IMPLEMENTATION ACTIVITIES

As a companion to the Strategic Plan for the Padnos College of Engineering & Computing, this document summarizes the recent and ongoing strategies, as well as new initiatives that are of highest priority in service to and/or in cooperation with each of our constituent groups.

Constituent Group: Our Students

Recent and Ongoing Initiatives

1. Professional development opportunities
   a. Integrated co-op (Engineering) and internship (CSIS) programs
   b. Support and encourage professional society activity
   c. Support and encourage student scholarship/research
   d. Support encourage international opportunities
   e. Opportunities for community service in line with professional Codes of Ethics
   f. Ethics in Computing Student Organization, Discussion Groups, and Seminar
2. Recruit and retain outstanding faculty as well as establish and ensure sufficient faculty to
   a. Staff program offerings to facilitate optimal time to graduation
   b. Promote high quality and innovative teaching
   c. Provide for professional activity
   d. Provide for expanded sabbatical opportunities
   e. Provide for targeted unit, university, and community service opportunities
3. ABET Accreditation for engineering programs
4. ABET Accreditation for CS and IS programs
5. Facility expansion to accommodate program growth and support classroom, laboratory, and non-structured learning; Kennedy Hall, CIS Hardware/Software Lab, CIS Office changes from MAK expansion, Mobile Application Services Lab
6. Expansion of scholarship opportunities (new or expanded since 2006)
   a. Maino
   b. Wisner
   c. Price-Heneveld
   d. Whitney Young
   e. Parmelee
   f. Part Time Graduate Student Scholarship
7. Expansion of Graduate Assistantships
   a. Base budget funded positions
   b. Externally funded positions
8. Development of PCEC Student Services Center
   a. Advising Efforts
   b. Outreach Efforts
   c. Addition of AP and COT positions
   d. Office space on both campuses
9. New program introductions
   a. Information Systems Security Minor
   b. Final Plan for Bio-medical engineering minor (approval expected April 2010)
10. Refinement of assessment data gathering vehicles (web portal, etc.)

New / Expanding Initiatives (High Priority)

1. Provide enhanced resources to support consistent educational excellence
2. Facilitate efficient and productive assessment processes
3. Expand “out of class” facilities to support CS and IS programs
4. Enhance flexibility in faculty work assignments through the individualized faculty workload approach
5. Expand funding for college-wide, School of Engineering and School of Computing & Information Systems (SOCIS) scholarships
6. Expand educational program opportunities.
7. Direct admission programs
8. Honors freshman program in engineering
9. Electronic and tele-advising program for prospective students
10. Expand Graduate Assistantships
11. Development of PCEC Inclusion & Equity Plan
12. Cyber Security & Information Assurance Project (in development)

**Constituent Group: The Grand Valley State University Community**

**Recent and Ongoing Initiatives**

1. Fully meeting college appointments to governance committees
2. Offering general education courses and providing leadership to the Creativity Theme
3. Joint development and offering of entrepreneurship curricula
4. Contribution to the university-wide sustainability program
5. Support and leverage recruiting activities with the admissions office
6. Outreach and pipeline building programs such as
   a. Scholarship programs and funding
   b. STEPS – Summer Engineering Camp (7th grade girls)
   c. AIME
   d. Mathcounts
   e. FIRST Robotics
   f. Science Olympiad
   g. Get with the Program - Summer Robotics & Computing Camp (8th grade girls)
   h. GRAPCEP Stem Consortium
   i. NSF Grant – Nano-tech w/ HS Internship component
   j. Middle & High School Visitation Program
   k. A World in Motion
   l. Electrathon
   m. Pathways for community college transfer students to complete engineering and computing degrees
   n. Engineering Robotics Camp (under development)
   o. Energy Camp at MAREC (concept under development)
   p. Middle School Camp (concept under development)
7. Leverage the engineering and computing curricula to increase visibility
8. Refinement of assessment data gathering vehicles (web portal, etc.)

**New / Expanding Initiatives (High Priority)**

1. Expand existing service and general education course offerings
2. Introduce additional general education theme courses
   a. Urban Sustainability
3. Expand college specific publications
Constituent Group: The Faculty and Staff of the Padnos College of Engineering & Computing

Recent and Ongoing Initiatives

1. Professional Development Committee
2. College level mentoring and development program for new faculty
3. Facility expansion to accommodate faculty collaboration and professional activity
4. Recruit and retain outstanding and diverse faculty and ensure sufficient faculty to
   a. Staff program offerings to facilitate optimal time to graduation
   b. Promote high quality and innovative teaching
   c. Provide for professional activity
   d. Offer sabbatical opportunities
   e. Provide for targeted unit, university and community service
5. Develop flexible appointment / contract models to attract and retain excellent faculty and staff
6. Development of PCEC Inclusion & Equity Plan
7. Expand Graduate Assistantships
8. Provide enhanced resources to support consistent educational excellence and faculty professional activities
   a. Reduction of teaching loads to 18 credit hours per year
   b. Hiring of faculty to reduce “off” semester teaching requirements
   c. Expanded base funded graduate assistant positions
   d. Expanded externally funded graduate assistant positions
   e. Continuing funding for internal co-op positions
   f. Continued financial support to minimize faculty contributions to scholarly travel cost
9. Enhance flexibility in faculty work assignments through implementation of the emerging individualized faculty workload approach

New / Expanding Initiatives (High Priority)

1. Facilitate efficient and productive assessment processes
2. Refinement of graduate faculty definitions, expectations, and workload
3. Refinement of assessment data gathering vehicles (web portal, etc.)
4. Implementation of Digital Measures – Activity Insight

Constituent Group: The Engineering and Computing Professions

Recent and Ongoing Initiatives

1. Positions of leadership in professional societies, accreditation boards, grant review committees, community boards, etc. by faculty, staff and students
2. Recognition of and support for faculty consulting and research activities
3. University, college, and school support for publication and presentation expenses
4. Office facilities for student chapters of professional societies
5. Community service and service learning activities  
   a. Green House on Watson  
   b. Other Way Ministries Projects  
   c. IS Capstone Projects for NPOs  
   d. EGR 468 Projects  
   e. EGR 301 Projects  
   f. Esteli Innovation Projects  
6. Outreach and pipeline building programs such as  
   a. Scholarship programs and funding  
   b. STEPS – Summer Engineering Camp (7th grade girls)  
   c. AIME  
   d. Mathcounts  
   e. FIRST Robotics  
   f. Science Olympiad  
   g. Get With the Program - Summer Robotics & Computing Camp (8th grade girls)  
   h. GRAPCEPStem Consortium  
   i. NSF Grant – Nano-tech w/ HS Internship component  
   j. Middle & High School Visitation Program  
   k. A World in Motion  
   l. Electrathon  
   m. Pathways for community college transfer students to complete engineering and computing degrees  
   n. Engineering Robotics Camp (under development)  
   o. Energy Camp at MAREC (concept under development)  
   p. Middle School Camp (concept under development)  
7. Graduate and continuing education programs  
8. Expand facilities for faculty professional activities  
9. Development of PCEC Inclusion & Equity Plan  
10. Expand Graduate Assistantships  
11. Enhance the activities of student chapters of professional societies within the college and provide improved facilities  
   a. Student Societies Office in KEN  
   b. Financial Support for student organizations  

**New / Expanding Initiatives (High Priority)**  

1. Expand financial support for publication and presentation of our work and leadership participation by faculty and staff  
2. Enhance flexibility in faculty work assignments through individualized faculty workload approach  
3. Cyber Security & Information Assurance Project (in development)  

**Constituent Group: Our Employer Base**  

Recent and Ongoing Initiatives  

1. Advisory Board Activities for program planning, feedback and assessment  
2. Utilize co-op assessment instruments for program feedback and assessment  
3. Close partnership with industry in co-op and internship programs
4. Industry-based undergraduate and graduate course and capstone projects
   a. CS 690/692
   b. EGR 301
   c. EGR 326
   d. EGR 485/486
   e. EGR 692/693
   f. Additional courses not yet listed
5. DOER Center Activities
6. Faculty consulting for industry
7. Engage industry partners in outreach and pipeline building programs such as
   a. Addition of Outreach Staff Position
   b. Scholarship programs and funding
   c. STEPS – Summer Engineering Camp (7th grade girls)
   d. AIME
   e. Mathcounts
   f. FIRST Robotics
   g. Science Olympiad
   h. Get With the Program - Summer Robotics & Computing Camp (8th grade girls)
   i. GRAPCEPStem Consortium
   j. NSF Grant – Nano-tech w/ HS Internship component
   k. Middle & High School Visitation Program
   l. A World in Motion
   m. Electrathon
   n. Pathways for community college transfer students to complete engineering and computing degrees
   o. Engineering Robotics Camp (under development)
   p. Energy Camp at MAREC (concept under development)
   q. Middle School Camp (concept under development)
8. ABET accreditation of engineering programs
9. ABET accreditation of CS & IS programs
10. Continuing education programs
11. Development of PCEC Inclusion & Equity Plan

New / Expanding Initiatives (High Priority)
1. Funding assistance for facilities expansion
2. Programmatic accreditation on all engineering programs
3. Refine co-op and internship programs utilizing best practices
4. Enhance international activities with multinational companies
5. Enhance flexibility in faculty work assignments
6. Refinement of assessment data gathering vehicles (web portal, etc.)
7. Cyber Security & Information Assurance Project (in development)

Constituent Group: The General Public

Recent and Ongoing Initiatives
1. Not for profit agency based projects in Information Systems Capstone (CS 463)
2. EGR 301 Projects
3. Sibley Elementary Partnership
4. Westside Service Projects
a. LEED Certified house  
b. Home insulation and roofing project  
c. Coit Elementary project  
d. Other Way Ministries Food Pantry project  
5. Love INC Activities  
6. Outreach and pipeline building programs  
   a. Addition of Outreach Staff Position  
   b. Scholarship programs and funding  
   c. STEPS – Summer Engineering Camp ($7^{th}$ grade girls)  
   d. AIME  
   e. Mathcounts  
   f. FIRST Robotics  
   g. Science Olympiad  
   h. Get With the Program - Summer Robotics & Computing Camp ($8^{th}$ grade girls)  
   i. GRAPCEPStem Consortium  
   j. NSF Grant – Nano-tech w/ HS Internship component  
   k. Middle & High School Visitation Program  
   l. A World in Motion  
   m. Electrathon  
   n. Pathways for community college transfer students to complete engineering and computing degrees  
   o. Engineering Robotics Camp (under development)  
   p. Energy Camp at MAREC (concept under development)  
   q. Middle School Camp (concept under development)  
7. Development of PCEC Inclusion & Equity Plan  
8. Lakota – Pine Ridge Reservation IT Project  
9. Esteli Innovation Project  
10. Leadership positions in community organizations  

New / Expanding Initiatives (High Priority)  

1. Provide enhanced resources to support community service and outreach activities  
   a. West Side Service Projects Endowment  
2. Enhance flexibility in faculty work assignments through individualized faculty workload approach  
3. Participate in potential university-wide partnership with Westside community  
4. Participate in university-wide sustainability program  

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