

## 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 Strategies

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
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. Facility expansion to accommodate program growth and support classroom, laboratory, and non-structured learning

#### New Initiatives (High Priority)

1. Provide enhanced resources to support consistent educational excellence
2. Pursue ABET accreditation for CS and IS programs and programmatic accreditation on all engineering programs
3. Facilitate efficient and productive assessment processes
4. Expand “out of class” facilities to support CS and IS programs
5. Enhance flexibility in faculty work assignments through implementation of the emerging individualized faculty workload approach
6. Expand funding for college-wide and School of Computing & Information Systems (SOCIS) scholarships
7. Expand educational programs opportunities.

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

#### Recent and Ongoing Strategies

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 elements of the 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

- c. AIME
  - d. Mathcounts
  - e. FIRST Robotics
  - f. Science Olympiad
  - g. Summer Robotics & Computing Camp
7. Leverage the engineering and computing curricula to increase visibility

New Initiatives (High Priority)

1. Expand existing service and general education course offerings
2. Introduce additional general education theme courses
3. Expand college specific publications
4. Facilitate efficient and productive assessment processes
5. Enhance flexibility in faculty work assignments

***Constituent Group: The Faculty and Staff of the Padnos College of Engineering & Computing***

Recent and Ongoing Strategies

1. College level mentoring and development program for new faculty
2. Facility expansion to accommodate faculty collaboration and professional activity
3. 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
3. Direct admission programs
4. Honors freshman program in engineering
5. Electronic and tele-advising program for prospective students

New Initiatives (High Priority)

1. Provide enhanced resources to support consistent educational excellence and faculty professional activities
2. Enhance flexibility in faculty work assignments through implementation of the emerging individualized faculty workload approach
3. Develop flexible appointment / contract models to attract and retain excellent faculty and staff
4. Facilitate efficient and productive assessment processes

***Constituent Group: The Engineering and Computing Professions***

Recent and Ongoing Strategies

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
6. Outreach and pipeline building programs such as
  - a. Scholarship programs and funding
  - b. STEPS
  - c. AIME
  - d. Mathcounts
  - e. FIRST Robotics
  - f. Science Olympiad
  - g. Summer Robotics & Computing Camp
7. Graduate and continuing education programs
8. Expand facilities for faculty professional activities

#### New Initiatives (High Priority)

1. Expand financial support for publication and presentation of our work
2. Expand support for full-time graduate students
3. Enhance the activities of student chapters of professional societies within the college and provide improved facilities
4. Enhance flexibility in faculty work assignments through implementation of the emerging individualized faculty workload approach

#### ***Constituent Group: Our Employer Base***

#### Recent and Ongoing Strategies

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
5. Faculty consulting for industry
6. Engage industry partners in outreach and pipeline building programs such as
  - a. Scholarship programs and funding
  - b. STEPS – Science, Technology and Engineering Preview Summer
  - c. AIME – Articulation and Integration of Manufacturing Education
  - d. Mathcounts
  - e. FIRST Robotics
  - f. Science Olympiad
  - g. Summer Robotics & Computing Camp
7. ABET accreditation of engineering programs
8. Continuing education programs

#### New Initiatives (High Priority)

1. Funding assistance for facilities expansion
2. Expand funding assistance for college-wide or SOCIS scholarships
3. Pursue ABET accreditation for CS and IS programs and programmatic accreditation on all engineering programs
4. Refine co-op and internship programs utilizing best practices
5. Enhance international activities with multinational companies
6. Enhance flexibility in faculty work assignments

## ***Constituent Group: The General Public***

### Recent and Ongoing Strategies

1. Not for profit agency based projects in Information Systems Capstone (CS 463)
2. Sibley Elementary Partnership
3. Westside Service Projects
  - a. LEED Certified house
  - b. Home insulation and roofing project
  - c. Coit Elementary project
  - d. Other Way Ministries Food Pantry project
4. Bikes for Kids Program
5. Mel Trotter Ministries Projects
  - a. Play room
  - b. Sandbox
6. Outreach and pipeline building programs
  - a. Scholarship programs and funding
  - b. STEPS
  - c. AIME
  - d. Mathcounts
  - e. FIRST Robotics
  - f. Science Olympiad
  - g. Summer Robotics & Computing Camp

### New Initiatives (High Priority)

1. Provide enhanced resources to support community service and outreach activities
2. Enhance flexibility in faculty work assignments through implementation of the emerging 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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