

SEYMOUR & ESTHER PADNOS COLLEGE OF ENGINEERING & COMPUTING STRATEGIC PLAN

Introduction

The Seymour and Esther Padnos College of Engineering and Computing was created through the reorganization of the Academic Affairs Division of Grand Valley State University in 2004. The units within the Padnos College are the School of Engineering, the School of Computing and Information Systems and the Student Services Center.

The college offers undergraduate programs in Computer Engineering, Electrical Engineering, Interdisciplinary Engineering, Mechanical Engineering, Product Design and Manufacturing Engineering, Computer Science, and Information Systems. Masters degree programs are offered in Medical and Bioinformatics, Computer Information Systems, Electrical and Computer Engineering, Product Design and Manufacturing Engineering, Manufacturing Operations, and Mechanical Engineering.

The college also provides courses in support of non-engineering and computing students through minor programs as well as general education and service course offerings.

Mission Statement

Our mission is to prepare undergraduate and graduate students in engineering and computing to become accomplished professionals; to contribute to our professions through active scholarship in all of its forms; and to support the University and society with expertise, leadership, and service.

Our goals in achieving our mission are to:

- prepare students to compete in today's global economy by emphasizing experiential learning in a contemporary technical environment
- prepare students for the future by emphasizing fundamental principles
- emphasize a strong technical background enhanced by effective communication skills
- provide working professionals with the opportunity for continuous professional development
- imbue students with a strong sense of "the public good" and their own professional responsibility to the public good
- strive to be an example and an inspiration to develop competence, courage, and compassion with unquestioned integrity

Constituencies

The Padnos College serves and supports six primary constituencies. The goals, strategic objectives, and strategies presented in this plan are organized around our activities with and for each of these constituent bodies. The constituents of the Padnos College of Engineering & Computing are (no order implied):

- Our Students
- The Grand Valley State University Community
- The Faculty and Staff of the Padnos College of Engineering & Computing
- The Engineering and Computing Professions
- Our Employer Base
- The General Public

Constituent Group: Our Students

Objectives

- Provide excellent and respected academic programs that:
 - a. are challenging and technically rigorous
 - b. reflect current trends in the field of study
 - c. reflect the global environment
 - d. are firmly grounded in theoretical fundamentals and hands-on application
 - e. provide a broad range of electives
 - f. are ABET accredited (undergraduate programs)
 - g. are carefully crafted and supported to ensure completion in a timely manner
- Provide opportunities for professional development within and through both undergraduate and graduate programs
- Provide an outstanding and inclusive environment for learning that supports student / faculty / community interaction
- Provide curricular and co-curricular support to enhance student growth, success and time to graduation

Strategies

1. Remain student-centered in all aspects of the student's academic experience
2. Articulate and maintain the primacy of consistent excellence in teaching and learning at both undergraduate and graduate levels
3. Establish and/or maintain appropriate enrollment, staffing, and facilities for effective & efficient program operations
4. Offer programs that are responsive to industry/community needs and student demand through comprehensive and diverse offerings
5. Ensure academic excellence in all programs
6. Enhance rigor, respect, and recognition for all programs
7. Enhance student success via advising and student support services
8. Expand financial support (scholarship) opportunities for PCEC students
9. Develop and implement the PCEC Inclusion and Equity Plan
10. Regularly review the PCEC and Schools strategic plans for alignment with the GVSU strategic plan
11. Refine School Workload and Rewards documents to reflect the commitments and resources appropriate to faculty duties such as co-op and internship supervision, undergraduate and graduate thesis/project supervision, program administration, to facilitate these activities
12. Inform our service to these constituents through regular assessment processes

Constituent Group: The Grand Valley State University Community

Objectives

- Provide professional college perspectives in university governance
- Support university-wide and interdisciplinary initiatives and activities
- Support the content needs for students in non-engineering and computing disciplines
- Assist in presenting the university to the public

Strategies

1. Provide active participation and leadership in
 - a. university governance committees
 - b. the general education program

- c. university scholarship programs
- d. interdisciplinary programs
- 2. Develop and implement the PCEC Inclusion and Equity Plan
- 3. Regularly review the PCEC and Schools strategic plans for alignment with the GVSU strategic plan
- 4. Inform our service to these constituents through regular assessment processes

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

Objectives

- Ensure an inclusive, collegial and supportive environment
- Ensure that each faculty/staff member has the opportunity to reach his/her fullest potential in teaching, scholarship, and service
- Support the recruitment of outstanding and diverse students, faculty, and staff
- Ensure supportive and efficient college governance
- Establish and promote the distinctive identities of programs, schools, and the college

Strategies

1. Articulate and maintain the primacy of consistent excellence in teaching and learning at both the undergraduate and graduate levels
2. Establish and/or maintain appropriate enrollment, staffing, and facilities for effective & efficient program operations
3. Facilitate and expand consulting and scholarship
4. Facilitate and expand publication and presentation of our work
5. Encourage and support active membership and leadership positions in professional societies, accreditation boards, community boards, etc.
6. Facilitate community service activities
7. Develop and implement the PCEC Inclusion and Equity Plan
8. Regularly review the PCEC and Schools strategic plans for alignment with the GVSU strategic plan
9. Refine School Workload and Rewards documents to reflect the commitments and resources appropriate to faculty duties such as co-op and internship supervision, undergraduate and graduate thesis/project supervision, program administration, in order to facilitate these activities.
10. Inform our service to these constituents through regular assessment processes

Constituent Group: The Engineering and Computing Professions

Objectives

- Provide a diverse population of graduates well prepared for the challenges of industry and graduate studies
- Contribute to advancing professional knowledge
- Support our professional societies
- Increase awareness of our professions
- Enhance the expertise of practicing professionals through graduate education and topical courses, etc.
- Incorporate and contribute to global awareness through professional activities

Strategies

1. Facilitate and expand consulting and scholarship
2. Facilitate and expand publication and presentation of our work
3. Encourage and support active membership and leadership positions in professional societies
4. Enhance support for student chapters of professional societies
5. Provide community service that features our professions
6. Create educational opportunities to serve practicing professionals
7. Develop and implement the PCEC Inclusion and Equity Plan
8. Regularly review the PCEC and Schools strategic plans for alignment with the GVSU strategic plan
9. Inform our service to these constituents through regular assessment processes

Constituent Group: Our Employer Base

Objectives

- Provide a diverse population of graduates well prepared for the challenges of industry and graduate studies
- Provide outstanding experiential educational programs
- Offer educational programs consistent with contemporary practice
- Enhance industry competitiveness and faculty currency
- Provide industry and community service and outreach
- Enhance competitiveness in the global environment

Strategies

1. Offer undergraduate, graduate and topical programs that are responsive to industry and community needs
2. Ensure academic excellence in all programs
3. Enhance respect and recognition for all programs
4. Engage industry as partners in our experiential educational programs
5. Facilitate industry / faculty interaction and support
6. Leverage industry partnerships to enhance service and outreach activities
7. Develop and implement the PCEC Inclusion and Equity Plan
8. Regularly review the PCEC and Schools strategic plans for alignment with the GVSU strategic plan
9. Inform our service to these constituents through regular assessment processes

Constituent Group: The General Public

Objectives

- Enhance the local and larger communities via our professional expertise
- Expand educational opportunities and interest in engineering & computing

Strategies

1. Support the economic health of our community by producing graduates who can drive the regional economy.
2. Integrate service learning activities into engineering and computing coursework and faculty activities
3. Provide enhancement and enrichment opportunities for K – 12 students to expand the talent pipeline
4. Provide effective pathways for Community College students to complete engineering and computing degrees

5. Develop and implement the PCEC Inclusion and Equity Plan
6. Regularly review the PCEC and Schools strategic plans for alignment with the GVSU strategic plan
7. Inform our service to these constituents through regular assessment processes

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