 0% | - | 20% | 9,270 |
| * MTI | Program Manager | 45,000 | 0% | - | 0% | - | 20% | 9,000 |
| First Step/Fast Track | Asst. Manager | 41,200 | 0% | - | 0% | - | 100% | 41,200 |
| First Step/Fast Track | Manager | 53,500 | 0% | - | 0% | - | 100% | 53,500 |
| CAT | Manager | 72,100 | 30% | 21,630 | 70% | 50,470 | 0% | - |
| **Sub-total 3 - Training Supervision** | | | | 35,020 | | 81,713 | | 190,630 |

**Attachment A**

| Department | Position | FY 2005 Actual | WIA Adult Percent Allocation | WIA Adult Amount | WIA Statewide Percent Allocation | WIA Statewide Amount | GF/GP Percent Allocation | GF/GP Amount |
|---|---|---|---|---|---|---|---|---|
| **Instructors** | | | | | | | | |
| * MTI | Dept. Head | 36,050 | 0% | - | 0% | - | 20% | 7,210 |
| * MTI | Dept. Head | 36,079 | 0% | - | 0% | - | 20% | 7,216 |
| * MTI | Dept. Head | 37,128 | 0% | - | 0% | - | 20% | 7,426 |
| * MTI | Dept. Head | 37,131 | 0% | - | 0% | - | 20% | 7,426 |
| * MTI | Dept. Head | 32,960 | 0% | - | 0% | - | 20% | 6,592 |
| * MTI | Dept. Head | 32,960 | 0% | - | 0% | - | 20% | 6,592 |
| First Step/Fast Track | Instructor | 33,475 | 0% | - | 0% | - | 100% | 33,475 |
| First Step/Fast Track | Instructor | 32,960 | 0% | - | 0% | - | 100% | 32,960 |
| First Step/Fast Track | Instructor | 33,475 | 0% | - | 0% | - | 100% | 33,475 |
| First Step/Fast Track | Instructor | 33,475 | 0% | - | 0% | - | 100% | 33,475 |
| First Step/Fast Track | Instructor | 33,475 | 0% | - | 0% | - | 100% | 33,475 |
| First Step/Fast Track | Instructor | 33,475 | 0% | - | 0% | - | 100% | 33,475 |
| CAT | Instructor | 42,848 | 30% | 12,854 | 70% | 29,994 | 0% | - |
| **Sub-total 4 - Instructors** | | | | 12,854 | | 29,994 | | 242,797 |

* No cost can be charged to line item without a detail written description of job duties and approval of payment by the MWA.

**Coaches - Engineering/Manufacturing**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Production | Manager | 79,567 | 15% | 11,935 | 35% | 27,848 | 0% | - |
| Production | Manager | 77,250 | 15% | 11,588 | 35% | 27,038 | 0% | - |
| Quality | Manager | 63,561 | 15% | 9,534 | 35% | 22,246 | 0% | - |
| Manufacturing | Manager | 78,000 | 15% | 11,700 | 35% | 27,300 | 0% | - |
| Materials | Manager | 45,835 | 15% | 6,875 | 35% | 16,042 | 0% | - |
| Engineering | Manager | 84,975 | 15% | 12,746 | 35% | 29,741 | 0% | - |
| Engineering | Project Manager | 72,820 | 15% | 10,923 | 35% | 25,487 | 0% | - |
| Machine Maintenance | Manager | 63,159 | 15% | 9,474 | 35% | 22,106 | 0% | - |
| Production | Engineer | 58,710 | 15% | 8,807 | 35% | 20,549 | 0% | - |
| Production | Engineer | 58,710 | 15% | 8,807 | 35% | 20,549 | 0% | - |
| Production | Supervisor | 43,672 | 15% | 6,551 | 35% | 15,285 | 0% | - |
| Production | Supervisor | 40,170 | 15% | 6,026 | 35% | 14,060 | 0% | - |
| Production | Supervisor | 30,079 | 15% | 4,512 | 35% | 10,528 | 0% | - |
| Production | Supervisor | 39,140 | 15% | 5,871 | 35% | 13,699 | 0% | - |
| Production | Supervisor | 43,672 | 15% | 6,551 | 35% | 15,285 | 0% | - |
| Production | Supervisor | 48,452 | 15% | 7,268 | 35% | 16,958 | 0% | - |
| Production | Engineer | 45,744 | 15% | 6,862 | 35% | 16,010 | 0% | - |
| Quality | Engineer | 48,226 | 15% | 7,234 | 35% | 16,879 | 0% | - |
| Quality | Engineer | 47,846 | 15% | 7,177 | 35% | 16,746 | 0% | - |
| Tool Room | Supervisor | 52,232 | 15% | 7,835 | 35% | 18,281 | 0% | - |
| Engineering | Engineer | 41,199 | 15% | 6,180 | 35% | 14,420 | 0% | - |
| Engineering | Engineer | 37,080 | 15% | 5,562 | 35% | 12,978 | 0% | - |
| Engineering | Engineer | 38,000 | 15% | 5,700 | 35% | 13,300 | 0% | - |
| Machine Maintenance | Supervisor | 65,137 | 15% | 9,771 | 35% | 22,798 | 0% | - |
| Machine Maintenance | Supervisor | 54,384 | 15% | 8,158 | 35% | 19,034 | 0% | - |
| **Sub-total 5 - Coaches** | | | | 203,647 | | 475,167 | | - |

**Attachment B**
**Candidate Wages**

| | WIA Adult | | WIA Statewide | | GF/GP | |
|---|---|---|---|---|---|---|
| FY 2005 Actual | Percent Allocation | Amount | Percent Allocation | Amount | Percent Allocation | Amount |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 21,840 | 0% | - | 50% | 10,374 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| - | 0% | - | 50% | - | 0% | - |
| 21,320 | 0% | - | 50% | 10,127 | 0% | - |
| 21,840 | 0% | - | 50% | 10,374 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 20,800 | 0% | - | 50% | 9,880 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,968 | 0% | - | 50% | 9,485 | 0% | - |
| 21,840 | 0% | - | 50% | 10,374 | 0% | - |
| 18,720 | 50% | 8,892 | 0% | - | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 23,400 | 0% | - | 50% | 11,115 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| - | 50% | - | 0% | - | 0% | - |
| 21,840 | 0% | - | 50% | 10,374 | 0% | - |
| 19,760 | 0% | - | 50% | 9,386 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 27,040 | 0% | - | 50% | 12,844 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 18,720 | 50% | 8,892 | 0% | - | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,760 | 0% | - | 50% | 9,386 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 28,392 | 0% | - | 50% | 13,486 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 18,720 | 50% | 8,892 | 0% | - | 0% | - |
| 21,840 | 0% | - | 50% | 10,374 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 18,720 | 50% | 8,892 | 0% | - | 0% | - |
| 23,400 | 0% | - | 50% | 11,115 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 18,720 | 50% | 8,892 | 0% | - | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 18,720 | 50% | 8,892 | 0% | - | 0% | - |
| 17,680 | 50% | 8,398 | 0% | - | 0% | - |
| 18,720 | 50% | 8,892 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |

**Attachment B**
**Candidate Wages**

| | WIA Adult | | WIA Statewide | | GF/GP | |
|---|---|---|---|---|---|---|
| FY 2005 Actual | Percent Allocation | Amount | Percent Allocation | Amount | Percent Allocation | Amount |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 22,360 | 0% | - | 50% | 10,621 | 0% | - |
| 25,920 | 0% | - | 50% | 12,312 | 0% | - |
| 26,520 | 0% | - | 50% | 12,597 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 26,208 | 0% | - | 50% | 12,449 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 20,800 | 0% | - | 50% | 9,880 | 0% | - |
| 19,760 | 0% | - | 50% | 9,386 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 29,120 | 0% | - | 50% | 13,832 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 22,360 | 0% | - | 50% | 10,621 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 18,720 | 50% | 8,892 | 0% | - | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 27,040 | 0% | - | 50% | 12,844 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 20,800 | 0% | - | 50% | 9,880 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 29,120 | 0% | - | 50% | 13,832 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,240 | 0% | - | 50% | 9,139 | 0% | - |
| 18,720 | 50% | 8,892 | 0% | - | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 19,440 | 50% | 9,234 | 0% | - | 0% | - |
| 21,320 | 0% | - | 50% | 10,127 | 0% | - |
| 24,960 | 0% | - | 50% | 11,856 | 0% | - |
| 27,040 | 0% | - | 50% | 12,844 | 0% | - |
| | | $ 393,148 | | $ 593,602 | | $ - |

# PART VI – APPENDICES

## SELECT RECOGNITION AND CITATIONS

*Michigan Bicameral, Bipartisan Legislative Welfare Reform Task Force,* November 4, 2005, requested and received testimony from Focus: HOPE colleagues and students on ensuring welfare reform initiatives support those who are participants in training and education programs

*"Leaders and Innovators: Eleanor Josaitis,"* November 2005 profile, Lawrence Technological University

*"Focus: HOPE Receives Three State Awards for Outstanding Safety and Health Records,"* October 3, 2005, Michigan Occupational Safety and Health Administration, Michigan Department of Labor & Economic Growth

*Michigan Chamber of Commerce honors Eleanor Josaitis for Distinguished Service and Leadership,* September 2005, for being an "internationally-recognized advocate for the education and training of children and adults, and the elimination of racism, poverty and injustice among the urban poor."

*"What's in the Box?"* August 2005, Cutting Tool Engineering Magazine

Cisco Networking Academy Program recognizes Focus: HOPE's Information Technologies Center, *Workplace Learning Mode — Best Practices: Future Industry Leaders Exploring, Serving, and Achieving,* June 2005

*"Belief in Community Keeps Leader Going Strong,"* Volume 3, No. 4, December 2004, Charles Stewart Mott Foundation

*"A Veteran Leader Combines Social Services with Civil Rights in Detroit,"* December 9, 2004, The Chronicle of Philanthropy

*Cisco Networking Academy Program Gender Initiative Best Practices Award*, 2001 — for recruitment and retention of women

*U.S. Army Announces 2003 Top 10 Greatest Army Inventions Awards*, U.S. Army Research, Development and Engineering Command. One of the invention awards was for a Squad Automatic Weapon (SAW) Pintle Mount Assembly for HMMWV-Tanks — a Focus: HOPE engineer was responsible for this invention, which is now being used to protect soldiers in field operations, May 2004

*Congressional Record*, Senator Carl Levin floor statement recognizes Focus: HOPE's Mobile Parts Hospital and its 2003 Army Greatest Inventions Award, Proceedings and Debates of the 108th Congress, Second Session, June 25, 2004

*AMC LSE SWA Newsletter*, September, 2004, Mobile Parts Hospital Deployment

*Focus: HOPE Tribute*, February 25, 2004 the U.S. Senate passed S. Con. Res. 92 and on June 1, 2004 the U.S. House of Representatives passed H. Con. Res. 295 congratulating and saluting

Focus: HOPE on its 35th anniversary and for its remarkable commitment and contributions to Detroit, the State of Michigan, and to the United States

*Focus: HOPE received its first patent* for a composite diesel /automotive piston making machine, July 12, 2004

ISO 9001: 2000, Certified February, 2003, expanded to all Focus: HOPE Non-Manufacturing Programs, i.e., education and training, administrative offices, etc.

ISO 14001 Environmental, Certified, August, 2004

TS16949 migrated from QS-9000, Manufacturing Operations, Certified since 1998

National Science Foundation cites the Focus: HOPE Greenfield Coalition as the nation's largest producer of bachelor degreed minority graduates in manufacturing engineering, 2002

Tichy, Noel and Cardwell, Nancy, The Cycle of Leadership: How Great Leaders Teach Their Companies to Win, HarperCollins, September 2002

Co-Founder, Mrs. Josaitis, named one of the 100 Most Influential Women by *Crain's Detroit Business* 2002 and previously inducted into the Michigan Women's Hall of Fame

The Aspen Institute/Economic Opportunities Program, *"Focus: HOPE; A Case Study of a Sectoral Employment Development Approach,"* December 2000, Washington, DC

The National Congress for Community Economic Development, *"Building Partnerships between State TANF Initiatives and CDCs: A Guidebook for Practitioners and State Officials,"* by Marcus Weiss, February 2000, Washington, DC

*"What Works in Empowerment Zones!"* U.S. Department of Housing and Urban Development, 2000

Computerworld/Smithsonian Award, 1998; Newsweek Education Program, 1998

Tichy, Noel; McGill, Andrew; and St. Clair, Linda, Corporate Global Citizenship; Doing Business in the Public Eye, The New Lexington Press, San Francisco, 1997

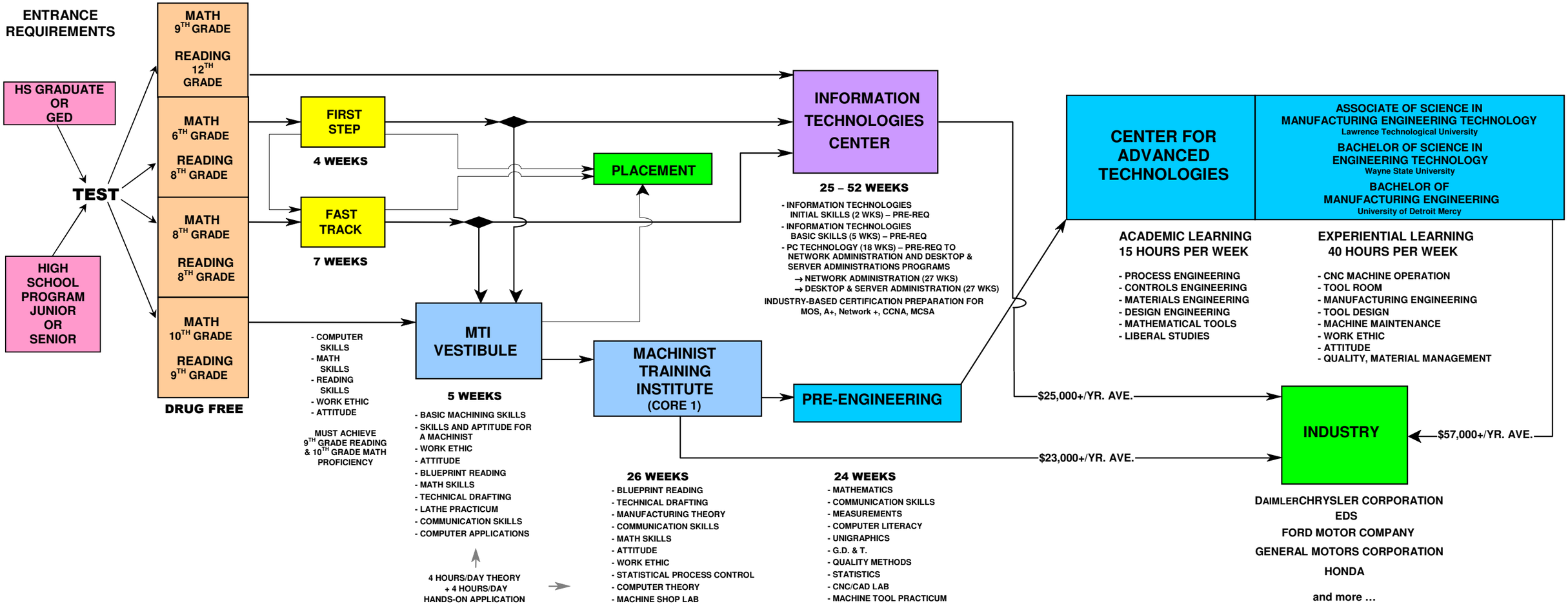
*"Employment Training: Successful Projects Share Common Strategy,"* U.S. Government Accounting Office, May 1996, GAO/HEHS-96-108

*"Jobs and the Urban Poor: Privately Initiated Sectoral Strategies,"* The Aspen Institute, November 1995, Washington, DC

Memorandum of Understanding for the collaborative of establishment of Center for Advanced Technologies, signed by officials of U.S. Departments of Defense, Commerce, Education and Labor, August 1, 1989

# FOCUS: HOPE TRAINING AND EDUCATION

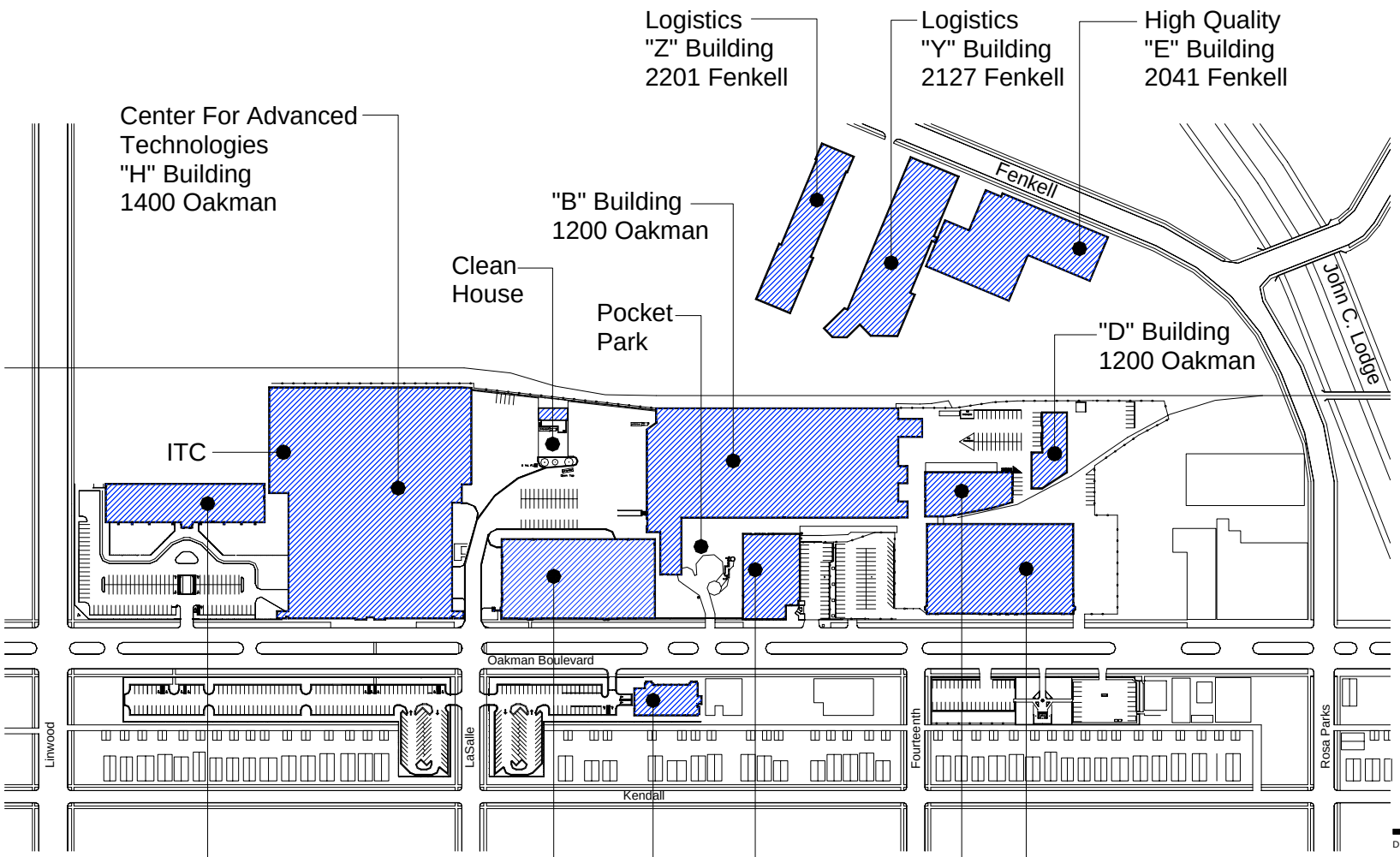
## Process Flow and Outcomes





**Focus: HOPE**
**TRAINING AND EDUCATION**
1355 Oakman Blvd. - Detroit, MI 48238
313-494-5500 / www.focushope.edu


AWH 01-26-06




Focus: HOPE

1355 Oakman Blvd.
Detroit, MI 48238

Drawing North:

N
W E
S

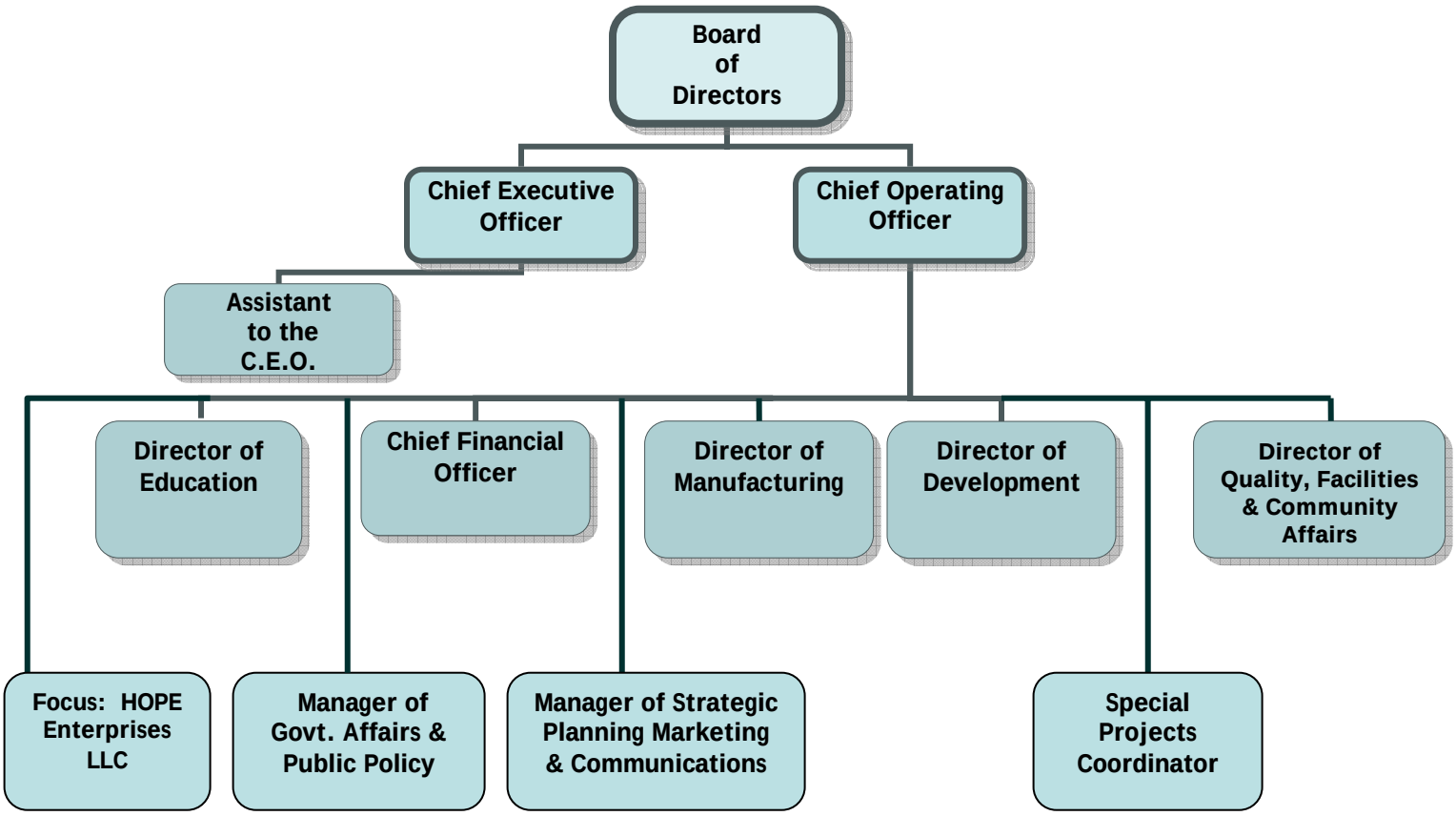
Drawing Title:
BASE CAMPUS PLAN

Scale:
NTS

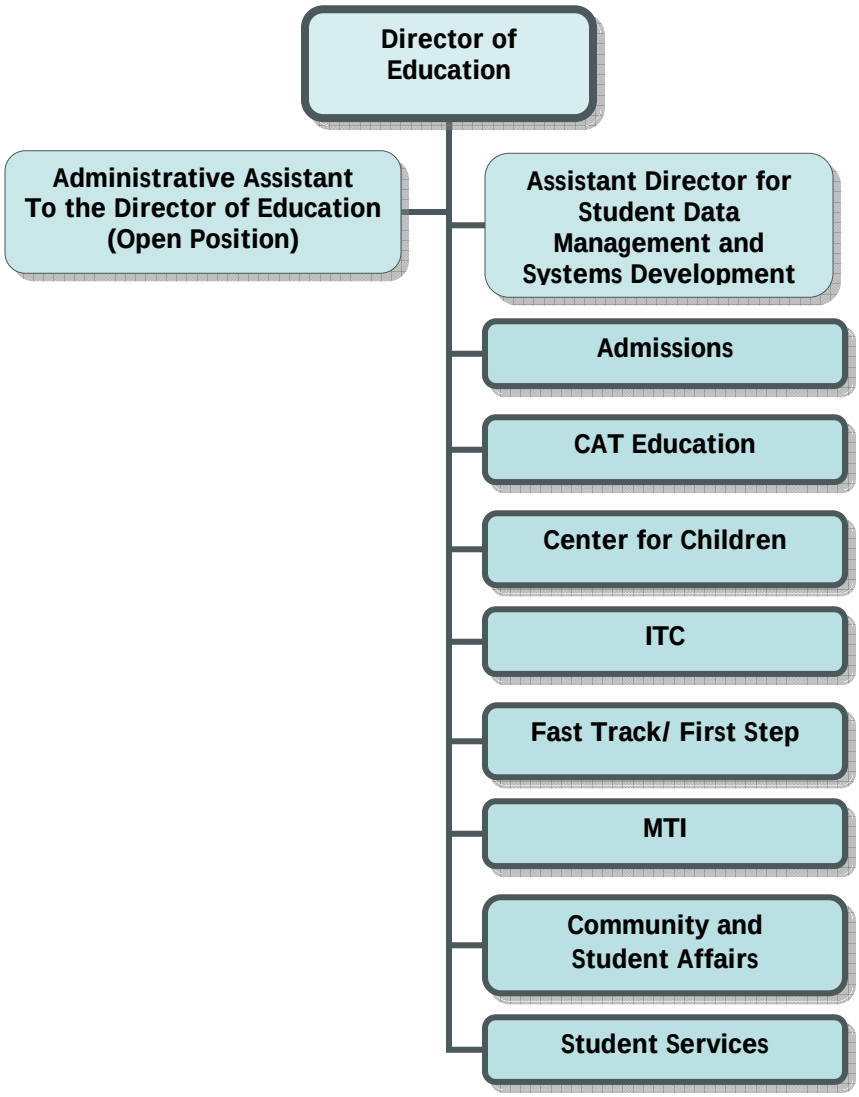
Drawing No.:
BC-01

Appendix C

# EXECUTIVE ADMINISTRATION ORG. CHART



# DIRECTOR OF EDUCATION ORG. CHART



# Focus: HOPE Board of Directors

| | |
|---|---|
| William Brodhead | **Chairperson, Board of Directors**<br>Attorney at Law |
| Joe Anderson | Chairman and CEO<br>Vibration Control Technologies, LLC |
| Lizabeth Ardisana | CEO<br>ASG Renaissance |
| Peter Brown | Executive Editor and Associate Publisher<br>Crain Communications' Automotive News Group |
| Daniel G. Brudzynski | Vice President and Controller<br>DTE Energy |
| Gary L. Cowger | Group Vice President, Global Manufacturing and Labor<br>General Motors North America |
| Monica E. Emerson | Executive Director, Corporate Diversity Office<br>DaimlerChrysler Corporation |
| Donald L. Haney | Communications Consultant, Broadcaster |
| William F. Jones, Jr. | Vice President<br>DaimlerChrysler Services, North America LLC |
| Eleanor M. Josaitis | Chief Executive Officer and Co-Founder<br>Focus: HOPE |
| Jack A. Litzenberg | Senior Program Officer<br>Charles Stewart Mott Foundation |
| James J. Padilla | President and Chairman, Automotive Operations<br>Ford Motor Company |
| Gerald E. Rosen | Judge, United States District Court<br>Eastern District of Michigan |
| Mitsunobu (Tony) Takeuchi | Chairman Emeritus<br>DENSO International America, Inc. |

# ADVISORY BOARD

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*Chair, Advisory Board*
Retired President, General Motors Corporation

Hon. Lucile A.Watts
*Co-Chair, Advisory Board*
Retired Judge, Wayne County Circuit Court

Bo Andersson
Vice President - Worldwide Purchasing, Production Control and Logistics
General Motors Corporation

Bill Brooks
Chairman
United American Healthcare Corporation

Tony Brown
Vice President - Global Purchasing
Ford Motor Company

David Buhl
Vice President - Customer Operations
Comcast Cable Communications

Lois Pincus Cohn
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Artspace, Inc.

John Fikany
General Manager - Manufacturing Industries
Microsoft Corporation

W. Frank Fountain
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DaimlerChrysler Corporation

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Mervenne & Company

Ron Pirtle
President - Thermal & Interior Division
Delphi Corporation

John Rakolta, Jr.
Chairman and CEO
Walbridge Aldinger Company

Robert Rossiter
Chairman and CEO
Lear Corporation

Focus: HOPE
*Celebrating Diversity Since 1968*

# Greenfield Coalition Associate of Science in Manufacturing Engineering Technology

## Academic Pre-requisite Structure

| Course Numbers | Knowledge Area | Pre-requisites |
|---|---|---|
| **Tier 1** | | |
| GCL 1013 | English Composition | 80 on English diagnostic or English prep modules as directed |
| GCC 1101 | Basic Graphics | MTI Core II computer graphics |
| GCM 1013 | Technical Mathematics I | Math diagnostic |
| **Tier 2** | | |
| GCL 1214 | Psychology-Sociology | GCL 1013 |
| GCL 2013 | Communications in Manufacturing I | GCL 1013 |
| GCL 2614 | Comparative Politics & Economics | GCL 1013 |
| GCT 2452 | Ethics in Industry | GCL 1013 |
| GCM 1022 | Technical Mathematics II | GCM 1013 |
| GCC 1012 | Basic Chemistry | GCM 1013 |
| GCF 1013 | Computers in Engineering | GCM 1013 |
| GCF 1113 | Design Graphics | GCF 1101; GCM 1013 |
| GCT 1112 | Machining Processes | GCM 1013 |
| GCT 1211 | Measurements | GCM 1013 |
| GCT 1221 | Instrumentation | GCT 1211; GCM 2413 |
| GCT 2112 | Manufacturing Processes | GCM 1013 |
| GCE 2462 | Engineering Economics I | GCM 1013 |
| **Tier 3** | | |
| GCM 2114 | Calculus Foundations | GCM 1022 |
| GCM 2413 | Statistical Methods | GCF 1013, GCM 1013 |
| GCC 2012 | Chemical Materials Science I | GCC 1012 |
| GCS 2113 | Mechanophysics I | GCF 1013; GCM 1022 |
| GCS 2211 | Thermosciences I | GCF 1013; GCM 1022 |
| GCS 2312, 2321 | Electrosciences I | GCF 1013; GCM 1022 |
| GCE 2412 | Manufacturing Planning | GCF 1013; GCT 1112, 2112; GCE 2462 |
| GCT 2012 | Engineering Materials I | GCC 1012 |
| **Tier 4** | | |
| GCS 2141 | Engineering Mechanics I | GCM 2114; GCS 2113 |
| GCE 2261 | Control Systems I | GCM 2114; GCS 2321; GCT 1221 |
| GCT 2182 | Tool Design | GCF 1113; GCE 2462; GCT 1112, 2012 |
| GCT 2212 | Electrical Machines | GCS 2321 |
| GCT 2314 | Manufacturing Systems I | GCL 2013; GCM 2413; GCE 2412 |
| GCT 2511 | Capstone | 40 credits |

# Greenfield Coalition Bachelor of Manufacturing Engineering

## Academic Pre-requisite Structure

| Course Numbers | Knowledge Area | Pre-requisites |
|---|---|---|
| **Tier 1** | | |
| GCL 3013 | Communications in Manufacturing II | GCL 2013 |
| GCL 3613 | Global Culture | GCL 1013 |
| GCM 3214 | Applied Calculus | GCM 2114 |
| GCM 3411 | Design of Experiments | GCM 2413 |
| GCC 3011 | Chemical Materials Science II | GCC 2012; GCM 1022 |
| GCE 3012 | Engineering Materials II | GCT 2012 |
| GCE 3111 | Machining Processes II, e | GCT 1112 |
| GCE 3461 | Engineering Economics II | GCE 2462 |
| **Tier 1a** | | |
| GCM 3254 | Engineering Calculus | GCM 3214 |
| **Tier 2** | | |
| GCL 3113 | Philosophy | GCL 1013 |
| GCL 3413 | History | GCL 1013 |
| GCM 3314 | Differential Equations | GCM 3214 |
| GCC 3031 | Process Chemistry | GCC 3011 |
| GCS 3214 | Thermosciences II | GCS 2211; GCM 3214 or GCM3312 |
| GCS 3311 | Electrosciences II | GCS 2312; GCM 3214 or GCM3312 |
| GCS 3361 | Electrosciences II | GCS 3311; GCM 3254 |
| GCE 3314 | Manufacturing Systems II | GCT 2314; 3111; GCL 3013; GCE 3012, 3461 |
| GCT 3131 | Joining & Assembly I | GCT 2112 |
| GCT 3152 | Forming I | GCT 2112 |
| **Tier 3** | | |
| GCL 3313 | Contemporary Social Problems | GCL 1013 |
| GCL 4113 | World Religions | GCL 3113 |
| GCS 3163 | Mechanophysics II | GCS 2113; GCM 3314 |
| GCE 3262 | Control Systems II | GCE 2261; GCS 3311 |
| GCE 4113 | Joining & Assembly II | GCT 3131 |
| GCE 4173 | Tool Design II | GCT 2182 3131, 3152; GCE 3012, 3111 |
| GCE 4313 | Facilities Design | GCT 3131, 3163; GCE 3012, 3111 |
| Tier 3a | | |
| GCE 3132 | Engineering Mechanics II | GCS 2141, 3163 |
| GCS 3191 | Engineering Mechanics II | GCS 3132, 3163 |
| **Tier 4** | | |
| GCL 3513 | Arts in Action | GCL 1013 |
| GCE 3172 | Forming II | GCT 3163; GCS 3191 |
| GCE 4314 | Mechanisms & Machinery | GCS 3132 |
| GCE 4413 | Operations Management | GCL 3631; GCE 3314, 4113, 4313 |
| GCE 4513 | Capstone | 40 credits beyond AS degree |

## Greenfield Coalition Bachelor of Science in Manufacturing Engineering Technology

## Academic Pre-requisite Structure

| Course Numbers | Knowledge Area | Pre-requisites |
|---|---|---|
| **Tier 1** | | |
| GCL 3013 | Communications in Manufacturing II | GCL 2013 |
| GCL 3613 | Global Culture | GCL 1013 |
| GCM 3213, 3312 | Applied Calculus | GCM 2114 |
| GCE 3012 | Engineering Materials II | GCT 2012 |
| GCE 346 | Engineering Economics II | GCE 2462 |
| GCT 3111 | Machining Processes II | GCT 1112 |
| **Tier 2** | | |
| GCL 3113 | Philosophy | GCL 1013 |
| GCL 3413 | History | GCL 1013 |
| GCS 3163 | Mechanophysics II | GCS 2113; GCM 3214 or GCM3312 |
| GCS 3214 | Thermosciences II | GCS 2211; GCM 3214 or GCM3312 |
| GCS 3311 | Electrosciences II, c | GCS 2321; GCM 3214 or GCM3312 |
| GCE 3314 | Manufacturing Systems II | GCT 2314; 3111; GCL 3013; GCE 3012, 3461 |
| **Tier 3** | | |
| GCL 3363 | Political Science | GCL 1013 |
| GCS 3132 | Engineering Mechanics II, c | GCS 2141, 3163 |
| GCE 3262 | Control Systems II | GCE 2261; GCS 3311 |
| GCT 3131 | Joining & Assembly I | GCT 2112 |
| GCT 3152 | Forming I | GCT 2112 |
| **Tier 4** | | |
| GCL 3513 | Arts in Action | GCL 1013 |
| GCF 4314 | Mechanisms & Machinery | GCS 3132 |
| GCT 4113 | Product Realization | GCE 3314, GCT 3131, 3163 |
| GCT 4513 | Capstone | 40 credits beyond AS degree |
| **Technical electives** | | |
| 11 credits required | Various | AS degree |

Term: Sept. 8 - Dec. 18, 2004

As of: August 17, 2004

# FALL 2004 Academic Schedule

| Period | Course name and number | | | Pre-requisite | day | prd | nr of wks | nr of mtgs | cr | start date | end date | Instructor | Room |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **LTU** | | | | | | | | | | | | |
| C 2:45-5:45 | AS Capstone | GCT | 2511 | 40 credit hours | F | C1 | 14 | 14 | 1 | 10 Sep | 10 Dec | S. Palaniswami | 114 |
| C1 2:45-4:10 | Basic Chemistry | GCC | 1012 | GCM1013 | TTH | C2 | 9 | 18 | 2 | 9 Sep | 9 Nov | C. Yeltsin | E-LIBRARY |
| C2 4:20-5:45 | Chemical Material Science I | GCC | 2012 | GCC1012 | TTH | C1 | 9 | 18 | 2 | 9 Sep | 9 Nov | C. Yeltsin | E-LIBRARY |
| C6 4:50-6:10 | Control Systems I | GCE | 2261 | GCM2114,GCS2312,GCT1221 | TTH | C1 | 5 | 10 | 1 | 9 Sep | 9 Nov | S. Ahmed | 112 |
| C7 4:20-7:20 | Engineering Mechanics I | GCS | 2141 | GCM2114,GCS2113 | F | C2 | 9 | 9 | 1 | 10 Sep | 5 Nov | S. Nwabuzzor | V-TEL |
| D S, 9:00-1:00 | Manufacturing Planning | GCE | 2412 | GCF1013,GCT1112,2112,GCE2462 | TTH | C2 | 9 | 18 | 2 | 16 Sep | 16 Nov | L. Joulakh | 112 |
| D1 S, 9:00-11:30 | Manufacturing Processes | GCT | 2112 | GCM1013 | MW | C1 | 9 | 18 | 2 | 8 Sep | 8 Nov | S. Palaniswami | CONF. RM. A |
| D2 S, 9:00-12:00 | Manufacturing Systems I | GCT | 2314 | GCL2013, GCM2412, 2411, GCE2412 | TTH | C2 | 15 | 30 | 4 | 9 Sep | 16 Dec | S. Ahmed | 105 |
| | Mechanophysics | GCS | 2113 | GCF1013, GCM1012 | MW | C2 | 14 | 28 | 3 | 8 Sep | 8 Dec | S. Nwabuzzor | 115 |
| | Mechanophysics II | GCS | 3163 | GCS2113, GCM3314 | MW | C1 | 14 | 28 | 3 | 8 Sep | 8 Dec | M. Hailat | 114 |
| | Process Chemistry | GCC | 3031 | GCC3011 | MW | C2 | 5 | 10 | 1 | 8 Sep | 11 Oct | S. Moosavi | E-LIBRARY |
| | Psychology/Sociology | GCL | 1214 | GCL1013 | TTH | C1 | 15 | 30 | 4 | 9 Sep | 16 Dec | K. Doby | 114 |
| | Statistical Methods | GCM | 2413 | GCF1013, GCM1013 | MW | C2 | 14 | 28 | 3 | 8 Sep | 8 Dec | T. Hambir | MTI/215 |
| | Technical Calculus | GCM | 2114 | GCM1022 | MWF | C1 | 15 | 45 | 4 | 8 Sep | 17 Dec | R. Baroody | 112 |
| | Technical Math | GCM | 1013 | Diagnostic Exam | MWF | C1 | 14 | 42 | 3 | 8 Sep | 10 Dec | T. Hambir | MTI/219 |
| | Technical Math | GCM | 1013 | Diagnostic Exam | MWF | C2 | 14 | 42 | 3 | 8 Sep | 10 Dec | R. Baroody | MTI/219 |
| | Technical Math | GCM | 1022 | GCM1013 | MWF | C2 | 10 | 30 | 2 | 8 Sep | 12 Nov | O. Nwankwo | MTI/219 |
| | | | | | | | | | | | | | |
| | Calculus II | GCM | 3214 | GCM2114 | MWF | C1 | 15 | 45 | 4 | 8 Sep | 17 Dec | I. Okechukwu | 115 |
| | Differential Equations | GCM | 3314 | GCM3214 | MWF | C2 | 15 | 45 | 4 | 8 Sep | 17 Dec | O. Nwankwo | 114 |
| | Electrosciences I | GCS | 2312, 2321 | GCF101, GCM1042 | MW | C1 | 14 | 28 | 3 | 8 Sep | 8 Dec | A. Hyder | 105 |
| | Electrosciences II | GCS | 3311, 3361 | GCS 2312; GCM 3214 or GCM3312/GCS 331; GCM3254 | TTH | C2 | 9 | 18 | 2 | 9 Sep | 9 Nov | T. Lahdhiri | 114 |
| **Cancelled** | ~~Joining & Assembly~~ | ~~GC~~ | ~~T313, E4113~~ | ~~GCT 2112, GCE 3131~~ | ~~TTHF~~ | ~~C1~~ | ~~12~~ | ~~36~~ | ~~4~~ | ~~9 Sep~~ | ~~3 Dec~~ | tbd | ~~TTH 115/F 112~~ |
| | Machining Processes I | GCT | 1112 | GCM1013 | TTH | C1 | 9 | 18 | 2 | 9 Sep | 9 Nov | T. White | E-LIBRARY |
| | Mechanisms & Machinery | GCF | 4314 | GCS3163 | MWF | C1 | 12 | 36 | 4 | 8 Sep | 3 Dec | M. Mehrabi | V-Tel |
| **Cancelled** | ~~Philosophy~~ | ~~GCL~~ | ~~3113~~ | ~~GCL 1013~~ | ~~MW~~ | ~~C2~~ | ~~14~~ | ~~28~~ | ~~3~~ | ~~8 Sep~~ | ~~8 Dec~~ | tbd | ~~105~~ |
| | Tool Design | GCT | 2182 | GCF1113, GCE2462, GCT1112,2012 | MW | C2 | 9 | 18 | 2 | 8 Sep | 8 Nov | P. Perdur | 114 |
| | Tool Design & Construction | GCE | 4173 | GCT 2182 3131, 3152; GCE 3012, 3111 | TTH | C2 | 14 | 28 | 3 | 9 Sep | 16 Dec | P. Perdur | CONF. RM. A |
| **Cancelled** | ~~World Religions~~ | ~~GCL~~ | ~~4113~~ | ~~GCL 3113~~ | ~~MW~~ | ~~C2~~ | ~~14~~ | ~~28~~ | ~~3~~ | ~~8 Sep~~ | ~~8 Dec~~ | tbd | ~~112~~ |
| | | | | | | | | | | | | | |
| | Arts in Action | GCL | 3513 | GCL1013 | TTH | C1 | 14 | 28 | 3 | 9 Sep | 16 Dec | G. Trzaskoma | 105 |
| | Communications I | GCL | 2013 | GCL1013 | TTH | C2 | 14 | 28 | 3 | 9 Sep | 16 Dec | M. Ramsey | 115 |
| | Communications II | GCL | 3013 | GCL2013 | S | D2 | 14 | 14 | 3 | 11 Sep | 18 Dec | P. Priest | 114 |
| | Computers in Engineering | GCF | 1013 | GCM1013 | S | D | 9 | 9 | 3 | 11 Sep | 6 Nov | K. Sanders | 105 |
| | Electrical Machines | GCT | 2212 | GCS2312 | S | D1 | 10 | 10 | 2 | 11 Sep | 13 Nov | A. Slominis | 112 |
| | English Composition | GCL | 1013 | Diagnostic Exam | TTH | C1 | 14 | 28 | 3 | 9 Sep | 16 Dec | P. Priest | V-TEL |
| | Engineering Economics I | GCE | 2462 | GCM1022 | MW | C6 | 9 | 18 | 2 | 8 Sep | 8 Nov | B. Scott | E-LIBRARY |
| | Methods & Work Design | IE | 3120 | Associates Degree | T | C7 | 9 | 14 | 3 | 7 Sep | 23 Dec | S. Palaniswami | V-TEL |

# Winter 2005 Academic Schedule

| Period | Course name and number | | | Pre-requisite | day | prd | nr of wks | nr of mtgs | cr | start date | end date | Instructor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **LTU** | | | | | | | | | | | |
| C 2:45-5:45 | AS Capstone | GCT | 2511 | 40 credit hours | F | C1 | 14 | 14 | 1 | 7 Jan | 15 Apr | S. Palaniswami |
| C1 2:45-4:10 | Basic Chemistry | GCC | 1012 | GCM1013 | MW | C1 | 9 | 18 | 2 | 5 Jan | 9 Mar | G. Yawson |
| C2 4:20-5:45 | Chemical Material Science I | GCC | 2012 | GCC1012 | MW | C2 | 9 | 18 | 2 | **5 Jan** | **9 Mar** | G. Yawson |
| C6 4:50-6:10 | Chemical Material Science II | GCC | 3011 | GCC2012, GCM1022 | TTH | C2 | 5 | 10 | 1 | 10 Mar | 12 Apr | S.A. Moosavi |
| C7 4:20-7:20 | Control Systems I | GCE | 2261 | GCM2114,GCS2312,GCT1221 | MW | C2 | 5 | 10 | 1 | **14 Mar** | **13 Apr** | S. Ahmed |
| D S, 9:00-1:00 | Control Systems II | GCE | 3262 | GCE2261, GCS3311 | MW | C2 | 9 | 18 | 2 | 5 Jan | 9 Mar | S. Ahmed |
| D1 S, 9:00-11:30 | Engineering Mechanics I | GCS | 2141 | GCM2114,GCS2113 | F | C2 | 9 | 9 | 1 | 7 Jan | 4 Mar | S. Nwabuzor |
| D2 S, 9:00-12:00 | Global Cultures | GCL | 3613 | GCL1013 | TTH | C1 | 14 | 28 | 3 | 6 Jan | 12 Apr | tbd |
| | Manufacturing Planning | GCE | 2412 | GCF1013,GCT1112,2112,GCE2462 | F | C | 8 | 8 | 2 | 4 Mar | 29 Apr | L. Joulakh |
| | Manufacturing Processes | GCT | 2112 | GCM1013 | TTH | C2 | 9 | 18 | 2 | 6 Jan | 8 Mar | S. Palaniswami |
| | Manufacturing Systems I | GCT | 2314 | GCL2013, GCM2413, GCE2412 | S | D | 13 | 13 | 4 | 8 Jan | 16 Apr | S. Palaniswami |
| | Manufacturing Systems II | GCE | 3314 | GCT2314, GCE3111, GCL3013, GCE3012, GCE3461 | MW | C1 | 15 | 30 | 4 | 5 Jan | 20 Apr | S. Ahmed |
| | Mechanophysics | GCS | 2113 | GCF1013, GCM1012 | MW | C2 | 14 | 28 | 3 | 5 Jan | 13 Apr | S. Nwabuzor |
| | Statistical Methods | GCM | 2413 | GCF1013, GCM1013 | MW | C2 | 14 | 28 | 3 | 5 Jan | 13 Apr | T. Hambir |
| | Technical Calculus | GCM | 2114 | GCM1022 | MWF | C1 | 15 | 45 | 4 | 5 Jan | 22 Apr | R. Baroody |
| | Technical Math | GCM | 1013 | Diagnostic Exam (new candidates) | MWF | C1 | 14 | 42 | 3 | 5 Jan | 15 Apr | T. Hambir |
| | Technical Math | GCM | 1013 | Diagnostic Exam | MWF | C2 | 14 | 42 | 3 | 5 Jan | 15 Apr | R. Baroody |
| | Technical Math | GCM | 1022 | GCM1013 | MWF | C2 | 10 | 30 | 2 | 5 Jan | 16 Apr | O. Nwankwo |
| | **TTU** | | | | | | | | | | | |
| | Calculus II | GCM | 3214 | GCM2114 | MWF | C1 | 15 | 45 | 4 | 5 Jan | 22 Apr | I. Okechukwu |
| | Capstone | GCE | 4513 | 40 credit hours beyond AS degree | F | C1 | 14 | tbd | 3 | 7 Jan | 22 Apr | C. VandenBroek |
| | Design of Experiments | GCM | 3411 | GCM2413 | MW | C1 | 5 | 10 | 1 | 5 Jan | 9 Feb | O. Nwankwo |
| | Electrosciences I | GCS | 2312, 2321 | GCF101, GCM1022 | MW | C1 | 14 | 28 | 3 | 5 Jan | 13 Apr | A. Hyder |
| | Engineering Materials I | GCT | 2012 | GCC1012 | TTH | C1 | 9 | 18 | 2 | 6 Jan | 8 Mar | M. Demeri |
| | Engineering Materials II | GCE | 3012 | GCT2012 | TTH | C2 | 9 | 18 | 2 | 6 Jan | 8 Mar | M. Demeri |
| | Joining & Assembly | GC | T313, E4113 | GCT 2112, GCE 3131 | TTH | C1 | 15 | 30 | 4 | 6 Jan | 19 Apr | M. Mehrabi |
| | Ethics in Industry | GCT | 2452 | GCL1013 | F | C | 8 | 8 | 2 | 7 Jan | 25 Feb | P. Fortier |
| | Machining Processes II | GCE | 3111 | GCT1112 | F | C2 | 9 | 9 | 1 | 7 Jan | 4 Mar | T. White |
| **Cancelled** | ~~Materials Forming~~ | ~~GC~~ | ~~T3152,E3172~~ | ~~GCT2112, GCT3163, GCS3191~~ | ~~MWF~~ | ~~C1~~ | ~~12~~ | ~~36~~ | 4 | ~~5 Jan~~ | ~~4 Apr~~ | ~~tbd~~ |
| | Philosophy | GCL | 3113 | GCL 1013 | S | D | 9 | 9 | 3 | 8 Jan | 12 Mar | M. VanHorn |
| | Thermosciences I | GCS | 2211 | GCF1013, GCM1022 | TTH | C1 | 5 | 10 | 1 | 10 Mar | 12 Apr | A. Cherri |
| C 2:45-5:45 | Thermosciences II | GCS | 3214 | GCS2211, GCM3214, OR GCM3312 | MW | C2 | 15 | 30 | 4 | 5 Jan | 20 Apr | A. Cherri |

# Winter 2005 Academic Schedule

| Period | Course name and number | | | Pre-requisite | day | prd | nr of wks | nr of mtgs | cr | start date | end date | Instructor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **LTU** | | | | | | | | | | | |
| C1 2:45-4:10 | Tool Design | GCT | 2182 | GCF1113, GCE2462, GCT1112, GCT2012 | TTH | C2 | 9 | 18 | 2 | 6 Jan | 8 Mar | J. Zheng |
| C2 4:20-5:45 | **WSU** | | | | | | | | | | | |
| C6 4:50-6:10 | Communications I | GCL | 2013 | GCL1013 | TTH | C1 | 14 | 28 | 3 | 6 Jan | 12 Apr | P. Guenther |
| C7 4:20-7:20 | Communications II | GCL | 3013 | GCL2013 | S | D2 | 14 | 14 | 3 | 8 Jan | 23 Apr | P. Guenther |
| D S, 9:00-1:00 | Computers in Engineering | GCF | 1013 | GCM1013 | S | D | 9 | 9 | 3 | 8 Jan | 12 Mar | K. Sanders |
| D1 S, 9:00-11:30 | Electrical Machines | GCT | 2212 | GCS2312 | S | D1 | 10 | 10 | 2 | 8 Jan | 19 Mar | A. Slominus |
| D2 S, 9:00-12:00 | English Composition | GCL | 1013 | Diagnostic Exam | TTH | C1 | 14 | 28 | 3 | 6 Jan | 12 Apr | M. Ramsey |
| | Engineering Economics I | GCE | 2462 | GCM1022 | MW | C6 | 9 | 18 | 2 | 5 Jan | 9 Mar | B. Scott |
| | Engineering Economics II | GCE | 3461 | GCE2462 | MW | C6 | 5 | 10 | 1 | 14 Mar | 13 Apr | B. Scott |
| | Facilities Design | GCE | 4314 | GCT3131,3163,GCE3012,GCE3111 | TTH | C2 | 14 | 28 | 3 | 6 Jan | 12 Apr | T. White |
| | Operations Management | GCE | 4413 | GCL3613, GCE3314, GCE4113, GCE4313 | **W** | **C2** | **14** | **28** | 3 | **10 Jan** | **25 Apr** | **S. Palaniswami** |
| | **Lehigh** | | | | | | | | | | | |
| | Instrumentation | GCT | 1221 | GCT1211 | MW | C1 | 5 | 10 | 1 | 5 Jan | 9 Feb | L. Butler |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Term: May 11 - Aug. 31

# SUMMER 2005 ACADEMIC SCHEDULE

As of 04/25/05

| Period | Course name and number | | | Pre-requisite | day | prd | nr of wks | nr of mtgs | cr | start date | end date | Instructor | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 2:45-5:45 | AS Capstone | GCT | 2511 | 40 credit hours | F | C2 | 14 | 14 | 1 | 13 May | 26 Aug | S. Palaniswami | |
| C1 2:45-4:10 | Basic Chemistry | GCC | 1012 | GCM1013 | TTH | C1 | 9 | 18 | 2 | 12 May | 12 Jul | S.A. Moosavi | |
| C2 4:20-5:45 | Chemical Material Science I | GCC | 2012 | GCC1012 | TTH | C2 | 9 | 18 | 2 | 12 May | 12 Jul | S.A. Moosavi | |
| C6 4:50-6:10 | Process Chemistry | GCC | 3031 | GCC3011 | MW | C1 | 5 | 10 | 1 | 20 Jul | 22 Aug | S.A. Moosavi | |
| C7 4:20-7:20 | Control Systems I | GCE | 2261 | GCM2114,GCS2312,GCT1221 | MW | C2 | 5 | 10 | 1 | 20 Jun | 25 Jul | S. Ahmed | |
| D S, 9:00-1:00 | Engineering Mechanics I | GCS | 2141 | GCM2114,GCS2113 | F | C1 | 9 | 9 | 1 | 10 Jun | 12 Aug | S. Nwabuzor | |
| D1 S, 9:00-11:30 | Manufacturing Planning | GCE | 2412 | GCF1013,GCT1112,2112,GCE2462 | **S** | **D** | **6** | **6** | **2** | **30 Jul** | **27 Aug** | L. Joulakh | **CHANGE** |
| D2 S, 9:00-12:00 | Manufacturing Processes | GCT | 2112 | GCM1013 | MW | C1 | 9 | 18 | 2 | 11 May | 18 Jul | S. Ahmed | |
| | Manufacturing Systems I | GCT | 2314 | GCL2013, GCM2413, GCE2412 | MW | C1 | 15 | 30 | 4 | 11 May | 24 Aug | S. Palaniswami | |
| | Psychology/Sociology | GCL | 1214 | GCL1013 | TTH | C1 | 15 | 30 | 4 | 12 May | 23 Aug | K. Doby | |
| | Mechanophysics | GCS | 2113 | GCF1013, GCM1012 | **MW** | **C2** | 14 | 28 | 3 | 11 May | 22 Aug | S. Nwabuzor | **CHANGE** |
| | Mechanophysics II | GCS | 3163 | GCS2113,GCM3314 | TTH | C2 | 14 | 28 | 3 | 12 May | 16 Aug | M. Hailat | |
| | Statistical Methods | GCM | 2413 | GCF1013, GCM1013 | MW | C2 | 14 | 28 | 3 | 11 May | 22 Aug | O. Nwankwo | |
| | Technical Calculus | GCM | 2114 | GCM1022 | **MWF** | **C1** | 15 | 45 | 4 | 11 May | **31 Aug** | T. Hambir | **CHANGE** |
| **CANCELLED** | ~~Technical Math~~ | ~~GCM~~ | ~~1013~~ | ~~Diagnostic Exam (new candidates)~~ | ~~MWF~~ | ~~C1~~ | ~~14~~ | ~~42~~ | ~~3~~ | ~~11 May~~ | ~~29 Aug~~ | tbd | **CHANGE** |
| | Technical Math | GCM | 1013 | Diagnostic Exam | MWF | C2 | 14 | 42 | 3 | 11 May | **29 Aug** | T. Hambir | **CHANGE** |
| | Technical Math | GCM | 1022 | GCM1013 | MWF | C1 | 10 | 30 | 2 | 11 May | **29 Jul** | R. Baroody | **CHANGE** |
| | | | | | | | | | | | | | |
| | Calculus II | GCM | 3214 | GCM2114 | MWF | C1 | 15 | 45 | 4 | 11 May | **31 Aug** | I. Okechukwu | **CHANGE** |
| | Calculus III | GCM | 3254 | GCM3214 | MWF | C2 | 15 | 45 | 4 | 11 May | **31 Aug** | M. Barlaskar | **CHANGE** |
| | Comparative Politics & Economics | GCL | 2614 | GCL1013 | T | C | 15 | 45 | 4 | 5 Apr | 12 Jul | V. Mantzopolous | |
| | Electrosciences I | GCS | 2312, 2321 | GCF101, GCM1022 | MW | C2 | 14 | 28 | 3 | 11 May | 22 Aug | A. Hyder | |
| | Electrosciences II | GCS | 3311, 3361 | GCS2321, GCM3214 or GCM3312 | MW | C1 | 9 | 18 | 2 | 11 May | 18 Jul | T. Lahdhiri | |
| | Engineering Mechanics II | GCS | 3133 | GCS2141, GCS3163 | MW | C1 | 14 | 28 | 3 | 11 May | 22 Aug | C. Morgan | |
| | Materials Forming | GC | T3152,E3172 | GCT2112, GCT3163, GCS3191 | TTH | C1 | 15 | 30 | 4 | 12 May | 23 Aug | M. Demeri | |
| | Thermosciences I | GCS | 2211 | GCF1013, GCM1022 | F | C1 | 9 | 9 | 1 | 13 May | 8 Jul | A. Cherri | |
| | Tool Design | GCT | 2182 | GCF1113, GCE2462, GCT1112, GCT2012 | TTH | C1 | 9 | 18 | 2 | 7 Jun | 4 Aug | J. Zheng | |
| | Tool Design & Construction | GCE | 4173 | GCT2182,3131,3152, GCE3012,3111 | S | D2 | 12 | 12 | 3 | 14 May | 6 Aug | J. Zheng | |
| | World Religions | GCL | 4113 | GCL3113 | TTH | C2 | 14 | 28 | 3 | 12 May | 16 Aug | on-campus | |
| | | | | | | | | | | | | | |
| | Capstone | GCT | 4513 | 40 hours beyond AS/MET | F | C2 | 14 | 14 | 3 | 13 May | 26 Aug | T. White | |
| | Communications I | GCL | 2013 | GCL1013 | TTH | C2 | 14 | 28 | 3 | 12 May | 16 Aug | tbd | |
| | Communications II | GCL | 3013 | GCL2013 | S | D2 | 14 | 14 | 3 | 14 May | 30 Jul | P. Guenther | |
| | Computers in Engineering | GCF | 1013 | GCM1013 | S | D | 9 | 9 | 3 | 14 May | 16 Jul | K. Sanders | |
| | Electrical Machines | GCT | 2212 | GCS2312 | S | D1 | 10 | 10 | 2 | 14 May | 23 Jul | T. Slominis | |
| | English Composition | GCL | 1013 | Diagnostic Exam | TTH | C1 | 14 | 28 | 3 | 12 May | 16 Aug | H. Eichbauer | |
| | Engineering Economics I | GCE | 2462 | GCM1022 | MW | C6 | 9 | 18 | 2 | 11 May | 18 Jul | B. Scott | |
| | | | | | | | | | | | | | |
| | Instrumentation | GCT | 1221 | GCT1211 | MW | C2 | 5 | 10 | 1 | 11 May | 15 Jun | L. Butler | **CHANGE** |

- over

Term: Sept. 7 - Dec. 21

# FALL 2005 ACADEMIC SCHEDULE

As of 08/22/05

| Period | Course name and number | | | Pre-requisite | day | prd | nr of wks | nr of mtgs | cr | start date | end date | Instructor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C 2:45-5:45 | AS Capstone | GCT | 2511 | 40 credit hours | F | C2 | 14 | 14 | 1 | 9 Sep | 16 Dec | S. Palaniswami |
| C1 2:45-4:10 | Basic Chemistry | GCC | 1012 | GCM1013 | MW | C2 | 9 | 18 | 2 | 7 Sep | 7 Nov | S.A. Moosavi |
| C2 4:20-5:45 | Chemical Material Science I | GCC | 2012 | GCC1012 | MW | C1 | 9 | 18 | 2 | 7 Sep | 7 Nov | S.A. Moosavi |
| C6 4:50-6:10 | Chemical Material Science II | GCC | 3011 | GCC2012 | TTH | C1 | 5 | 10 | 1 | 10 Nov | 15 Dec | S.A. Moosavi |
| C7 4:20-7:20 | Communications I | GCL | 2013 | GCL1013 | TTH | C2 | 14 | 28 | 3 | 8 Sep | 15 Dec | H. Eichbauer |
| D S, 9:00-1:00 | Communications II | GCL | 3013 | GCL2013 | S | D | 9 | 9 | 3 | 10 Sep | 5 Nov | P. Guenther |
| D1 S, 9:00-11:30 | Control Systems II | GCE | 3262 | GCE2261, GCS3331 | TTH | C1 | 9 | 18 | 2 | 4 Oct | 6 Dec | S. Ahmed |
| D2 S, 9:00-12:00 | Engineering Mechanics I | GCS | 2141 | GCM2114,GCS2113 | F | C1 | 9 | 9 | 1 | 30 Sep | 2 Dec | S. Nwabuzor |
| | Manufacturing Planning | GCE | 2412 | GCF1013, GCT1112, GCT2112, GCE2462 | S | D | 6 | 6 | 2 | 29 Oct | 10 Dec | L. Joulakh |
| | Manufacturing Processes | GCT | 2112 | GCM1013 | TTH | C2 | 9 | 18 | 2 | 8 Sep | 8 Nov | tbd |
| | Mechanophysics | GCS | 2113 | GCM1022 | MW | C1 | 14 | 28 | 3 | 7 Sep | 12 Dec | S. Nwabuzor |
| | Statistical Methods | GCM | 2413 | GCM1013 | MW | C2 | 14 | 28 | 3 | 7 Sep | 12 Dec | O. Nwankwo |
| | Technical Calculus | GCM | 2114 | GCM1022 | MWF | C2 | 15 | 45 | 4 | 7 Sep | 21 Dec | R. Baroody |
| | Technical Math | GCM | 1013 | Diagnostic Exam | MWF | C1 | 14 | 42 | 3 | 7 Sep | 21 Dec | tbd |
| | Technical Math | GCM | 1022 | GCM1013 | MWF | C1 | 10 | 30 | 2 | 7 Sep | 14 Nov | T. Hambir |
| | | | | | | | | | | | | |
| | Capstone | GCE | 4513 | 40 hours beyond AS/MET | F | C1 | 14 | tbd | 3 | 9 Sep | 21 Dec | C. VandenBroek |
| | Calculus II | GCM | 3214 | GCM2114 | MWF | C2 | 15 | 45 | 4 | 7 Sep | 21 Dec | I. Okechukwu |
| | Differential Equations (UDM Candidates) | GCM | 3312//3332 | GCM3214 | MWF | C2 | 15 | 45 | 4 | 7 Sep | 21 Dec | M. Barlaskar |
| | Differential Equations (WSU Candidates) | GCM | 3312 | GCM3214 | MWF | C2 | 10 | 30 | 2 | 7 Sep | 14 Nov | M. Barlaskar |
| | Engineering Materials I | GCT | 2012 | GCC1012 | TTH | C2 | 9 | 18 | 2 | 8 Sep | 8 Nov | M. Demeri |
| | Engineering Materials II | GCE | 3012 | GCT2012 | TTH | C1 | 9 | 18 | 2 | 8 Sep | 8 Nov | M. Demeri |
| | Ethics in Industry | GCT | 2452 | GCL1013 | TTH | C1 | 9 | 18 | 2 | 8 Sep | 8 Nov | P. Fortier |
| | Electrosciences I | GCS | 2312 | GCF1013, GCM1022 | MW | C1 | 14 | 28 | 3 | 7 Sep | 12 Dec | A. Hyder |
| | Electrosciences I | GCS | 2321 | GCS2312 | MW | C1 | 14 | 28 | 3 | 7 Sep | 12 Dec | A. Hyder |
| | Electrosciences II | GCS | 3311 | GCS2312,GCM3214 or GCM3312, | MW | C1 | 9 | 18 | 2 | 7 Sep | 7 Nov | U. Mohammad |
| | Electrosciences II | GCS | 3361 | GCS3311,GCM3254 | MW | C1 | 9 | 18 | 2 | 7 Sep | 7 Nov | U. Mohammad |
| | Engineering Mechanics II | GCS | 3132, 3191 | GCS2141,GCS3163 | TTH | C2 | 14 | 28 | 3 | 8 Sep | 15 Dec | C. Morgan |
| | **Joining and Assembly** | GCT | 3131 | GCT2112 | TTHF | C1 | 12 | 36 | 4 | 8 Sep | 2 Dec | J. Zheng |
| | **Joining and Assembly** | GCE | 4113 | GCT3131 | TTHF | C1 | 12 | 36 | 4 | 8 Sep | 2 Dec | J. Zheng |
| | Mechanisms/Machinery | GCF | 4314 | GCS3191 | MWF | C2 | 15 | 45 | 4 | 7 Sep | 30 Nov | M. Mehrabi |
| | Machining Processes II | GCE | 3111 | GCT1112 | TTH | C2 | 5 | 10 | 1 | 8 Sep | 11 Oct | T. White |
| | Thermosciences I | GCS | 2211 | GCM1022, GCF1013 | TTH | C1 | 5 | 10 | 1 | 10 Nov | 15 Dec | M. Schumack |

-over-

Term: Sept. 7 - Dec. 21

# FALL 2005 ACADEMIC SCHEDULE

As of 08/22/05

| Course name and number | | | Pre-requisite | day | prd | nr of wks | nr of mtgs | cr | start date | end date | Instructor |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thermosciences II | GCS | 3214 | GCS2211, GCM3214, OR GCM3312 | TTHF | C2 | 12 | 36 | 4 | 8 Sep | 2 Dec | A. Cherri |
| | | | | | | | | | | | |
| Computers in Engineering | GCF | 1013 | GCM1013 | S | D | 9 | 9 | 3 | 1 Oct | 3 Dec | K. Sanders |
| Electrical Machines | GCT | 2212 | GCS2312 | S | D1 | 10 | 10 | 2 | 10 Sep | 12 Nov | T. Slominis |
| Engineering Economics I | GCE | 2462 | GCM1013 | MW | C6 | 9 | 18 | 2 | 7 Sep | 7 Nov | B. Scott |
| Engineering Economics II | GCE | 3461 | GCE2462 | MW | C6 | 5 | 10 | 1 | 9 Nov | 12 Dec | B. Scott |
| | | | | | | | | | | | |
| Instrumentation | GCT | 1221 | GCT1211 | MW | C1 | 5 | 10 | 1 | 12 Sep | 12 Oct | L. Butler |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

# Focus: HOPE
## Professional Development Workshop Schedule 2004 - 2005

**October 2004**

| | | |
|---|---|---|
| 10/7/04 | 12:30 -2:30 | **Customer Service for the IT Professional** |
| 10/12/04 | 4:30 – 6:00 | **Resume Writing and Interviewing** |
| 10/28/04 | 12:30 – 2:30 | **Customer Service Tools & Techniques** |
| 10/30/04 | 10:00 – 2:00 | **Study Skills and Test Taking** |

**November 2004**

| | | |
|---|---|---|
| 11/02/04 | 3:30 – 5:30 | **Customer Service for the IT Professional** |
| 11/18/04 | 3:30 – 5:30 | **Customer Service Tools & Techniques** |

**January 2005**

| | | |
|---|---|---|
| 1/06/05 | 12:30 – 2:30 | **Presenting Yourself with Confidence** |

**February 2005**

| | | |
|---|---|---|
| 2/10/05 | 10:30-12:00 | **Ford Mentor – Tour** |
| 2/10/05 | 12:30 – 2:30 | **Sexual Harassment (EEOC)** |
| 2/22/05 | 9:00-1:00 | **Resume Writing for Engineering Grads** |
| 2/23/05 | 12:30-2:00 | **Networking at a Job Fair** |
| 2/24/05 | 9:00-1:00 | **Success in Corporate America & Work Ethics** |

**March 2005**

| | | |
|---|---|---|
| 3/3/05 | 12:30 – 2:30 | **Resume Writing** |
| 3/3/05 | 5:00-6:30 | **Networking at a Job Fair** |
| 3/9/05 | 10:30-12:00 | **Dress for Success** |
| 3/16/05 | 9:00-1:00 | **Transitioning to Corporate America** |
| 3/22/05 | 12:30-2:00 | **Pre-Job Fair Resume Writing and Interviewing** |
| 3/23/05 | 9:00-1:00 | **Understanding Union Protocols** |
| 3/29/05 | 9:00-12:00 | **Supervising People** |
| 3/30/05 | 3:30-5:00 | **Networking at a Job Fair** |

**April 2005**

| | | |
|---|---|---|
| 4/7/05 | 11:00-4:00 | **Focus: HOPE Job Fair 2005** |
| 4/13/05 | 10:30-12:00 | **Ford Mentor Meeting** |
| 4/19/05 | 12:30-2:30 | **Time Management** |

**May 2005**

| | | |
|---|---|---|
| 5/3/05 | 12:30-2:30 | **Resume Writing and Interviewing** |
| 5/11/05 | 10:30-12:00 | **Ford Mentor Meeting** |

**June 2005**

| | | |
|---|---|---|
| 6/8/05 | 10:30-12:00 | **Ford Mentor Meeting** |

**August 2005**

| | | |
|---|---|---|
| 8/10/05 | 1:00-3:00 | **Ford Mentor – Tour** |

**September 2005**

| | | |
|---|---|---|
| 9/14/05 | 10:30-12:00 | **Ford Mentor Meeting** |

## *Partial List of Industry Partners That Have Hired Focus: HOPE Graduates*

| | | | |
|---|---|---|---|
| **A.B. Heller** | **Dart Machinery** | **Libralter Plastics, Inc.** | **TDS Automotive** |
| **Addison Iron Works** | **Decision Consultants, Inc.** | **Manpower Professional** | **Tech Systems** |
| **Adecco Staffing** | **Delcon, Inc.** | **Mark IV Aoutomotive** | **Tech Team Global** |
| **Advance Communications, Inc.** | **Denso** | **Media One** | **Tech Team Global/Ford** |
| **Advance Integration Group, Inc.** | **Detroit Diesel** | **Metal Dyne** | **Tek Systems** |
| **Advantage Logistics** | **Detroit Edison** | **Michigan Internet Communications Assoc.** | **Telecore** |
| **Advanced Resources** | **Detroit Edison Public School Academy** | **MI Specialty Tube** | **The Budd Company** |
| **Aerotek** | **Detroit Metropolitan Communications** | **Millennium Manfacturing** | **The Oakwood Group** |
| **Air Matic Products** | **Detroit Newspapers** | **Millwrights Union Local #1102** | **The Web Group** |
| **Ajilon Consulting** | **Diversified Staffing** | **Modis IT Staffing** | **Toys -R' - Us** |
| **American Axle** | **Draw Tite** | **Motex Services** | **Trauchan Tool Machine** |
| **Ameritech** | **Dynamic Seals Co.** | **Motor City Electric Technologies** | **TRIALON** |
| **Analyst International** | **EDS** | **National Tech Team, Inc.** | **TRIALON/Goertz+Schiele Corporation** |
| **Arcadia Staffing** | **Elan Engineering** | **NLB Corporation** | **United Machining** |
| **Arrow Strategies** | **Electronic Data Systems** | **Northstar MFG.** | **Universal Bearing Co.** |
| **Atlas Tool & Die** | **Entech Personnel Services Incorporated** | **Omega Plastics** | **University of Michigan – Ann Arbor** |
| **Bailey Telecommunications, LLC** | **Epitec Group** | **Onsite Commercial Staffing** | **US Manufacturing** |
| **Berger Realty** | **ETD Staffing Solutions** | **Panther Crankshaft** | **Vatalsi** |
| **Best Buy** | **Exemplar Manufacturing** | **Paramount Boring** | **Vehicle Logistics Solutions** |
| **Bing Lear Group** | **Express Personnel** | **Parser** | **Virtual Communications, LLC** |
| **Bridgewater Interior** | **Ford Motor Company** | **PERSONNEL UNLIMITED** | **Visteon** |
| **Campbell Industrial Contractors, INC** | **Forge Industrial Staffing** | **Pitney Bowes** | **Vitullo & Associates** |
| **Caterpillar** | **Galaxy Industries** | **Plastipak** | **Voda** |
| **CDS Engineering** | **General Dynamics Land Systems** | **Process Control & Instrumentation** | **Volt Services Group** |
| **CJ Quality Services** | **General Motors Corporation** | **Product Action** | **Volt Technical Services** |
| **Clips & Clamps Industries** | **Global Engine Manufacturing Alliance** | **Productivity Improvement Center** | **W. F. Whelan** |
| **Clover** | **Goertz & Schiele Corporation** | **Professional Design Technologies** | **West Win Ltd.** |
| **Colin Communicaitons** | **Great Lakes Technologies Group** | **Progressive Die Solutions** | **Warren Industries** |
| **Comcast** | **Hewlett-Packard Company** | **Progressive Stamping** | **Wayne State University** |
| **Communications 2000** | **Hercules Tool & Die** | **PTI Assembly & Manchining** | **West Win Ltd.** |
| **Communities in Schools of Detroit** | **Honda** | **PTI Manufacturing & Technology** | **White Castle Systems, Inc.** |
| **Compass Consulting Enterprises Inc.** | **IBEW Electricians Local 58** | **Ramzey Broadband Services** | **Witzenmann USA** |
| **Complete Communications** | **IKON Office Solutions** | **RCO Technologies** | |
| **Complete Computer Services** | **IMCO Carbide Tool** | **REB Tool** | |
| **Comprehensive Computer Systems Inc.** | **Ingersoll** | **Records Deposition Services** | |
| **Computer & Engineering Services** | **Information Systems Resources** | **Rouge Steel** | |
| **Computer Show Network** | **International Hardcoat, Inc.** | **Royal Oak Boring** | |
| **Compuware** | **JSP International** | **Sanders Consulting – IT Services** | |
| **Concord Management** | **Kelly Services** | **Sentech** | |
| **CONECTS** | **Kelly IT Services** | **Severstal North America** | |
| **Consumers Energy** | **Keys & Co.** | **Sierra Systems** | |
| **Convergys Incorporated** | **K-Mart Corporation** | **Skyway Precision, Inc.** | |
| **Cornerstone Staffing** | **LaFarge North America** | **Sorting Solutions** | |
| **Covad Communications** | **Lear Corporation** | **Staff Solutions** | |
| **Crown Heating and Air Conditioning, Inc.** | **Learning Consultants, Inc.** | **Staffing Connection** | |
| **Cummins, INC** | **Lebow Products** | **Staffpro, Inc.** | |
| **Daimler Chrysler** | **LeCommunications, Inc.** | **Strategic Staffing/City of Detroit** | |
| **Dana Communications** | **Level 3 Communications** | **SVM Development** | |
| **Danka Office Imaging** | **Legend Motorcycles, Inc.** | **TBL Professional Services** | |

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*Celebrating Diversity Since 1968*

# Focus on Your Future!

## Attend the Focus: HOPE Job Fair


## Thursday, April 7, 2005
## 11 a.m. to 4 p.m.

Focus: HOPE Conference Center in the
Center for Advanced Technologies
1400 Oakman Boulevard

Register by contacting Donearl Johnson at
**313.494.4567** or **johnsod@focushope.edu**


# Hire the Best!

Focus: HOPE's programs prepare talented men and women for careers in manufacturing, information technology and engineering. In addition to strong technical skills, our students have excellent work habits. Attend our fair and hire employees who will help you along on the road to success.

**Thursday, April 7, 2005**
**8 a.m.–11 a.m.** *Employer registration, brunch and tour*
**11 a.m.–4 p.m.** *Job Fair*

Focus: HOPE Conference Center
Center for Advanced Technologies, 3rd Floor
1400 Oakman Boulevard, Detroit, MI

Space is limited! Register today by:
- Accessing our online form at **www.focushope.edu**
- Call Linda Tinsley at **313.494.4560**
- Email us at: **tinslel@focushope.edu**

***Registration fee of $150 is due March 4.***

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**CENTER FOR ADVANCED TECHNOLOGIES**

# Denise Ankofski Sheid
## CAT Graduate

**AT ONE TIME**, Denise Scheid worked in retail, earned minimum wage, and struggled to support her young son.

Today, she is a manufacturing engineer and earns a good living at General Motors Metal Fabrication Division where she is in the fellowship training program of its tool and die college. Scheid graduated in May 2002 from Focus: HOPE's Center for Advanced Technologies where she earned a bachelor degree through a partnership with the University of Detroit Mercy.

"Focus: HOPE has raised the quality of my life," she said. Although she graduated with honors from Waterford Kettering High School and attended college, Scheid said she had trouble finding direction in her life. Dead end jobs spiraled downward until her options were limited to low-paying jobs in retail. When she found herself divorced with a young child, the options were even more limited. "I was working in retail, in a low-paying job I could have gotten training to be a secretary and earned a few dollars more…The only way to get a higher wage was to earn a degree in a skilled area."

The turning point in her life came when she saw a story about the shortage of skilled workers in engineering. Focus: HOPE was mentioned as a source for training. She called and made an appointment with a recruiter. From that point on, her future started looking brighter.

Scheid enrolled in the Machinist Training Institute, where she was one of a handful of women learning how to operate mills, lathes, and grinders. While at MTI, she learned blueprint reading, technical drafting, computer aided design, manufacturing theory, and communication skills.

When she graduated from MTI in the fall of 1996, she saw many fellow students go into the job market and start earning good salaries. Although that option was tempting, Scheid said, "I knew that I wanted more." That's when she made the commitment to continue on through the Focus: HOPE engineering program in its Center for Advanced Technologies (CAT).

The CAT is unique. It combines academic course work with actual hands-on work on manufacturing contracts.

Six universities work together to offer academic courses, and three award degrees. Lawrence Technological University awards the associate degree. Students who decide to pursue a bachelor degree can choose between the manufacturing engineering degree offered by the University of Detroit Mercy or the engineering technology degree offered through Wayne State University.

Corporate partners are integral part of the CAT program as well. They are Cincinnati Machine, DaimlerChrysler, Detroit Diesel, EDS, Ford Motor Company, General Motors Corporation, and Society of Manufacturing Engineers.

Focus: HOPE engineering students rotate through departments working at different aspects of manufacturing. Scheid worked on a variety of projects, including a project launch for a part to be manufactured for the U.S. Department of Defense. She also had opportunities to interact with business leaders, speak to various audiences, and attend conferences.

Working full time, taking academic classes, running her own household—and finding time to spend with her son—was a challenge, Scheid said. "There were times when I really questioned whether I could continue," she said. "I was blessed by some people who chose to take me under their wings. If those people hadn't been there to help me, I might not have finished."

Initially, her son attended the Center for Children at Focus: HOPE, next door to the building she worked in. The center's hours matched hers, and she could check in on him during the day. "The Center for Children was a great benefit," she said.

Now that she has a college degree and a good job, she knows that she and her son will have a much better life. She's excited about working for General Motors. "I feel I've picked an employer that's willing to invest in its employees," she said. At the end of her three-year training program, she'll either work as a skilled trades supervisor or a manufacturing engineer. "It is a program designed to help you succeed."

It's a prospect that she couldn't have imagined a few years ago.

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# Glenn Johnson
## CAT Graduate

*"(Focus: HOPE's educational programs) filled in all the gaps in my mathematic education. For the first time I was interested in math because it had a purpose."*

Glenn Johnson took his Highland Park adult education students to Focus: HOPE for a tour in 1996 hoping that they'd see something that would spark their interest in further education after completing their GEDs.

At the end of the day, he was the one convinced that it was time to switch from his role as teacher to that of student.

"I was impressed (with Focus: HOPE's educational programs)," said Johnson, who was also serving in the Army Reserves. "I (had previously) tried engineering while I was at Morehouse College but math deterred me from becoming an engineer. I got down there and I had one of the top math persons in the world as my math teacher. I realized I didn't have the tools to be an engineer."

This incorrect assumption had led him to pursue other ventures, including the teaching job he was working when he found out about Focus: HOPE. He had become an adult education teacher after he was laid off from a job at MichCon.

Prior to this he was well on his way to becoming a chiropractor. He had taken pre-med classes in community college and was accepted to two of the nation's three chiropractic colleges. However, he didn't have the money to follow through.

But as he stood in the midst of Focus: HOPE's campus with his students he became inspired to pick up the career that he had previously eluded him. He completed the Machinist Training Institute (MTI) in 1997 and graduated in December 2004 from the Center for Advanced Technologies (CAT).

This time the math wasn't a deterrent.

"I was a little bit older when I went to MTI," Johnson said. "It filled in all the gaps in my mathematic education. For the first time I was interested in math because it had a purpose. I never really needed it before. I figured if I knew how to count money, that's all I needed to know."

Johnson learned so much more in the 31-week MTI program as it prepared him for careers in the manufacturing trades. He added on to this knowledge by going on to the CAT where he gained hands-on experience in manufacturing while studying toward his Bachelor of Science degree in manufacturing engineering technology from Wayne State University. He did all of this while also handling the responsibilities of a one-year-old daughter.

And, not only did he master all of the program's mathematic requirements, he was hired as a tool and die supervisor for General Motors Corporation in Pontiac. Initially, he will participate in GM's three-year training program and then will become a tool and die engineer.

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# Ralph Crossley
## CAT Graduate

*"Focus: HOPE introduced me to the manufacturing field and gave me an opportunity to work in the field and start my career there."*

When four years of fixing helicopters in the Marine Corps didn't translate into a civilian job, Ralph Crossley started waiting tables at the Atheneum Conference Center in Detroit.

But he didn't want this to be his final destination. He wanted to be a machine repairman.

Today, he has a more advanced career than he originally intended. He graduated from Focus: HOPE's Center for Advanced Technologies (CAT) and is working as a manufacturing engineer for Detroit Diesel.

"When I look back I just wanted to be able to fix a machine, but I've come a long way," said Crossley, 34, who has been working for the corporation since 2000. "Focus: HOPE, Eleanor Josaitis, and Father Cunningham had a dream for me when I didn't have one for myself. Now I have a beautiful home in Brighton, a wife, and a child. Focus: HOPE introduced me to the manufacturing field and gave me an opportunity to work in the field and start my career there."

A simple trip to the grocery store started him on this successful path. He saw a Focus: HOPE poster that portrayed the opportunity he'd been waiting for. At that point in his life he was single and living with his mother and, since he didn't have a car, he needed something within walking distance from where he lived. He also didn't have the kind of money it would have taken to go to a university without putting himself in deep debt.

He used the discipline he'd learned as a Marine, enrolled in the Machinist Training Institute, and graduated in 1994. He then went on to graduate in 2000 from Focus: HOPE's CAT with a bachelor of science in manufacturing engineering awarded by the University of Detroit Mercy. The opportunity gave him hands-on experience in manufacturing while he earned his degree.

"It's basically a 12-hour day starting at 6 a.m. (with work followed by classes)," Crossley said. "So I spent at least 12 hours a day at Focus: HOPE on weekdays. Saturdays and Sundays I studied in the e-library at Focus:HOPE. Some days I'd leave and it would be dark out."

All of that dedication is now paying off at Detroit Diesel, said his supervisor Dan Hogan.

"He's very responsive and good at helping to implement change within the organization,"said Hogan, an area manager for Detroit Diesel. "He helps to implement cost reductions within the department. The fact that he ran a lot of the equipment at Focus: HOPE makes him very hands-on. He has a good idea of what it's like to run the equipment through experience."

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# Dennis Weathers
## CAT Graduate

*"I originally intended to go through FAST TRACK and stop there. But...I started liking it so I went on to become an engineer."*

Dennis Weathers originally enrolled at Focus: HOPE to make his family stop bugging him about finding something productive to do with his life.

His plan was to go through the FAST TRACK program to improve his reading, math, communication, and computer skills and stop there. But once he got started he was drawn to continue further than he intended. After completing the FAST TRACK program in 1992 he went on to graduate from Focus: HOPE's Machinist Training Institute in 1994 and its Center for Advanced Technologies in 2001.

Now, he's a manufacturing engineer for Ford Motor Company who's grateful for the loving nudges of his family.

"My uncle told me about (Focus: HOPE's educational programs)," he said. "I went to FAST TRACK to make my sister happy. My sister always asked me what I was going to do with my life. I originally intended to go through FAST TRACK and stop there. But I met a lot of friends there who kept me in the program and I started liking it so I went on to become an engineer."

The Machinist Training Institute helped him develop precision machining and metal-working skills, and the Center for Advanced Technologies gave him hands-on experience in manufacturing while studying towards his associate's and bachelor's degrees in science and manufacturing technologies.

During his 2.5 years at Ford Motor Company he has worked at the Michigan Truck Plant where the Navigator and Expedition are being built. He was also in Norfolk, Virginia last year to help with the launch of the F-150.

Weathers is a highly self motivated man who Mark McConville enjoyed supervising during the launch.

"He's dedicated," said McConville, a process and strategy supervisor who was a launch specialist when he worked with Weathers. "He does what it takes to get the assignments done. He took on assignments without a problem and picked up things pretty easily. He had good computer skills and his ability to work with other people is one of his greatest assets.

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# Vickie Wilson
## CAT Student

Vickie Wilson's father started telling her in middle school that he thought she had what it took to be a successful manufacturing engineer. It took her a while to realize that he really knew what he was talking about.

"He said he really thought I could do it," said Wilson, 22, of Detroit. "He thinks I'm so smart. Everybody thinks their own kids are geniuses."

Wilson is proving her father was right. In May 2005, she earned an associates degree in applied science manufacturing engineering through Focus: HOPE's Center for Advanced Technologies (CAT). Now she's working toward her bachelor's degree.

Wilson got a head start on career training during her senior year of high school when she began splitting each weekday between Detroit School of the Industrial Arts and Focus: HOPE's Machinist Training Institute. By the time she graduated from high school in 2000 she was months ahead of her classmates who were just preparing to begin their college education.

She's glad she took advantage of the opportunity to enroll at Focus: HOPE while still in high school. "I really felt like I should do it because we had only been studying a book in our high school class," Wilson said. "This was a way for me to do actual work. It was a step in the right direction."

Focus: HOPE's 31-week MTI prepared her for a career in the manufacturing trades by developing her precision machining and metalworking skills. She took classes and worked on the machine shop floor learning to operate lathes, mills, grinders, and Computer Numerical Controlled machine tools. She also made a set of tools that will stay with her throughout her career.

While working on her bachelor of science degree in manufacturing engineering, she has had the opportunity to gain hands-on work experience at Focus: HOPE and through an externship at Ford Motor Company. She expects that the work experience and academic experience from Focus: HOPE will add up to a bright future.

"The people here are so unbelievably helpful," Wilson said. "They teach us everything including how to conduct ourselves at a business lunch, interview skills, and how to present our projects. It's hands-on training. All of those things give you a step ahead of the competition. It makes it better for me when I leave here."

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MACHINIST TRAINING INSTITUTE

# Kumasi Rayford
## MTI Graduate

*"There's times you think, 'man, this is tough.' But anything worth having is hard work."*

Kumasi Rayford satisfied his unrealized desire to design parts for cars by playing with LEGOs and erector sets as a child. During his teens he admired flashy vehicles in magazines even though he wasn't old enough to drive.

Now he helps to create the cars that others admire.

A lead designing engineer for General Motors, Rayford, 32, prepared for his career at the Focus: HOPE Machinist Training Institute.

During the 31-week machinist program, Rayford learned precision machining and metal working. Teachers worked with him and other students in small groups for strict, timely classes that taught them how to operate lathes, grinders and other machining equipment. While learning the trade, they created their own set of tools including hammers, clamps, V-blocks, sine bars and parallels. The completed set of tools is valued at $700 and stays with them throughout their careers.

Rayford, who graduated from MTI in January 2000, said his successful career was made possible by all the "rigorous" training at MTI.

"It's kind of like a boot camp for the workforce," he said. "It's real structured. There's times you think, 'man, this is tough.' But anything worth having is hard work."

His persistence and knowledge has carried over to his job at General Motors, where he has been since Feb. 14, 2000. One of his most notable accomplishments was designing the world's first SUV power-sliding rear roof for the Envoy. That's a long way from where he started.

When a friend told him about Focus: HOPE, Rayford had a GED but wasn't really certain which direction he was headed in life. But since completing his training at Focus: HOPE and following it up with a job and more training at General Motors he is now also pursuing a bachelor's degree in engineering and expects to pursue a master's in business.

He is one of about 30 Focus: HOPE graduates who work for the General Motors in Warren.

Gerald Bojanowski, engineer group manager for movable roof systems at the GM Warren Tech Center, knew Rayford would be a valuable asset to the company the first time he met him.

"From the onset I saw someone very intelligent and hungry who wanted to be involved in something successful," Bojanowski said. "He continues to excel at anything we throw at him. He has passion, not just for working, but for the automobile. Everyone that I've met (from Focus: HOPE) are carbon copy individuals like Kumasi. They come out with a good work ethic and a desire to be the best."

**Focus: HOPE**
*Celebrating Diversity Since 1968*

1355 Oakman Boulevard
Detroit, Michigan 48238-2850
313.494.5500

**www.focushope.edu**

**MACHINIST TRAINING INSTITUTE**

# Lester Lampkins
## MTI Graduate

*"I didn't start dreaming until I got (to Focus: HOPE)."*

Lester Lampkins' friends weren't impressed when he took a $5.50 per hour job as a machine repairman after graduating from Focus: HOPE's Machinist Training Institute (MTI) in 1989. It wouldn't take long before they changed their minds.

Lampkins moved into a well-paying job at FANUC Robotics where he now earns $32 an hour with full benefits, a car allowance, bonus incentives, and overtime as a senior service/ installation engineer.

A native of Memphis, Tennessee, Lampkins had moved to Detroit in the 1980s looking for a good job opportunity. "I wasn't doing that good down south," said Lampkins, 47. "There weren't a lot of jobs. I heard they made cars in Detroit. I knew if I got a job dealing with cars I'd never be out of work."

Initially, he didn't do any better here than down south. He lived with an aunt and depended on food stamps to eat. One day, as he stood in line for his monthly allotment of food vouchers he saw a poster about Focus: HOPE's educational programs.

He went to Focus: HOPE where he met the late Father William Cunningham. The co-founder gave him his first job in Detroit as a custodian.

"I didn't want everybody to know I was cleaning the classrooms, so I always walked outside like I was catching the bus," Lampkins recalled. "But (Cunningham) did that for me not to quit because I needed an income. That's why I graduated. That was the first job I had in Michigan. I've never been out of work since and I've never needed any food stamps either."

Lampkins learned precision machining and metalworking skills at MTI. He took classes and worked on the machine shop floor learning to operate lathes, mills, grinders, and Computer Numerical Controlled machine tools.

Now Lampkins has moved back to Memphis where he works for FANUC out of his home. He said the skills he attained at MTI prepared him for his future in the same way that a college degree would have.

"They've taught me that I can figure out anything put before me if it deals with math," Lampkins said. "So, the same things I learned here I applied to the electronic end. I think I can go to work anywhere. I didn't start dreaming until I got (to Focus: HOPE) because I wasn't looking to finish school. But, then I realized I could do this."

Now he impresses his colleagues at FANUC, including Service Supervisor Marianne Thomas.

"What he learned (at Focus: HOPE) allows him to do his job," Thomas said. "I can give him all kinds of jobs and off he goes. He's a self-starter who's very motivated. He's fantastic."

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**INFORMATION TECHNOLOGIES CENTER**

# Venita Thompkins
## ITC Graduate
**Desktop & Server Administration**

*"I didn't think (interpersonal communication) had anything to do with computers...I just wanted to graduate. Now I'm glad I did it..."*

Venita Thompkins will never forget her first day of class in Focus: HOPE's Information Technologies Center. It was April 22, 2002, the same day her grandmother was admitted to the hospital for what was expected to be a routine treatment.

On her second day of class she explained to her grandmother that she had to cut her visit short in order to meet Focus: HOPE's strict attendance policy.

"That was the last time I saw my grandmother," said Thompkins, 42, of Detroit. "She had made her transition the next day, but she knew I was at Focus: HOPE. When I completed Information Technologies Basic Skills six weeks later I said it was in honor of my grandmother."

Her grandmother would be proud to know that she went on to complete the rest of her ITC desktop support classes in November of 2002 and is now a Local Network Administrator for Detroit Public Schools.

Focus: HOPE's ITC provides education and training in the field of computer and information technology. Training is available in the three areas of network administration, desktop and server administration, and PC technology. This instruction prepares students for industry certifications that put them on the path toward exciting careers in the computer industry.

A former cosmetologist, Thompkins was encouraged by an ITC student's success story in Focus: HOPE's newsletter. Although she failed the math part of the entrance exam twice and was busy raising a young daughter, Thompkins kept re-reading that article to motivate herself. She passed the test on the third try.

The interpersonal communication training incorporated in her studies helped her in more ways than she had imagined. Thompkins received the Breithaupt Career & Technical Center Director's Choice Award in May of 2005 for the role she played in the "What's Up in Factories?" project. As a representative of Detroit Public Television, she teamed up with Auto Alliance International to launch the program in 1994 which educates middle and high school students about the world of manufacturing.

"I didn't think (interpersonal communication) had anything to do with computers," said Thompkins about the communications training every Focus: HOPE student is required to receive. "I just wanted to graduate. Now I'm glad I did it. It developed me more personally."

When Thompkins graduated in January of 2003 she was overwhelmed by the memories of everything she sacrificed and experienced to make it to that proud moment. It was an accomplishment that changed her life forever.

"I cried when I graduated because I knew the struggle to get in the program and stay in the program and feel the joy of completing," she said. "Now I'm spearheading success."

Fannie S. Dennis, principal of Thurgood Marshall Elementary School in Detroit, said her school is now reaping the benefits of the education Thompkins attained at Focus: HOPE.

"Venita has been an exceptional employee," said the principal. "She's so knowledgeable of all areas. She's a computer gem."

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**INFORMATION TECHNOLOGIES CENTER**

# Brian Collins
## ITC Graduate

*"Focus: HOPE has prepared me with course knowledge and presentation skills so that I can present myself to companies in a professional manner."*

When Brian Collins was laid off from two jobs within four years he decided it was time to do something different before taking further employment.

A native of Detroit, Collins moved back to the city in 2004 after living in Chicago. After moving in with his sister and niece, he saw an advertisement about Focus: HOPE.

"If you look at my resume I could have just picked up another job somewhere else, but I wanted to learn something in an area that I like," said Collins, 42, who is also raising a four-year-old daughter. "I already knew the software side (of computers). But, I wanted to know the hardware and networking side. The commercial talked about the information technologies program and Cisco. I've always wanted to do Cisco, but I hadn't taken the time to study it."

Focus: HOPE's Information Technologies Center provides education and training in the field of computer and information technology. Training is available in the two areas of network administration (NA), and desktop and server administration. This instruction prepares students for industry certifications that put them on the path toward exciting careers in the computer industry.

Collins, who enrolled in ITC's NA-27 class in February of 2004, graduated in February of 2005. During his time in the program he attained Microsoft Office Specialist certifications in Word and Excel as well as CompTIA A+ and CCNA certifications. Prior to this he had experience using Baan and SAP software and had a bachelor's degree in management from Southern University in Baton Rouge, Louisiana. He was also a U.S. Marine from 1986 until 1994 where he attained the rank of captain.

His hard work in Focus: HOPE's ITC recently made him one of 15 students nation-wide to earn a CompTIA IT Merit Award of $250. He credits Focus: HOPE.

"It's a crown jewel in the city of Detroit," he said. "I took this education so I can go on to become an independent contractor offering my skill set in the Enterprise Resource Planning (ERP) field and Cisco networking field. Focus: HOPE has prepared me with course knowledge and presentation skills so that I can present myself to companies in a professional manner."

His leadership in Focus: HOPE's ITC program indicates he has a bright future ahead, said instructor Hermine Turner. That's why she nominated him for the CompTIA award.

"Brian was always the kind of person to come early and get the students together for a study group," said Turner. "So, when I came to class the students were already huddled around Brian preparing for their upcoming quizzes. Brian is definitely a leader."

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# Abdoulie Jatta
## ITC Graduate

*"I like computers a lot… I felt like a certification would do me a whole lot of good."*

Tax season 2003 brought a more valuable return than Abdoulie Jatta could ever imagine.

While working as a tax associate for H&R Block that year, one of the Fraser resident's customers told him about Focus: HOPE. That proved to be a life-changing piece of information.

At the time he was also working as an officer for 36th District Court and was studying toward degrees in accounting and Computer Information Systems (CIS) at a major college. One of his goals was to become a Cisco certified network professional.

"I like computers a lot," said Jatta, 33, who graduated in February 2005. "I felt like a certification would do me a whole lot of good. A degree doesn't do a lot by itself anymore. So, I wanted certification, plus the degree and hands-on experience. In college you don't really go deep into A+ (certification) or hands-on."

Focus: HOPE's ITC provides education and training in the field of computer and information technology. Training is available in the two areas of network administration, and desktop and server administration. This instruction prepares students for industry certifications that put them on the path toward exciting careers in the computer industry.

That is exactly what Jatta's father hoped for him when he sent him to America from Gambia about six years ago. "When we graduated from high school my dad always sent us to another country for education," said Jatta who has 17 brothers and sisters. "He said you have to be educated to succeed in life."

Jatta now is certified in A+ and as a Microsoft Office Specialist in Excel. His hard work in Focus: HOPE's ITC recently made him one of 15 students nation-wide to earn a CompTIA IT Merit Award of $250. He was very humbled by the honor.

"It's very flattering," Jatta said. "It means a lot to me to be recognized by CompTIA."

His leadership and preparation in Focus: HOPE's ITC program indicates he has a bright future ahead, said instructor Hermine Turner. "I only nominate students in the 90 percent (G.P.A.) range," Turner said. "Abdoulie takes the initiative on things and he takes directions well. He is definitely a leader."

# MACHINIST TRAINING INSTITUTE

**Overview**: The Machinist Training Institute was established in 1981 to bridge industry needs for precision machinists with community needs for well-paying and career employment. This state licensed and accredited training institute provides comprehensive basic and advanced precision machining and metalworking skills. The program provides opportunity for minority youth, women, and others to gain access to the financial mainstream and learn in-demand skills. Of the hundreds of the businesses that hired the first MTI graduates, most had never previously hired either a woman or minority as a machinist. This hiring thus furthered the Focus: HOPE mission of breaking down racial and gender barriers.

Today, in terms of formal career training programs, the Focus: HOPE MTI provides a significant percentage of new entrants for skilled production work in Michigan and of all machinist entrants formally trained. Since its inception the program has graduated nearly 3,000 machinists, with graduates receiving wages between $8.50 and $12.00 per hour. Graduates of the MTI may go directly into jobs as precision machinists or other advanced manufacturing classifications or pursue additional post-secondary education.

**Program and Course Descriptions**

The Basic Machinist Training Course consists of a 31-week period requiring 1,108 contact hours to successfully complete (including both Manufacturing Technology Vestibule and Basic Precision Machining). Its graduates are able to read blueprints, efficiently produce the work called for in the blueprint, and meticulously inspect the produced piece to insure that it meets specifications. Program Course Hours Are As Follows:

## Manufacturing Technology Vestibule (5 weeks)

| TRAINING AREA | CONTACT HOURS |
|---|---|
| Shop Theory | 17 |
| Shop Math | 16 |
| Blueprint Reading | 16 |
| Drafting | 12 |
| Communication Skills | 16 |
| Computer Literacy | 12 |
| Lathes | 73 |
| Intro to Technology | 14 |
| Total | 176 |

## Basic Precision Engineering (26 weeks)

| TRAINING AREA | CONTACT HOURS |
|---|---|
| Shop Theory | 61 |
| Shop Math | 121 |
| Blueprint Reading | 61 |
| Drafting | 70 |

| | |
|---|---|
| Communication Skills | 61 |
| CAD | 82 |
| Lathes | 73 |
| Mills | 147 |
| Grinders | 147 |
| CNC Operations | 109 |
| Total | 932 |

There is flexibility within this structure allowing a student to reduce his/her clock hours in areas where competencies are achieved and/or projects completed ahead of schedule. The hours gained must be applied to **(1)** additional work in a different area where difficulty has been encountered, or **(2)** advanced study in enrichment areas.

Shop Theory provides an overview of the principles and techniques used in the machine shop. Students learn to use precision measuring instruments such as the micrometer, calipers and gage blocks. Properties of metals and alloys are examined in some detail, along with the basic machines used in metalworking operations. Speeds and feeds and the use of tables and handbook data are studied.

Shop Math gives students the basic mathematical skills necessary to enter the machinist trade. Basic Shop Math topics range from fractions and decimals to algebra and geometry. Efficient use of calculators is a regular part of instruction. Advanced Shop Mathematics concentrates on problem solving in general math and trigonometry. Practical shop applications are an integral part of the course.

Blueprint Reading teaches how to read a blueprint and take a job from blueprint to prototype. The student develops an understanding of the standards, signs, symbols, and other techniques the draftsperson uses to describe a part, unit or mechanism completely. Topics include dimensions, tolerances, product specification, number of parts to be machined, process engineering and tool instructions.

Technical Drawing familiarizes the students with basic drafting principles and methods of presentation. Students learn to describe a part with the universal language of the mechanical world. Considerable time is spent on line weight, symbols, and dimensioning. Subjects covered include projection, sectional views, multiview drawing, and auxiliary views.

Communication Skills develops both spoken and written communications to prepare students for greater success in the job market. The course covers group communications, goal setting, resume writing, interviewing, job searching and retention.

Computer Theory enables the student to see the computer for the tool that it is. The class teaches the student how to travel around the computer by first introducing DOS and WINDOWS. The students delve into software packages; learning the principles of word-processing, spreadsheets, and databases. The student then moves on to AutoCAD software to learn to apply drafting knowledge.

Shop Laboratory entails practical application of all learning. Students receive hands-on experience in setting up jobs and operating lathes, horizontal and vertical mills and Bridgeports, surface, I.D. and O.D. grinders as well as the computer numerical control of lathes and mills. Students also receive instruction in instrument reading, and make actual machine-tooled parts from blueprints.

## Advanced Precision Machining/Pre-Engineering (24 weeks/5.5 hrs/day)

The Pre-Engineering coursework provides students who plan to enroll as Candidates in the Center for Advanced Technologies (CAT) with a very strong math foundation, necessary in order to be successful in the undergraduate engineering programs. Students who successfully complete the Vestibule, Basic Precision and Advanced Precision Machining coursework may receive as many as 14 credits toward their Lawrence Technological Institute associate degree.

TUITION IS $4000

## Contact Hour Breakdown

## Pre-Engineering

| | |
|---|---|
| Orientation | 8 |
| Statistical Process Control | 40 |
| UniGraphics | 76 |
| Computer Literacy | 40 |
| English Composition | 80 |
| Fundamentals of Measurement | 20 |
| Geometric Dimensioning & Tolerancing | 40 |
| Mathematics | 120 |
| Problem Solving | 56 |
| Statistical Methods | 80 |
| Total | 560 |

Pre-Engineering Mathematics: Trainees learn polynomial (factoring and operations), systems of equations, quadratic equations, complex number system, logarithms, exponents, rational expressions, and functions.

Geometric Dimensioning & Tolerancing: The course provides a working knowledge of advanced principles and techniques of GD&T, covering its history, justification and advantages, geometric characteristics and symbols, feature control frames, material condition and datum. Form, orientations, locational, profile and runout tolerances are discussed in detail. Trainees are assigned projects to apply these concepts and prints from industry that are extensively used.

Statistical Process Control: Trainees receive an overview in the methods and "tools of quality" useful in improving products and processes. Tools and techniques demonstrating the concepts of total quality management and continuous improvement are studied to reinforce the overall SPC and Problem Solving techniques utilized in manufacturing and TQM.

Problem Solving: The course is designed to develop the problem solving ability and introduce more strategies that come up naturally in traditional math courses where problem solving is integrated. Concepts such as systematic lists, matrix logic and manipulatives are explored as ways of enhancing critical thinking ability.

UniGraphics Laboratory: Trainees learn tool design and manufacturing using UniGraphics (an advanced CADD tool). Designs are constructed, defining the tools and tool path required to manufacture a part. Trainees learn to process jobs from start to finish.

Computer Literacy: Trainees learn the basics of Microsoft Office functions, including Word, Excel, Access and PowerPoint programs.

English Composition: Trainees learn or review grammar and its usage, sentence structure, paragraph construction and punctuation.

Orientation: Trainees are acclimated to the expectations of the Pre-Engineering program and the tie-ins with the Center for Advanced Technologies. Study techniques, Instructor availability, and tutoring assistance are discussed.

Statistical Methods: Trainees learn the concepts and definitions used in statistics, counting techniques, normal distribution, mean and standard deviation, and an introduction in probability.

Fundamentals of Measurements: Trainees learn measurement and its importance in assuring accuracy and precision. Standards and units are emphasized. Conversions between English and SI Systems and different measuring instruments are discussed.

# Machinist Training Institute
# Class Start Schedule

| Class | Vestibule Start | Core 1 Start |
|---|---|---|
| **203** | 5/23/2005 | 6/27/2005 |
| **204** | 7/25/2005 | 8/29/2005 |
| **205** | 9/19/2005 | 10/24/2005 |
| **206** | 11/14/2005 | 1/03/2006 |
| **207** | 1/23/2006 | 2/27/2006 |
| **208** | 3/20/2006 | 4/24/2006 |
| **209** | 5/15/2006 | 6/19/2006 |
| **210** | 7/10/2006 | 8/21/2006 |

# Focus: HOPE

*Celebrating diversity since 1968*

## FIRST STEP - COURSEWORK DESCRIPTION

The FIRST STEP program will provide its graduates with classroom and hands-on training in the area of job skills and remediation training concentrating on increasing mathematical abilities.

The following table provides a detailed outline of the coursework and competency levels attained by program completers.

| Program Hours | Program Components | Description of Activities | Competencies Attained |
|---|---|---|---|
| 60 | 1. Computer-Based math and reading | * Exclusive use of an IBM compatible Personal Computer<br>* Tutoring as required<br>* Also utilize Destinations software | * Computer literate w/ Pentium Computers<br>* Ability to work through computer-based assignments and lessons at basic level |
| 60 | 2. Mathematics | * Students study: Fractions, Decimals, Flow Charting, Word Problems, Integer Operations, Order of Operations, Exponents, Roots, Graphing, Slopes, Measurements, Perimeter and Area. | * Proficient in math skills<br>* Increase Math skills at least one to two grade levels |
| 20 | 3. Computer Technology | * Introduction to computer skill concept, keyboarding, MS DOS Operating System fundamentals, and introduction to basic word-processing and spreadsheet software | * Demonstrate an understanding of Microsoft Word and Excel Spreadsheet capability<br>*Demonstrate an understanding of MS DOS Operating System Knowledge<br>* Knowledge sufficient in basic hardware and software components to enter Data Entry Clerk, Warehouse Clerk and Production Clerk employment |
| 20 | 4. Communications Training | * Draft resume<br>* Develop marketable cover letter<br>* Write and deliver speeches<br>* Strengthen interviewing skills | * Complete resumes<br>* Complete cover letters<br>*Introduction to public speaking<br>* Proficiency in interviewing skills, proper dress code, and personal demeanor standards for the business environment |

**160 Total Program Hours**

# FAST TRACK -- COURSEWORK DESCRIPTION

The FAST TRACK program instills its graduates with computer literacy, proficiency in industry-standard word-processing and spreadsheet software, fundamental math skills and logic, and an awareness of technical career opportunities. Each of these competencies allow for a rapid transition of program completers into technical careers, advanced technical training for skilled manufacturing, and entrance into post-secondary educational institutions. The following table provides a detailed outline of the coursework and competency levels attained by program completers.

| Program Hours | Program Components | Description of Activities | Competencies Attained |
|---|---|---|---|
| 130 | 1. Computer-Based math and reading | * Exclusive use of an IBM compatible Personal Computer<br>* Tutoring as required<br>* Also utilize Destinations Software | * Computer literate w/ Pentium Computers<br>* Ability to work through computer-based assignments and lessons at mastery level |
| 26 | 2. Mathematics | * Students study: Fractions, Decimals, Flow Charting, Word Problems, Integer Operations, Order of Operations, Exponents, Roots, Graphing, Slopes, Measurements, Perimeter and Area, Pythagorean and Trigonometry/Geometric Functions<br>* Advanced students exposed to pre-calculus | * Proficient in math skills<br>* Increase Math skills at least one to two grade levels |
| 26 | 3. Computer Technology | * Learn basic computer skill concept, keyboarding, MS DOS Operating System fundamentals, & business word-processing and spreadsheet software | * Demonstrate Microsoft Word and Excel Spreadsheet capability<br>*Demonstrate an understanding of MS DOS Operating System Knowledge<br>* Knowledge sufficient in basic hardware and software components to enter Info Systems employment |
| 42 | 4. Career Prep/ Technical Awareness | * Ford Credit counselors<br>* Tour advanced manufacturing sites<br>* Establish career goals<br>* Review vocational and professional occupations | *Understand available technical careers<br>* Possess mechanical aptitude necessary for entering Focus: HOPE MTI & other advanced technical training programs<br>* Work ethic required for success<br>* Develop career goals |
| 56 | 4. Communications Training | * Draft resume<br>* Prepare business letter<br>* Write and deliver speeches<br>* Strengthen interviewing skills<br>*Learn about team principles of high performance organizations | * Complete resumes<br>* Prepared for team-oriented work environments<br>* Capable of writing cover letters and other business communications<br>*Introduction to public speaking<br>* Proficiency in interviewing skills, proper dress code, and personal demeanor standards for the business environment |

**280 Total Program Hours**

# 2005 - 2006 First Step - Fast Track Schedule

| ***Class*** | ***Start Date*** | ***End Date*** |
|---|---|---|
| FS 103 | 26-Sep-2005 | 21-Oct-2005 |
| FS 104 | 24-Oct-2005 | 18-Nov-2005 |
| FT 333 | 24-Oct-2005 | 9-Dec-2005 |
| FT MATH 12 | 24-Oct-2005 | 2-Dec-2005 |
| FT READING 11 | 24-Oct-2005 | 2-Dec-2005 |
| FS 105 | 21-Nov-2005 | 16-Dec-2005 |
| FT 334 | 12-Dec-2005 | 10-Feb-2006 |
| FT MATH 13 | 12-Dec-2005 | 3-Feb-2006 |
| FT READING 12 | 12-Dec-2005 | 3-Feb-2006 |
| FS 106 | 9-Jan-2005 | 3-Feb-2006 |
| FS 107 | 6-Feb-2006 | 3-Mar-2006 |
| FT 335 | 13-Feb-2006 | 31-Mar-2006 |
| FT MATH 14 | 13-Feb-2006 | 24-Mar-2006 |
| FT READING 13 | 13-Feb-2006 | 24-Mar-2006 |
| FS 108 | 6-Mar-2006 | 31-Mar-2006 |
| FS 109 | 3-Apr-2006 | 28-Apr-2006 |
| FT 336 | 3-Apr-2006 | 19-May-2006 |
| FT MATH 15 | 3-Apr-2006 | 12-May-2006 |
| FT READING 14 | 3-Apr-2006 | 12-May-2006 |
| FS 110 | 1-May-2006 | 26-May-2006 |
| FT 337 | 22-May-2006 | 14-Jul-2006 |
| FT MATH 16 | 22-May-2006 | 30-Jun-2006 |
| FT READING 15 | 22-May-2006 | 30-Jun-2006 |

# 2005 - 2006 First Step - Fast Track Schedule

| ***Class*** | ***Start Date*** | ***End Date*** |
|---|---|---|
| FS 111 | 30-May-2006 | 23-Jun-2006 |
| FS 112 | 26-Jun-2006 | 28-Jul-2006 |
| FT 338 | 17-Jul-2006 | 1-Sep-2006 |
| FT MATH 17 | 17-Jul-2006 | 25-Aug-2006 |
| FT READING 16 | 17-Jul-2006 | 25-Aug-2006 |
| FS 113 | 31-Jul-2006 | 25-Aug-2006 |
| FS 114 | 28-Aug-2006 | 22-Sep-2006 |
| FT 339 | 5-Sep-2006 | 20-Oct-2006 |
| FT MATH 18 | 5-Sep-2006 | 13-Oct-2006 |
| FT READING 17 | 5-Sep-2006 | 13-Oct-2006 |
| FS 115 | 25-Sep-2006 | 20-Oct-2006 |

Focus: HOPE

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INFORMATION TECHNOLOGIES CENTER

# Information Technology Programs

## Information Technologies Center

The Information Technologies Center opened in 1999 to bridge the digital divide—the gap between the high-tech "haves" and "have nots." Its goal was to provide those who have been left out of the economic mainstream with the personal and technical skills needed for the jobs of the 21st Century. ITC partnered with industry to develop training programs that enable students to obtain valuable industry certifications.

The ITC is:

- **a Cisco Network Academy Program (CNAP)**
- **an International Business Training Association partner**
- **a Microsoft Unlimited Potential partner**
- **a CompTIA E2C member (Education to Careers)**
- **Accredited by ACCET (Accrediting Council for Continuing Education & Training)**
- **a partner in a Comcast Call Center on Campus**
- **Licensed by State of Michigan**

*"CompTIA certifications help service providers like Western Digitech to assess the technical competency of new employees before they come into contact with customers. The CompTIA Network+ and A+ certifications were used as 'acid test' for new employees …"*

**Western Digitech– ROI on Certification Case Study Summary, January 2005**

## ITC Students Achieve Success

The proof of a quality education is in the success of its students and graduates. An indicator of a quality IT professional is in his/her ability to pass the challenging industry certification exams.

Focus: HOPE's ITC students are well prepared for the certification exams. Those who pass the first certification, the Microsoft Office Specialist (MOS) test, are awarded a t-shirt proclaiming "Educated, Qualified and CERTIFIED IT Professional" which they wear with pride (see photo below). In addition to preparing for certification exams, many students participate
in internships while studying or immediately after graduation, giving them practical experience which helps them achieve success.

For several years in a row, ITC students have won national IT Merit Awards from CompTIA based on their demonstrating excellence and leadership in addition to passing the A+ certification exam. "The awards were created to recognize outstanding achievement or commitment to IT training and certification in an effort to encourage more students to enter the IT industry," according to CompTIA. Our latest winners are:

**2002** **Lisa Leverette, Network Administration student**
**2003** **Treea Brown and Darryl Jackson, Network Administration students**
**2004** **Brian Collins and Abdoulie Jatta, Network Administration students**
**2005** **Charles Johnson, Desktop and Server Administration student**

# Why A Career in Information Technology?

Contrary to popular belief, all technology jobs are not going overseas. Many opportunities are growing right here in the United States.

The rising number of households that own personal computers and the growing need for businesses to have secure, monitored networks and web sites cause employers to seek educated employees with valuable experience. They want professionals who know the latest technology and have credible education and hands-on experience to back it up.

Focus: HOPE is preparing students for those career opportunities.

Since opening in 1999, the Focus: HOPE Information Technologies Center (ITC) has graduated 575 students with the skills employers demand today.

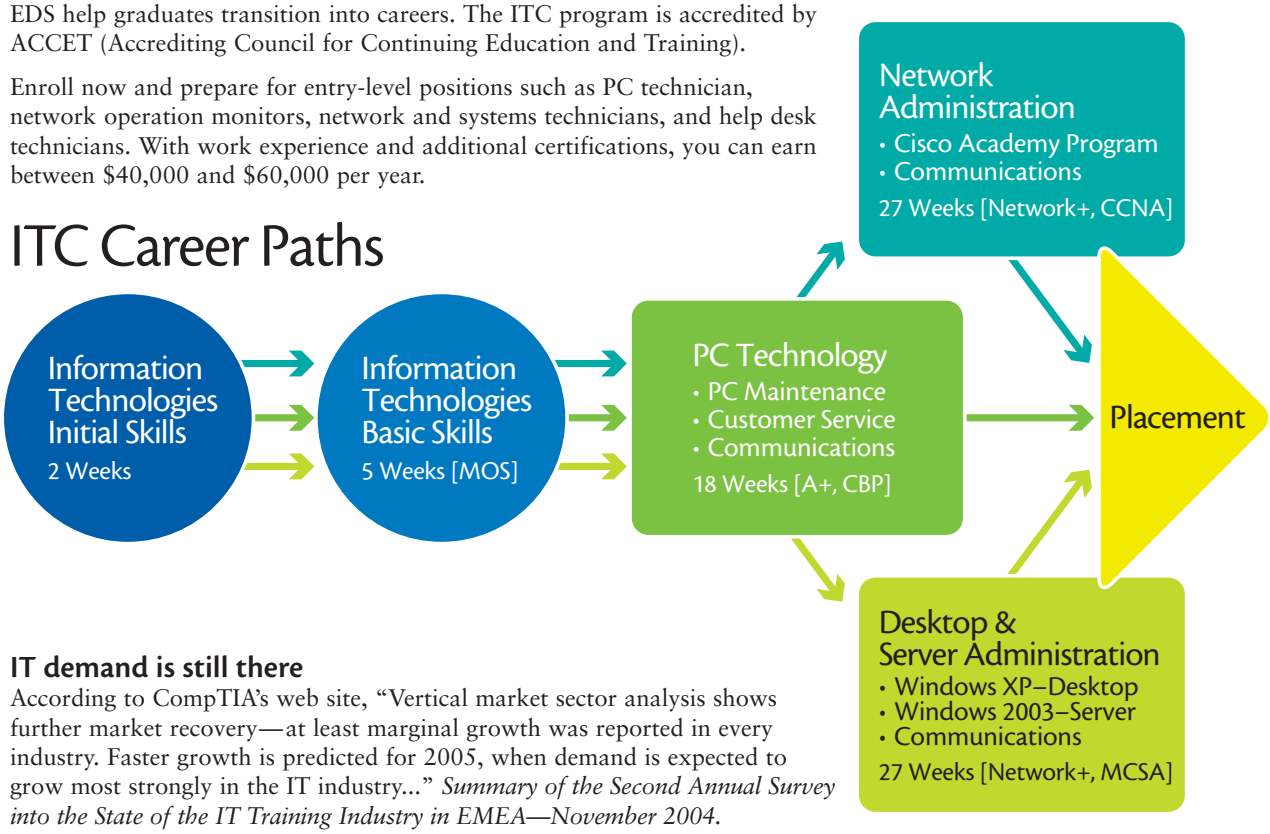
# ITC Programs

- **PC Technology**
- **Desktop & Server Administration**
- **Network Administration**

ITC uses the recommended industry curriculum for certifications offered through CompTIA, Cisco, and Microsoft. In addition, internships with area businesses including Comcast and EDS help graduates transition into careers. The ITC program is accredited by ACCET (Accrediting Council for Continuing Education and Training).

Enroll now and prepare for entry-level positions such as PC technician, network operation monitors, network and systems technicians, and help desk technicians. With work experience and additional certifications, you can earn between $40,000 and $60,000 per year.

# ITC Career Paths




### IT demand is still there

According to CompTIA's web site, "Vertical market sector analysis shows further market recovery—at least marginal growth was reported in every industry. Faster growth is predicted for 2005, when demand is expected to grow most strongly in the IT industry..." *Summary of the Second Annual Survey into the State of the IT Training Industry in EMEA—November 2004.*

# Communication & Professional Development

## Becoming an IT Professional, not just a "Techie"!

A distinguishing characteristic of Focus: HOPE's information technology curriculum is its emphasis on interpersonal skills. The ability to effectively communicate with customers is so essential that employers often put equal emphasis on communication and technical skills when hiring new employees. In fact, the U.S. Department of Labor's Bureau of Labor Statistics Occupational Outlook Handbook 2004-2005 Edition notes that "employers continue to seek computer specialists who can combine strong technical skills with good interpersonal and business skills …"

For that reason, our ITC curriculum stresses customer service, presentation skills, time management, problem solving and how to do a professional presentation. The Communications & Professional Development (CPD) courses prepare students for the International Business Training Association's Certified Business Professional (CBP) exam. When our students pass the CBP certification, they have one more credential that sets them apart from others in the information technology field. Core topics in our curriculum include:

### CPD for the PC Technician

- **Business Culture and Communication**
- **Customer Service**
- **Strategies for Success**
- **Job Search and Strategies**
- **Resumes and Portfolio**
- **Interviewing Skills**
- **Introduction to Problem Solving and Troubleshooting**

### CPD for the Network or Server Technician

- **Professional Development Action Planning**
- **Researching Industries & Companies**
- **Introduction to Project Management**
- **Using Technology to Solve Business Problems**

### Certification

- **CBP— Customer Service (International Business Training Association's Certified Business Professional)**

# Prerequisite Classes

Prerequisite classes are for students with little or no basic knowledge of using a computer or computer applications. Students who test at the appropriate skill level may enroll directly into one of the three ITC programs.

## Information Technologies Initial Skills (ITIS)

The initial skills class provides the essential computer literacy skills you need to progress into the basic skills module. The two-week, 40-hour class focuses on:

- **Basic computer skills**
- **Keyboarding and mouse skills**
- **Competency in Windows XP**

Successful completion requires attendance in classes and completion of lab assignments. **Tuition: $500.**

## Information Technologies Basic Skills (ITBS)

This five-week, 100-hour course prepares students to be computer literate. Students are exposed to basic applications in the Microsoft Office Suite, including Word, Excel, PowerPoint, and MS Project. Upon completion, students may choose to obtain a Microsoft Office Specialist (MOS) certification. Students also will be exposed to IT career choices and training options at ITC. ITBS is a prerequisite for PC Technology, Network Administration and Desktop & Server Administration.

The program focuses on:

- **Intro to computers and the World-Wide Web (www)**
- **E-mail**
- **Microsoft Office 2003: Word, Excel, PowerPoint**
- **Microsoft Project 2003**
- **IT careers**

Successful completion requires attendance in classes and completion of lab assignments. **Tuition: $1700.**

# PC Technology

As a PC Technician, you will provide technical support for the users or "clients" of a network. The smooth functioning, maintenance and upgrading of PC hardware, operating systems (OS) such as Microsoft XP and applications such as MS Office are your specialties. Your education also will include course work on customer service and professional skills that are essential to success.

In the course of a typical day, a PC Technician may:

- **Upgrade hardware**
- **Upgrade an operating system**
- **Install PCs or peripherals**
- **Load and configure new applications**
- **Monitor and modify desktop performance**
- **Back up and restore data**
- **Document configurations**

## Worth your weight in gold

When your company's PC users require assistance, you are the most valuable person in the organization! You may start your career as a help-desk technician where you will provide remote support to end users to diagnosis hardware or software problems or to provide support on using the PC and its applications. You may continue to advance in your career within the help-desk center or you may switch to desktop support where much of your time is spent working at users' desks.

## Certifications

The PC Technician program prepares you for two industry certifications:

- **CompTIA's A+ which demonstrates you have a comprehensive understanding of PC hardware and operating software**
- **IBTA's CBP which demonstrates you have the skills needed to provide excellent customer service**

## Career opportunities

The program prepares you for entry-level positions, such as:

- **Help Desk Technician**
- **PC Technician**

Graduates typically start their careers at $10 to $15 per hour. With two to three years of experience and additional certifications, you can expect to earn between $30,000 and $45,000 per year.

## PC Technology Program Description

PC Technology (PCT) is a 25-week, 500 hour course, which includes:

- **Prerequisite courses ITIS and ITBS**
- **CPD for PC Technician (see Communications/Professional Development)**
- **PC hardware and operating systems**
  - Installing & configuring PCs
  - Installing & configuring PC boards and peripherals
  - Installing & configuring PC operating systems
  - Installing & configuring software applications on a PC
  - Configuring network parameters on a PC
  - Troubleshooting PCs

**Class lectures, hands-on labs and computer-based tutorials are the tools used by the ITC to train students. Students attend classes or labs 4 hours per day, Monday through Friday.**

## PC Technology

| | Weeks | Hours | Tuition |
|---|---|---|---|
| **Prerequisite courses:** | | | |
| Information Technologies Initial Skills | 2 | 40 | $500 |
| Information Technologies Basic Skills | 5 | 100 | $1,700 |
| **PC Technology courses:** | | | $ 4,000 |
| Communications & Professional Development for PC Technician | 4 | 80 | |
| A+ | 14 | 280 | |
| **PC Technology Totals:** | **25** | **500** | **$ 6,200*** |

**Tuition includes books and vouchers for certification exams.*

## You will be in demand

"…In terms of future demand, technical support scored the largest number of jobs with approximately 67,000, followed by network systems development and programming;" *Information Technology Association of America Annual Workforce Development Survey*—Copyright September 2004, All Rights Reserved.

# Desktop & Server Administration

As a Systems Administrator, you will be the "Techie" who keeps company servers running.

You also will provide technical support to PC technicians supporting users or "clients" of a network. The smooth functioning, maintenance and upgrading of network servers' hardware, operating systems (OS), such as Windows 2003 and network security are your specialties.

In the course of a typical day, a Systems Administrator may:

- **Create user logins and access control**
- **Load and configure new applications**
- **Monitor and modify desktop performance**
- **Back up and restore data**
- **Document configurations**
- **Upgrade hardware**
- **Upgrade an operating system**
- **Install equipment**
- **Coordinate activities of your team of technicians**

## Constant mix of physical and mental challenges

Today's businesses rely on their financial, manufacturing, customer relationship management and database applications to function. As systems administrator, you will make sure these are functioning optimally and continuously. Expect a constant mix of physical and mental challenges: lifting and installing systems, troubleshooting problems, implementing projects, servicing client deadlines, and interfacing with management to achieve company goals.

*"My instructor made learning easy and coming back to school one of the best decisions I will make in my life! Thank you!"*

**ITC Student**

## Certifications

The Desktop & Server Administration Program prepares you for four industry certifications:

- **CompTIA's A+ which demonstrates you have a comprehensive understanding of PC hardware and operating software)**
- **MCSA (Microsoft Certified Systems Administrator) which demonstrates you have a comprehensive understanding of server hardware/operating software and login security.**
- **CompTIA's Network+ which demonstrates that you have a fundamental knowledge of how networks work.**
- **IBTA's CBP-Customer Service which demonstrates you have the skills needed to provide excellent customer service.**

## Career Opportunities

Upon completion, you will qualify for entry-level positions, such as:

- **Help Desk Technician**
- **PC Technician**
- **Server Technician**

You can expect an entry-level wage ranging between $10 and $15 per hour. Server Administrators with two to three years of experience and additional certifications can earn $40,000 to $60,000 per year.

*"I'm proud to be an ITC graduate. The curriculum is set up to help you succeed. If you don't, it's not because of the program. It's because of other choices you made."*

*Venita Thompkins*

**Desktop & Server Administration graduate**

## Desktop & Server Administration Program Description

Desktop & Server Administration (DS) is a 52-week, 986 hours course, which includes:

- **Prerequisite courses: ITIS and ITBS**
- **PC Technology courses (see PC Technology for detail)**
- **Server Technology courses:**

**CPD for Network & Server Technician**
(see Communications/Professional Development for detail)

**Network+**

TCP/IP network protocol

Network fundamentals

Introduction to network security

**Microsoft Windows XP**

Installing & configuring Windows XP

Configuring PCs for Active Directory Services (ADS), Directory Naming Services (DNS) and network protocols

**Windows 2003 Server**

Windows 2003 user accounts and access control

NTFS (New Technology Files System)

Maintaining shared resources (files, printers, applications)

Working with Groups

Managing storage, backup and restores

**Windows 2003 Network Infrastructure**

Managing server security

Managing DHCP [Dynamic Hosting Configuration Protocol] and DNS

Managing server performance

**Class lectures, hands-on labs and computer-based tutorials are the tools used by the ITC to train students. Students attend classes or labs 4 hours per day, Monday through Friday for prerequisite and PC Technology courses. Students attend classes or labs 4.5 hours per day, Monday through Thursday for Server Technology courses.**

## Desktop & Server Administration

| | Weeks | Hours | Tuition |
|---|---|---|---|
| **Prerequisite courses:** | | | |
| Information Technologies Initial Skills | 2 | 40 | $500 |
| Information Technologies Basic Skills | 5 | 100 | $1,700 |
| **PC Technology courses:** | | | $ 4,000 |
| Communications & Professional Development for PC Technician | 4 | 80 | |
| A+** | 14 | 280 | |
| **Server Technology courses:** | | | $ 6,500 |
| Communications & Professional Development for Server Technician | 2 | 36 | |
| Network+ | 6 | 108 | |
| MCSA | 19 | 342 | |
| **Desktop & Server Administration Totals:** | **52** | **986** | **$ 12,700*** |

**Tuition includes books and vouchers for certification exams.*

***You must pass A+ certification to continue*

### You will be in demand

Research published on CompTIA's website indicates continuing employment opportunities. "In specific vendor subject areas, expansion has been generated by modest growth across the board rather than the emergence of hot topics. No subject achieved the 'strong growth' level, but the closest was Microsoft Windows 2003." *Summary of the Second Annual Survey into the State of the IT Training Industry in EMEA—November 2004*

# Network Administration

Network administrators are the "glue" that keep computer networks together and allow computers—and the companies that rely upon them—to communicate.

## Connectivity & Security

The key words in Network Administration are "secure connectivity"—the system of relationships that makes a network a network. Connectivity flows along a fascinating variety of channels: cable, fiber optics, telephone connections, radio frequencies, lasers or microwaves using network devices (routers and switches).

As a Network Administrator, you will work with all of these connectivity media, as well as the equipment, hardware and software required to maintain the optimal flow of data across the network and assure that the information is secure. When a network fails or needs to be installed or expanded by a critical deadline, you are the most important person in the company!

## A brain-powered field, but not a desk job!

This may sound like a desk job, but it is not. Network administration is a team-oriented, project-based discipline that requires both physical and mental fitness. You will climb ladders, lift equipment and work with tools. You may need to travel. Your critical, logical and conceptual thinking skills will be constantly challenged; you will be constantly learning and updating your skills—passing additional certification tests which position you for ever-greater opportunities.

*"I liked the fact that he (instructor) used real world situations to help enhance the overall learning environment."*

**ITC Student**

## Certifications

The NA program prepares the student for the following industry-recognized certifications:

- **CompTIA's A+ which demonstrates that you have a comprehensive understanding of PC hardware and operating software**
- **CompTIA's Network+ which demonstrates that you have a fundamental knowledge of how networks work.**
- **IBTA's CBP-Customer Service which demonstrates you have the skills needed to provide excellent customer service.**
- **CCNA (Cisco Certified Network Associate) which demonstrates you have the skills needed to configure and manage LANS (local area networks), WANS (wide area networks) and the devices that make them work such as routers and switches.**
- **Panduit Certification which demonstrates you have the skills to create and maintain the cables and wall jacks that connect PCs, printers to a network's infrastructure.**

## Career opportunities

Upon completing the NA program, you will be qualified for entry level positions, such as:

- **Network Technician**
- **Network Control Operator**
- **Help Desk Technician**
- **PC Technician**

Graduates can expect to earn $10–15 per hour initially. Network administrators with two to three years of experience and two certifications can expect to earn $40,000 to $60,000 per year.

*"The Cisco program has allowed me to make the impossible possible. Of all the IT schools that are out there, Focus: HOPE has to rank in the top percentile, with good equipment, excellent instructors and staff. I highly recommend that any student who wants to go into the IT field should consider coming to Focus: HOPE."*

*Raphael Thomas*

**Network Administration graduate**

## Network Administration Program

Network Administration (NA) is a 52-week, 986 hours course, which includes:

- **Prerequisite courses ITIS and ITBS**
- **PC Technology courses (see PC Technology for detail)**
- **Network Technology courses:**

**CPD for Network & Server Technician** (see Communications/Professional Development for detail)

**Cisco Network Academy Program semesters 1–4 curriculum (CCNA certification program)**

- Network concepts and topologies
- OSI model
- Network devices: identification of, functions, and when to use
- TCP/IP and IP addressing
- Routing protocols
- Cisco routers and switches
- Start-up configuration
- Configuring interfaces
- Network security
- Designing and documenting networks
- MTFTP Server
- Visio
- Config maker
- Panduit cabling infrastructure
- Terminating and trouble-shooting UTP cable

**Class lectures, hands-on labs and computer-based tutorials are the tools used by the ITC to train students. Students attend classes or labs four hours per day, Monday through Friday for prerequisite and PC Technology courses. Students attend classes or labs 4.5 hours per day, Monday through Thursday for Network Technology courses.**

### Network Administration

| | Weeks | Hours | Tuition |
|---|---|---|---|
| **Prerequisite courses:** | | | |
| Information Technologies Initial Skills | 2 | 40 | $500 |
| Information Technologies Basic Skills | 5 | 100 | $1,700 |
| **PC Technology courses:** | | | $ 4,000 |
| Communications & Professional Development for PC Technician | 4 | 80 | |
| A+** | 14 | 280 | |
| **Network Technology courses:** | | | $ 6,500 |
| Communications & Professional Development for Network Technician | 2 | 36 | |
| CCNA & Network+ | 25 | 450 | |
| **Network Administration Totals:** | **52** | **986** | **$ 12,700*** |

**Tuition includes books and vouchers for certification exams.*

***You must pass A+ certification to continue*

### You will be in demand

"Things seem to be taking a turn for the better in information technology these days. Following the scores of cuts in IT positions and budgets brought about by the recession at the beginning of the decade, many companies are starting to boost IT spending: invest in new solutions, add more staff and put a little more into their veteran employees' pockets on payday." *'IT Salaries and the Value of Certification', Certification Magazine, May 2005, Brian Summerfield.*

# Career Placement

Focus: HOPE's goal is to help information technology graduates establish successful careers—and careers start with the first job. The Focus: HOPE Placement Office works with area employers to find jobs and internships for graduates. Graduates need reliable transportation to take advantage of most opportunities. Among the employers who have hired ITC graduates are:

**Advance Integration Group, Inc.**
**Aijilon**
**Arrow Strategies, LLC**
**Best Buy**
**Comcast**
**Complete Computer Services**
**Convergys Corporation**
**Denso International**
**Detroit Metropolitan Communications**
**EDS**
**Elan Engineering**
**Great Lakes Technologies Group**
**Hewlett-Packard**
**IKON Office Solutions**
**Information Systems Resources**
**Innovative Technologies & Design Inc.**
**Kmart Corporation**
**Media One**
**Michigan Internet Communications Association**
**Olde Discount Corporation**
**Professional Design Technologies**
**Sierra Systems, Inc.**
**Tech Team Global**
**TeleCore**
**The Web Group**
**Volt Technical Services**
**Wayne State University**

*"Focus: HOPE is more than an institution of learning, it is also a place of conducive growth. At Focus: HOPE, you are not just guaranteed a learning experience that will guide you throughout the life of your career, but also you are provided with a support system that lasts past graduation."*

**ITC Student**

*After being laid off from two jobs in four years, Brian Collins decided it was time for a change. He enrolled at ITC and now is on his way toward his goal of applying his new expertise in Cisco networking as an independent contractor.*

*The communications component of his Focus: HOPE education will help him achieve his goals, he said. "Focus: HOPE has prepared me with course knowledge and presentation skills so that I can present myself to companies in a professional manner."*

*After graduating from college, Abdoulie Jatta realized he had the academic training in information systems, but none of the certifications and hands-on experience that employers look for these days. That's why he enrolled at Focus: HOPE where he has earned a reputation as a student with initiative and leadership capability. "A degree doesn't do a lot by itself anymore," said Jatta. "I wanted certification, plus the degree and hands-on experience."*

*When Nancy Yvonne Triplett-Edmunds lost her job in radio sales, she decided it was time to change careers. After completing the network administration program and an internship at Comcast, she embarked on a new career with Tech Team Global. "After going through the schooling I felt a sense of pride," she said. "I thank God I met some wonderful people at Focus: HOPE. It's helped me immensely."*

# Enrollment Information

## Admission Requirements

To enroll in the Information Technologies Center, you must have:

- **High school diploma or GED**
- **12th grade reading ability**
- **9th grade math skills**
- **Ability to distinguish colors**

All incoming students must pass a skill evaluation test, an interview prior to admission and a drug screening test. ***Note:*** *Due to the sensitivity of information often handled by IT professionals, employers are not hiring persons with felony convictions. Therefore, enrollment into the ITC requires individuals to have no felony convictions.*

For students who test below the reading and math requirements, Focus: HOPE offers two courses to help students improve those skills. Upon completion of the ITC curriculum, students will need a valid driver's license and reliable transportation to obtain employment.

## Financing Your Education

You may qualify for financial aid, loans and/or scholarships to pay for your education. Students have received help through a variety of channels, including Economic Development Job Training, Michigan Rehabilitation Services, Work First grants, Pell grants and the GI Bill. If grants are not available, students may qualify for a loan from Focus: HOPE. Our staff will meet with you to advise you on options for financing your education.

## Support Services

**Child Care**

Our Center for Children provides quality child care for children ages six weeks to six years. Pre-school children participate in early childhood education programs. After-school programs, including help with homework and recreational activities, are available for children ages six to 12. In the summer, the center offers a day camp that includes field trips and activities such as golf and dance lessons.

**Advising and Tutoring**

Focus: HOPE is committed to helping students succeed. The organization offers advising and tutoring services for students that need assistance with personal challenges as well as academic difficulties. You can obtain information about these services through the ITC office.

## Take the next step!

To enroll in the Focus: HOPE Information Technologies Center, please contact our Admissions Office at **313.494.4300**.

Tours and admissions testing are conducted most Tuesday, Thursday and Friday mornings. Periodic open houses and special presentations are listed on our web site at **www.focushope.edu**.

Don't delay. Enroll now and you will be on your way into a new career in the exciting information technology field.

## About Focus: HOPE

Focus: HOPE is a nationally recognized civil and human rights organization in Detroit founded in 1968 in the wake of the Detroit riots. Throughout the years, Focus: HOPE has developed numerous programs in its fight to end racism, poverty and injustice. It offers a food program, which assists 43,000 seniors, mothers and children each month; career training programs in machining, engineering and information technology; child care; business conference facilities; community arts projects; and neighborhood revitalization initiatives. Through Focus: HOPE, thousands of individuals—especially women and minorities—have become financially independent.

## Focus: HOPE Mission Statement

*Recognizing the dignity and beauty of every person, we pledge intelligent and practical action to overcome racism, poverty, and injustice. And to build a metropolitan community where all people may life in freedom, harmony, trust and affection. Black and white, yellow, brown and red, from Detroit and its suburbs of every economic status, national origin and religious persuasion we join in this covenant.*

*—Adopted March 8, 1968*

**Focus: HOPE**
*Celebrating Diversity Since 1968*

**Information Technologies Center**
1400 Oakman Boulevard
Detroit, Michigan 48238-2848
**313.494.4888**

**www.focushope.edu**

# Focus: HOPE

***Celebrating diversity since 1968***

## SELECT DISTINGUISHED VISITORS

President George H.W. Bush
President William J. Clinton

Secretary of Agriculture Daniel Glickman
- Assistant Secretary Ellen Haas
- Under Secretary for Food, Nutrition, and Consumer Services Eric Bost

Secretary of Commerce Ronald Brown
Secretary of Commerce Michael Kantor
- Deputy Assistant Secretary Wilbur F. Hawkins (EDA)
- Assistant Secretary of Commerce Mary Good

Department of Defense
- Chairman Joint Chiefs of Staff General Colin Powell
- Under Secretary for Defense Acquisition and Technology Paul G. Kaminski
- Under Secretary of Defense John Deutch
- United States Army
  - Secretary of the Army Thomas E. White
  - General Benjamin S. Griffin, Commanding General of the U.S. Army Materiel Command
  - General Paul J. Kern, Commanding General of the U.S. Army Materiel Command
  - Brigadier General William M. Lenaers, Commanding General of the U.S. Army Tank-automotive and Armaments Command (TACOM)
  - Colonel (P) Peter M. Vangjel, Deputy Commanding General, U.S. Army Recruiting Command
  - LTC John Vernon, Great Lakes Recruiting Battalion
- United States Navy
  - Vice Admiral Terrance Etnyre, Commander, Naval Surface Forces

Secretary of Energy Spencer Abraham (as U.S. Senator)
Secretary of Energy Hazel O'Leary
Secretary of Housing & Urban Development Henry G. Cisneros
- Deputy Assistant Secretary Kenneth Williams (Grant Programs)

Secretary of Labor Robert Reich
- Assistant Secretary of Labor Douglas Ross

U.S. General Accounting Office
U.S. Small Business Administration
Federal Reserve Bank
National Institute for Standards & Technology
Office of Technology Assessment
National Aeronautics and Space Administration
National Science Foundation
U.S. Agency for International Development

Ambassador to Canada James Blanchard

United States Senate
- Hon. Spencer Abraham
- Hon. Carl Levin
- Hon. James Jeffords
- Hon. J. Robert Kerry
- Hon. Donald Reigle
- Hon. Debbie Stabenow
- Senate Armed Services Committee
- Senate Small Business Committee

U.S. House of Representatives
- Hon. James Barcia
- Hon. David Bonior
- Hon. William Brodhead
- Hon. Robert Carr
- Hon. Barbara Rose-Collins
- Hon. John Conyers, Jr.
- Hon. John Dingell
- Hon. Richard Gephardt
- Hon. Dennis Hertel
- Hon. Peter Hoekstra
- Hon. Marcy Kaptur
- Hon. Joseph Knollenberg (Paul Welday)
- Hon. Dale Kildee
- Hon. Carolyn Cheeks-Kilpatrick
- Hon. Sander Levin
- Hon. Thaddeus McCotter
- Hon. Nick Smith
- Hon. Lynn Nancy Rivers
- Hon. Patricia Schroeder
- Hon. Bob Traxler
- Hon. Howard Wolpe
- House Appropriations Committee
- House Armed Services Committee

Governors
- Hon. James Blanchard
- Hon. John Engler
  - Lt. Gov. Dick Posthumus
- Hon. Jennifer Granholm
  - Secy of State Terry Lynn Land
- Hon. Tom Ridge
- Hon. Don Siegelman

Other
- Rosa Parks

Foundations
- Annie E. Casey Foundation
- Charles Stewart Mott Foundation
- Ford Foundation
- Ford Motor Company Fund
- General Motors Foundation
- Hudson-Webber Foundation
- The John D. and Catherine T. MacArthur Foundation
- Kaiser Foundation
- Kellogg Foundation
- Kresge Foundation
- Skillman Foundation

News Media
- ABC News
- CBS News
- NBC News
- National Public Radio
- Business Week
- Fortune Magazine
- Christian Science Monitor
- Detroit Free Press
- McNeil/Lehrer News Hour
- New York Times
- Newsweek
- Wall Street Journal
- Washington Post

Officials from Foreign Nations
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- Armenia
- Australia
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- Canada
- Columbia
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- Croatia
- Cyprus
- Czech Republic
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- England
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- Russia
- Singapore
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- Switzerland
- Syria
- Togo
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- Uganda
- Ukraine
- Zimbabwe

# APPENDIX O

Recent Articles and Other Information of Interest

[Printer Friendly] [Text Version]

# Focus: HOPE Receives Three State Awards for Outstanding Safety and Health Records

**Contact:** Maura Campbell (517) 373-9280
**Agency:** Labor & Economic Growth

**October 3, 2005 –** Three Focus: HOPE programs received awards today from the Michigan Occupational Safety and Health Administration (MIOSHA) for outstanding safety and health records. The MIOSHA program is part of the Michigan Department of Labor & Economic Growth (DLEG).

The MIOSHA Consultation Education and Training (CET) Division recognizes the safety and health achievements of Michigan employers and employees through CET Awards, which are based on excellent safety and health performance.

MIOSHA Director Doug Kalinowski presented the Bronze Award to Tim Sullivan, Director of Manufacturing, Focus: HOPE Manufacturing; the Silver Award to Julian Pate, Director of Education, Focus: HOPE Center for Children; and the Silver Award to Brian Meriweather, Manager, Machinist Training Institute.

“I’m proud to present CET Awards today to three Focus: HOPE programs–this is an outstanding achievement,” said Kalinowski. “Your commitment to provide a safe and healthy work environment shows your dedication to your students and to your community.”

The above three Focus: HOPE programs employ 297 workers, with 240 students and 128 children. They have completed the following criteria to receive the Bronze and Silver Awards:

- Developed and implemented written safety and health policies and procedures,
- Established a safety and health committee,
- Appointed a safety and health designee, and
- Reduced their injury and illness rate by more than 50 percent in the last two years.
- The Silver Award recipients also have accumulated more than 100,000 continuous hours worked without an injury involving days away from work.

“On behalf of Focus: HOPE, I would like to thank MIOSHA for presenting us with these awards. I am especially thankful to all my Focus: HOPE colleagues who work hard every day to provide a safe environment on our campus,” said Roger Paige, Manager of Safety. “The safety and health of our colleagues is not only a top priority at Focus: HOPE–it’s a way of life.”

Focus: HOPE achieved ISO 9001:2000 quality certification for all of its education and training programs in 2003. Focus: HOPE Manufacturing earned QS 9000 certification in 1998 and TS 16949 in 2004. The

**Related Content**
- Save Money On Home and Renters Insurance
- Michigan Department of Labor & Economic Growth Awards 17 Grants ...
- Focus: HOPE to Receive Three State Awards for Workplace Safety ...
- Governor Announces Launch of Website to Promote Manufacturing
- State of Michigan to Launch New Website Promoting Manufacturing ...
- Broadband Authority Loan a National Model for Use of Federal D ...
- MIOSHA and Macomb Community College Sign Alliance to Protect W ...
- MIOSHA Tells Construction Employers "The Falls Must Stop!" < ...
- MIOSHA and Macomb Community College Form Alliance Signing ...
- Consumer's Corner Focuses on Building and Fire Safety
- Unemployment Rates Drop Seasonally in All of Michigan's Regional ...
- The Christman Company Receives State Award for Outstanding ...
- MPSC Grants Savoy Energy, L.P. Authority to Construct and ...
- MPSC Approves Settlement Agreement Rolling Under Recovery of $ ...
- MPSC Approves Gas Cost Recovery Factors for Aquila Networks - ...

organization also has ISO 14001 environmental certification. Their dedication to safety and health is linked to their quality certifications, and to their focus on continual improvement in all of their learning environments.

Focus: HOPE, a nationally recognized civil and human rights organization in Detroit, was co-founded in 1968 by Father William Cunningham (1930-1997) and Executive Director Eleanor Josaitis. Their mission is to use intelligent and practical action to fight racism, poverty and injustice.

Focus: HOPE programs include a food program for eligible mothers, children and senior citizens; education and training in information technology, manufacturing and engineering; community arts programs; community and economic development initiatives; a manufacturing operation; children's day care and education, conference facilities, and volunteer and outreach activities. Details on the career training programs in manufacturing, engineering and information technology are available on the Focus: HOPE web site www.focushope.edu.


- MPSC Grants License to Matrix Telecom, Inc. to Provide Basic L ...
- MPSC to Hold Three Public Hearings on Proposed Stray Voltage R ...
- MPSC Seeks Comments on Detroit Edison Renewable Energy Program
- MPSC Approves Upper Peninsula Telephone Company's Expanded ...
- MPSC Approves Expanded Local Calling throughout the Upper ...


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# WORKPLACE LEARNING MODE—BEST PRACTICES

## FUTURE INDUSTRY LEADERS EXPLORING, SERVING, AND ACHIEVING

CISCO NETWORKING ACADEMY PROGRAM

BEST PRACTICE

"The opportunity to intern as a tech support specialist with Comcast has given me the experience of relating to and being with customers, in a very professional way. I also get to practice the skill of really *listening* and using *attention to detail,* in order to comprehend and really understand a customer's problem in a fast and efficient manner."

*—Brian Collins*
*Student, Focus: HOPE and Comcast Call Center Intern*

***Focus: HOPE Information Technologies Center Partners with Comcast Corporation to Set Up Onsite Call Center***

The partnership that Focus: HOPE created with a local business proved to be a very successful workforce development program for underserved communities within the City of Detroit.

### Background

Focus: HOPE is a nationally recognized civil and human rights organization founded in 1968 in response to a riot that left Detroit, Michigan, sharply divided along racial lines. It was in this atmosphere that the Focus: HOPE cofounders became committed to "intelligent and practical action to overcome racism, poverty, and injustice."

Focus: HOPE's long-term objective is to provide opportunities for all people to enter the economic mainstream. This has led to the development of some highly respected education and training programs.

In 1999, Focus: HOPE created a new Information Technologies Center (ITC) to provide industry-certified training in network, desktop, and server administration. This program was developed in collaboration with industry partners such as Cisco Systems®, Microsoft, and the Computer Technology Industry Association (CTIA). To date, over 500 students have graduated from the program and are earning competitive wages in rewarding, professional careers. The ITC includes a Cisco Networking Academy® Program where students can learn networking skills leading to certification.

The ITC program is open to everyone in Detroit. Focus: HOPE serves a diverse population with an average student age of 27. Approximately 33 percent of the ITC students are female.

| **Information Technologies Center (Established 1999)** | |
|---|---|
| Enrollment (FY 2004) | 250 |
| Total Graduates of NA, NI, and Desktop Support (1999–FY 2004) | 574 |
| Average Starting Salary of an ITC Graduate | US$11.47/hour |

CISCO SYSTEMS

# BEST PRACTICE

Comcast is the largest cable company in the United States, with 68,000 employees. It serves more than 21 million cable subscribers and is principally involved in the development, management, and operation of broadband cable networks and the provisioning of programming content.

Comcast teamed up with Focus: HOPE when the company sought to support a local community organization. Focus: HOPE provided a philanthropic outlet for Comcast and its employees to become involved in endeavors such as helping with a food program for seniors, funding supplemental technical curriculum development, and donating to a student loan fund. Comcast viewed the Focus: HOPE ITC students and graduates as a potential labor pool. With a call center already located in Ann Arbor, Michigan, Comcast felt it would be valuable to position one at the Focus: HOPE facility. Discussions and planning began in 2003.

In July 2004, Comcast opened a call center staffed by ITC students. Comcast provided the equipment, phone lines, and connectivity. The center accommodates 15–20 student employees with plans for growth, and a second room is set up for training new staff. The center is open four days a week, including Saturdays, and students work a total of 19 hours per week. The call center is conveniently located on the ITC campus so students can complete four-hour shifts between classes.

The call center is geared toward students in A+ or beginning networking coursework, and is intended to provide an opportunity to show their skills and increase their options for later employment.

Focus: HOPE students earn US$11 per hour at the call center, learn about Comcast operations, gain entry-level experience, and have the opportunity to showcase their abilities and apply for a permanent position with Comcast after graduation from the ITC.

Several challenges had to be overcome. First, students needed to see the call center as a production environment where quality and time management are critical to reach the metric sets and limit callbacks. Second, enrollment in the ITC program was down, partially due to a slow economy. Finally, student workers found it challenging to fit both study time and work into their schedules.

However, in overcoming these challenges, both Comcast and Focus: HOPE gained important information that will help make the program a lasting success. The student-staffed call center provides a model that can be used to create jobs within communities across the United States. In addition, the collaboration shows that employee training in a highly technical call center must be detailed and structured to promote the success of trainees.

“This great project underscores our commitment to the communities where we live and work across the country. Our involvement with Focus: HOPE has been beneficial for everyone involved.”

*—Jerome Espy*
*Director of Communications, Comcast*
*http://www.comcast.com/*

“For the partnership to work, it's critically important that it adds value to both entities.”

*—Linda Hanks*
*ITC Manager Focus: HOPE*

Focus: HOPE
*Celebrating Diversity Since 1968*

For more information on Focus: HOPE, please visit www.focushope.edu

comcast

For more information on Comcast Corporation, please visit www.comcast.com



**For more information about the Cisco Networking Academy Program, visit http://cisco.com/edu/academy.**

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Detroit Free Press
www.freep.com



# Educated professionals buck trend

## A new wave of white-collar workers finds a niche in Michigan's job market

**BY KORTNEY STRINGER**
FREE PRESS BUSINESS WRITER

*December 29, 2005*

*Fourth of five parts*

Glenn Johnson is beating the odds.

The Highland Park resident has started a lucrative career at General Motors Corp. at a time when the embattled automaker is passing out more pink slips than job offers.

"It was and is a scary time, but I feel confident my job is secure," said Johnson, 35, a tool-and-die supervisor and engineer at GM's metal fabrication plant in Pontiac. Last December he earned a manufacturing engineering degree from Wayne State University.

Michigan's auto industry has suffered a precipitous decline -- its worst in 20 years -- prompting thousands of college-educated, twenty- and thirty-somethings to abandon the state and its biggest industry. But not everyone is fleeing.

Some of the newest generation of white-collar workers -- those with the brightest future in the auto industry -- are building automotive careers and moving to Michigan to work, proving metro Detroit is still a key hub for auto development and production that attracts talent.

More people moved out of Michigan than moved in from 1995 to 2000. But still, more than 26,000 single, college-educated people from ages 25 to 39 migrated to the area during that period.

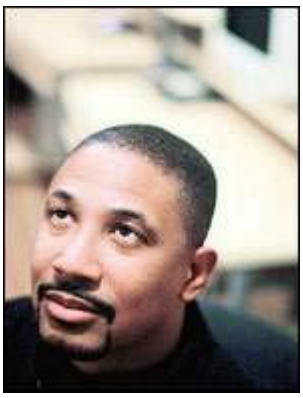
The migration is likely to continue, experts say, despite the auto industry's financial struggles and the state's poor economy.

"The auto industry of the future will be a younger and more educated workforce," said David Cole, chairman of the Center for Automotive Research in Ann Arbor. "High-paying jobs for educated workers are not going away."

### A generation of optimism

Cynthia Redwine, director of career placement at the University of Michigan's College of Engineering, said many students remain interested in the auto industry, "but they're also realistic in terms of opportunities." That goes for the students at the College for Creative Studies in Detroit, which claims to place more in the auto industry than any other U.S. school. CCS spokesman Tony Scotta said young people understand the industry is struggling, but they are willing to get more education to compete for quality jobs.

"I still think I have a career in Michigan," said Mark Reisen, a 22-year-old senior from



**Shunsuke Okubo**

**30, Van Buren Township**

- **Occupation:** Ford advanced research engineer.
- **Education:** Bachelor's of science and master's of science degrees in mechanical engineering from University of Illinois.
- **What he drives:** 2000 Ford Focus.
- **Quote:** "The auto industry will be around for the foreseeable future."

**35, Highland Park**

Cincinnati who's studying design at the college. "... It's impossible for Detroit to be detached from the future of the auto industry."

**A match made in Michigan**

Shunsuke Okubo and his wife, Carol Okubo -- both 30-year-old, white-collar workers from different parts of North America -- moved to Michigan about five years ago to work in Detroit's auto industry.

The Van Buren Township couple were recruited separately by Ford Motor Co. from the University of Illinois. Shunsuke, a Chicago native, earned a master's degree in mechanical engineering at Illinois. Carol Okubo, a Canadian, worked as an assistant professor there while finishing her master's in mathematics from the University of Waterloo in Ontario.

Now, they're advanced research engineers at Ford's Dearborn headquarters. They work together on the powertrain control system in Ford's future hybrid model vehicles.

Shunsuke Okubo, a Japanese American whose parents moved from Tokyo to Chicago in the 1970s, said the condition of Michigan's economy and auto industry "worries me a little, it's unfortunate, but I feel secure and safe here."

Carol Okubo said they have security because they're working in a part of the industry -- alternative fuel vehicles -- they believe is the wave of the future.

"We're working on things that will improve the environment," she said.

The Okubos have a 19-month-old daughter, and Carol Okubo is six months' pregnant with the couple's second child. "I definitely see us staying here in Michigan," she said.

The Okubos think Michigan's auto industry will have a place for future generations of white-collar workers.

"There's going to be some form of an auto industry here for the foreseeable future," Shunsuke Okubo said. "The challenge for the next 20 or 30 years is to provide technology" to sustain the industry.

**The road to autos**

Although settling in Michigan's auto industry wasn't his initial plan, Johnson, the GM engineer, now is seriously considering it.

After graduating from Highland Park High School and briefly attending Morehouse College in Atlanta, Johnson returned to Michigan and worked two jobs.

At the same time, in 1997, Johnson enrolled in Focus: HOPE's Machinist Training Institute, in which students train in precision machining and metalwork for 31 weeks.

Johnson continued his education, earning a bachelor's degree at Wayne State through Focus: HOPE's Center for Advanced Technologies. He worked on auto contracts as part of a program venture that gave students practical training by having them make parts for companies such as Ford and General Motors.

Focus: HOPE, a Detroit-based nonprofit, said this month it would discontinue the 12-year-old parts-making program and shift into research and development work for the U.S. Department of Defense and others. Students can still get four-year degrees through the

- **Occupation:** GM tool-and-die supervisor/engineer.

- **Education:** BS in manufacturing engineering from Wayne State University.

- **What he drives:** 1992 Chevy Lumina**.**

- **Quote:** "There is a big change happening in the industry. ... It's a good time to come ... and set up shop."

**The series**

**Monday:** Detroit automakers are scaling back and closing plants, prompting many young workers to switch fields or leave the state.

**Tuesday:** Blue-collar workers feel the pinch as high-paying factory jobs dry up.

**Wednesday:** Many young professionals leave metro Detroit for cities with better job markets.

**Today:** Despite the decline, many bright young workers move to Michigan's auto industry for white-collar jobs.

**Friday:** Detroit's auto industry is still alive but the future will be leaner, smarter and more global.

- **To read Parts 1 through 3,** go to **www.freep.com.**

Center for Advanced Technologies, though.

"During the course of working at Focus: HOPE, I got a feel for the auto industry," Johnson said. "It's an auto environment, so you're dealing directly with the automakers. And I went to a lot of functions with the higher-ups in the auto industry."

After college, Johnson had several out-of-state job offers, but was impressed with the GM job because "it had built-in raises and training."

Still, he worried about the future of Michigan's auto industry because of the trouble GM is having. And his decision was complicated because he has two uncles who have a total of 60 years working in the auto industry.

"In a way, they tried to discourage me," Johnson said.

Now, Johnson feels sure he's part of GM's plans. "They're investing in me to take over, pick up the reins and drive the company into the future," he said.

*Contact **KORTNEY STRINGER** at 313-223-4479 or stringer@freepress.com.*

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# CUTTING TOOL ENGINEERING

AUGUST 2005 VOLUME 57 / NUMBER 8

# WHAT'S IN THE BOX?


Turn to page 34 to find out

cover story

➤ BY BILL KENNEDY, CONTRIBUTING EDITOR

# Machining INSIDE the BOX

**Multitasking machine tool technology, combined with careful process planning, provides truly just-in-time support for U.S. troops.**

Workers in high-stress situations—like soldiers, surgeons and firefighters—often describe their efforts in low-key terms. Kevin Green, a production support engineer in the Detroit civic and manufacturing organization Focus: HOPE (see sidebar, page 40), has spent a lot of time overseas in what he dryly called "a nontraditional manufacturing environment … working inside of a box."

Green is part of a team that developed and operates the U.S. Army's Mobile Parts Hospital. The key component of an MPH is a 5-axis multitasking lathe housed in an 8'×8'×20' container, which can be flown or trucked to within miles of the battlefront. Backed by a globe-spanning network of advanced manufacturing and information resources, MPH units are used to re-engineer, program, machine and deliver emergency replacement parts for military vehicles and equipment in Kuwait, Iraq and Afghanistan. A carefully crafted process plan enables the MPH units to fully exploit the speed and flexibility of multitasking machine tools in support of troops.

The MPH concept was born in the late 1990s, when the Army's Tank-automotive and Armaments Command sought a way to add mobile engineering and manufacturing capabilities to the military supply chain. TACOM's National Automotive Center, Warren, Mich., assembled a team of specialized suppliers, including prime contractor Alion Science and Technology Corp., McLean, Va.; professional services provider Cleveland Advanced Manufacturing Program Inc.; and Focus: HOPE Manufacturing, which handled the development of machining processes and equipment.

*Spc. Brian Trapp, courtesy of Desert Voice magazine*

**The U.S. Army's Mobile Parts Hospital is on-site in the Mideast, supporting the country's war efforts by repairing and making needed parts.**

The MPH has three basic components. The containerized machine shop, deployed overseas, is called the rapid manufacturing system. The RMS is supported by an agile manufacturing cell that consists of an array of machining equipment based at Focus: HOPE, backed up by an extensive Detroit-area network of specialized suppliers of services such as painting, plating,

fabrication and forging. Also at Focus: HOPE is a communications and control center, which electronically links and coordinates the elements of the MPH, providing advanced engineering support as well as a database of part manufacturing information.

### Capable but Compact

From the start, the idea was to pack as much machining capability as possible into a portable package. Bruce O'Neill, Focus: HOPE project engineer, said the variety of parts that need to be manufactured in the field require a machine that can turn and mill. Initial development work for the RMS was carried out on a machining center with added turning capability. In choosing the machine that would be placed in the field, the chief criteria were the size of the machine's work envelope and its weight. "We wanted the maximum capacity we could get into the 8'×8'×20' envelope," O'Neill said. That favored a lathe-based unit. The machine now deployed is a Mazak Integrex 100SY III multitasking lathe, featuring twin spindles and a 20-tool magazine, that can machine parts up to 18" in diameter × 24" long. Together, the container and machine weigh about 27,000 lbs.

B. Kennedy

**Mobile Parts Hospital project engineer Bruce O'Neill at Focus: HOPE.**

The RMS container was custom-built for this application. A unique feature is a 5'-deep push-out section, like those found on motor homes, which was added on one of the container's long sides to accommodate a machinist. The container's heavy-duty climate-control system overcomes the heat generated by the machine and the desert sun, which can easily lift temperatures inside the box to over 150° F. O'Neill pointed out that, aside from the machinist's survival, climate control is necessary for part accuracy. "If a designer says, 'I need this part to be 1" long,' you can't say, 'I'm sorry, it's 102°, it's a little bit longer,' " he said. Power for the RMS is supplied on site by a 140kV generator.

### Working with a Plan

Manufacturing process planning for the RMS is blended with the flexibility needed to make a variety of parts, with standardization intended to simplify logistics and data sharing. A good example was the creation of a standard tooling package. When making test parts, the development team recorded all the tools employed. Taking that matrix of tools and parts, O'Neill said, "we combined it all as scientifically as you can when you've got a bunch of operators standing around who like one tool or another. We had to be pretty hard-nosed about it."

"The standard package means that when we want to share data, we already know how the machine is configured," Green said. "In the magazine, tool No. 1

## Providing hope

Focus: HOPE successfully makes the nontraditional link between community activism, human rights and manufacturing. The nonprofit civil and human rights organization was founded in 1968 by Detroit community leaders William Cunningham and Eleanor M. Josaitis as a way to heal the wounds of Detroit's 1967 riots and, at the same time, deal with some of the issues that spawned them.

After sponsoring studies that revealed discrimination in food pricing, the organization designed and implemented a supplemental food program for children and pregnant and postpartum women. Later expanded to include senior citizens, the program is one of the largest Commodity Supplemental Food Programs in the country, with food provided through the U.S. Department of Agriculture to more than 43,000 people in the Detroit metropolitan area.

Focus: HOPE also works to eliminate the need for such assistance programs by creating educational opportunities designed to help people learn skills and enter the economic mainstream.

In 1981, the organization opened its Machinist Training Institute, through which about 3,000 students have gained precision metalworking skills. In 1989, Focus: HOPE began its Fast Track Program, and in 1997 its First Step Program, designed to help students improve reading and math skills.

B. Kennedy

**In a RMS currently being used for training at Focus: HOPE's Center for Advanced Technologies in Detroit, engineering candidate Shakemma Taylor works with the CNC of a Mazak multitasking lathe.**

Founded in 1989, The Center for Advanced Technologies represents a coalition with universities and manufacturers to enable students to earn associate and bachelor's degrees through local universities. The engineer candidates gain real-world experience in Focus: HOPE Manufacturing, which is a Tier 1 subcontractor to North American automotive OEMs.

*—B. Kennedy*

is always tool No.1, because all the machines are completely the same." He pointed out that "none of the work we do is high-volume production, so speeds and feeds and performance are not our biggest focus. We aren't interested in specialized tools, and the tools are all off the shelf. We want a tool we can use in a variety of applications—something that's easy to use and easy to set up."

The machine is first a turning center, so the "go-to" tool, as it is in most turning shops, is the 80°-diamond turning insert. "It's beefy, all the tool manufacturers sell it and the inserts are interchangeable," Green said. Milling is more specialized, so no single tool predominates.

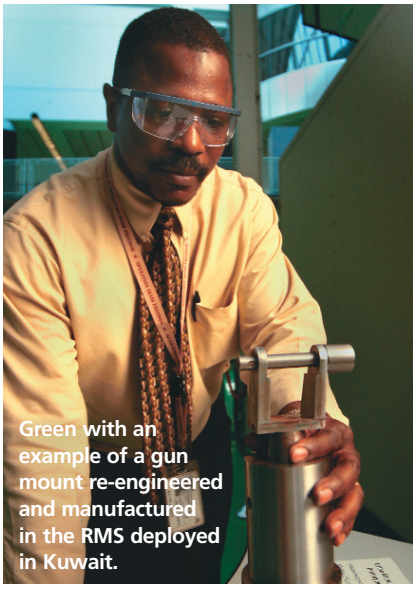
For the most part, workholding is standardized as well. "Because the machine is basically a lathe, it has a 3-jaw chuck, and that is our fixture," O'Neill said. "Ninety-nine percent of the time, it's chuck the bar in the machine and go." He admitted that material utilization suffers somewhat with that approach: "We machine off the end of the bar stock to make the part. We know we have a sacrificial piece in the jaws. It's not an economical process by any means." That issue is easily outweighed by the need to produce a range of parts on an ASAP basis.

For some particular milling applications, O'Neill said, face plates are bolted to the machine's chuck to hold the workpiece. His group is also exploring other alternatives to increase workholding flexibility on the machine, such as the Invert-A-Bolt fastener system from Lines in Motion, Fort Worth, Texas. Essentially a back-bolting system that provides front access to the fastener, the system is already in use on the machining centers in the agile manufacturing cell in Detroit.

## Mobile Parts Making

Parts are made from ½"- to 6"-dia. bar stock: 304 stainless steel, 6061 aluminum, and 1018 and preheat-treated (28 to 32 HRC) 4140 and 4150 steels. The alloys inventoried reflect demand for certain parts. In quick-deployment situations, the materials travel in the RMS. For situations where the RMS is expected to be in one place for an extended period of time, the workpiece material is shipped in a separate container that is placed adjacent to the RMS.

Green said parts typically fall into one of three categories: vehicle components, "which the MPH was created to address"; weapons-mounting systems, "our biggest seller, so to speak"; and special tools. "In Kuwait, for example, we are attached to forward repair activities, which may need a special type of planetary wrench to turn a socket on a Humvee." Green estimated that over half of the inventory is preheat-treated 4140, a quarter is the other steel alloys, and the rest is aluminum and stainless steel.



Green with an example of a gun mount re-engineered and manufactured in the RMS deployed in Kuwait.

B. Kennedy

The part-request process is organized, but not restrictive. "We are there to serve the soldiers," Green said. "Our men and women do an excellent job with what they have, and the mission of the MPH is to give them more. We don't take them through a lot of paperwork or bureaucracy." Guidelines exist regarding who can request a part, and under what circumstances. "MPH is not meant to be substituted for the military supply chain, but to augment it," Green said. However, it's not uncommon for a soldier to walk into the RMS with a broken part and say, "I need one of these," he added.

When a part is requested, the RMS technician searches the database back at the communications and control center for existing manufacturing information. If none is available, the part is reverse-engineered with data that is taken (physically measured) from the part. Such reverse-engineering takes place on about 30 percent of the parts, Green said. After a part is produced, the manufacturing data used to make it is saved in the Web-based database so all RMS technicians have access to it.

Short runs and emergency parts are generally handled at the RMS; repeat and longer runs, and parts too large for the RMS, are made back at the agile manufacturing cell. For example, six Cincinnati horizontal CNC mills and a Hurco vertical mill at Focus: HOPE were recently put to work expediting the manufacture of a 400-piece run of 1018 steel gun-mount-travel lock clamps for shipment to the war zone.

Re-engineering often involves improvement as well as simple reproduction. In 2003, a vehicle gun mount was re-engineered and manufactured to increase the weapon's range of vertical tilt, enabling soldiers to combat enemy attacks from rooftops. The Army honored the effort as one of the "Ten Greatest Inventions of 2003."

"Not only did we manufacture the part," Green said, "but the reverse-engineering gave the part functionality that is superior to the original."

## A Different Breed

RMS technicians are civilians who average more than 10 years of job shop service and, as O'Neill said, are "a different breed of cat. You talk about a machinist who has to have absolute, 100 percent self-confidence that he can make whatever somebody hands him, in that machine tool."

According to Green, RMS technicians have to be complete CNC machinists, able to program, set up, operate and maintain the machine. O'Neill said that finding such machinists is a challenge. "There are a lot of operators and not many machinists out there."

When deployed, the RMS is staffed by a two-person team of a technician/machinist and an administrative engineer. Nominally, they work 12-hour days, 6 or 7 days a week. However,

Green—who has spent two 3-month stints in the RMS in Kuwait—said, "in support of our soldiers, we will work through the night."

He pointed out that in the field, "you don't have the support you would" in a standard environment. Where a normal manufacturing plant might have project managers, process and tool engineers, programmers, setup people and operators, "in the RMS, you're it," Green said.

### Into the Future

The MPH is actually an ongoing R&D effort, and Focus: HOPE staff is continually introducing improvements prompted by field experience. The RMS on the floor in Detroit features an electrically operated push-out section and hydraulically actuated jacks to raise and level the unit on site. The addition of on-site heat-treating capabilities is also being investigated.

Nearing deployment is a part-scanning system that will allow RMS technicians to create CAD and CAM information directly from point-cloud data generated by a laser scan of a part that needs to be replicated.

Another new development will involve a container that houses what is called a "laser-engineered net-shaping process." The LENS process features directed material deposition, where CAD data is used to direct P/M through a 5-axis head into the path of a laser beam, where it is melted and then solidified into a near-net-shape part. Later, the part is finished in the RMS. When fully operational, use of the LENS process can minimize the need to inventory any workpiece materials except P/M, improving both the logistic efficiency and mobility of future MPH deployments.

Green said that although the work is "nontraditional," it is certainly rewarding. Even seemingly prosaic parts are important. Green recounted the case where nine pulleys for a maintenance unit's lighting system were manufactured, enabling the unit to achieve 24-hour operation. "Our deployment fills needs," Green said. "The residual effect of our work is actually helping to save American lives." △

*For more information about the MPH, go to www.mobilepartshospital.com. For more information about Focus: HOPE, go to www.focushope.edu or call (313) 494-5500.*

## MMA Publications

**Enterprise Magazine : September/October 2005**

### Feature Articles

## Case Study: Focus: HOPE — Diversification and Strategic Alliances Lead to Success

By **Kellie Garrett**

Manufacturing is evolving. It's been the talk of the industry for quite a while, but how does a manufacturer thrive in the midst of all of this change?

For one company, Detroit-based Focus: HOPE, the key is diversification and strategic alliances.

### Diversification

Focus: HOPE itself is a highly diversified organization that is primarily a non-profit with a for-profit subsidiary. The company was founded to address social reform and community improvement. From its civil and human rights founding, many programs and divisions have been created including community outreach, education and training, manufacturing and research and development.

Each area within Focus: HOPE interconnects with and builds off the others. Since each branch circles back to the mission of improving the lives of the underprivileged in the Detroit area, they are all highly aligned with receiving private and public grant monies.

From a manufacturer's standpoint it may seem odd to have such a broad focus. But for Focus: HOPE this internal evolution is the key to their success. It is what catapulted them into manufacturing and research and development contracts with the U.S. government and leading automotive manufacturers.

Focus: HOPE developed a "mobile parts hospital" (MPH) for the creation of spare parts and the repair of other parts at the military point of need.

Diversification is more than just an organizational structure for Focus: HOPE; it is an underlying strategy for future success.

"Michigan manufacturing is really powerful," said Tim Duperron, COO Emeritus for Focus: HOPE. "You'll have a start-up that will hit the right niche almost by accident and they'll grow along with their customer. But if they don't have vision around customer diversification, they won't survive."

For Focus: HOPE, market diversification is not about reinventing the wheel; it's about going deeper into an organization as well as expanding to similar industries that have money to spend.

The organization has built strong relationships with Michigan automakers, which have been the bulk of their customer base, and is also aggressively looking at non-domestic producers, and others, as additional markets.

Moreover, foreign manufacturers have a strong incentive to work with Focus: HOPE because of its strong relationship with underrepresented individuals, who are both potential employees and potential purchasers of their products.

"Diversification is about creative problem solving," said Duperron. "You have to really stay in touch with your customer base to see what kind of problems they're facing and then be able to come up with solutions."

### Strategic alliances

As the word implies, evolution takes time. Focus: HOPE has been evolving since the late 1960s, but during that time the company has learned how to grow through strategic alliances.

An early area of close collaboration with the federal government involved the establishment of the Commodity Supplemental Food Program (a federally-funded food outreach program that now spans 32 states). This type of collaboration with the government was later used by Focus: HOPE to help seed fund its state-of-the-art training facility, manufacturing operation and, more recently, research and development projects.

"When we wanted to start the machinist training program in 1981 we didn't have the capacity to buy machines," said

Duperron. "Because the program was to help the underprivileged and we had a track record with government through the Commodity Supplemental Food Program, we were able to get army surplus to use."

This was just the start of the company's successful use of strategic partnerships. Focus: HOPE currently has relationships with the U.S. Department of Defense (DOD), local universities, the Big 3 auto manufacturers, philanthropic foundations and leading research firms, to name but a few.

These partnerships are vital to Focus: HOPE as they provide the opportunity and means to support the organization's efforts. These alliances bring with them financial support, market opportunities and credibility.

With funding from the DOD, Focus: HOPE has worked with the U.S. Army Tank-automotive and Armaments Command (TACOM) and its National Automotive Center, headquartered in Warren, to develop a "mobile parts hospital" (MPH) for the creation of spare parts and the repair of other parts at the military point of need.

In June 2004, the MPH Team received a 2003 "Army's Top 10 Greatest Inventions Award" for inventing a new Squad Automatic Weapon Pintle Mount Assembly for the Humvee.

"It is this kind of innovation that has made this program so successful," said Tracy Smith Hall, manager and senior policy advisor, government affairs and public policy, for Focus: HOPE. "We have an incredible synergy with the DOD."

Because of the huge success of this initial deployment, the U.S. Army recently requested the production of three more units, two of which are currently being deployed in Iraq and Afghanistan. The third was recently delivered to Focus: HOPE to be used in training military personnel to operate the units. In addition, plans are in the works to modify lessons learned from this research and development in a Navy context.

**What does this mean for Michigan manufacturers?**

Manufacturing is evolving. In order to be successful it is imperative to step outside of the day-to-day operations and think into the future at least five years. Think of how your markets are also changing and initiate solutions to your customers' challenges, say Focus: HOPE executives.

"We obtained our DOD contracts by being proactive," Hall said. "Manufacturers need to think 'value-added' to increase their competitive edge. That means always looking toward the next thing in technology and future commercial applications."

Contracts similar to the ones Focus: HOPE has with the DOD, or other governmental contracts can be obtained by partnering with organizations that provide a community benefit or basic research that can be applied on a broad level.

"Now R&D is the biggest thing in Michigan," Duperron said. "We don't see any stop to the federal government being interested in funding basic and applied research."

**Kellie Garrett** is is media and member relations coordinator for the Michigan Manufacturers Association. She may be reached at 800-253-9039 ext. 542 or 517-487-8542.

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