Program Summary

Task Force: It seemed like many of the goals were not a high priority and the timelines for accomplishment of most goal were undefined. The first three goals were the most defined and could be the most focused on with current resources. The community and interdepartmental research partnerships would be good if funding for extra faculty and staff were available. Goal five to increase graduates is a reasonable one. Goal six concerning faculty research was unclear as whether there was a problem with current research standards. The last three goals were low priority.

Thank you for the time and effort you put forth in your report. Through the USAP process, we are working to create a culture of continuous improvement; setting specific and measurable goals is an important step in the process of moving IPFW toward this culture of improvement. Part of this effort is getting individuals and units at IPFW to think differently about planning and the future. The work of the Computer Science Department is critical to IPFW and we greatly appreciate the time you spent on this significant endeavor. Thank you again for being part of this important initiative.

Criterion: #1: Mission - How does your unit support the mission of the university? This may include your mission and vision statements. (no more than 200 words)

Question: Mission - How does your unit support the mission of the university? This may include your mission and vision statements. (no more than 200 words)

The Department offers degree programs that prepare graduates for careers in computer science, information systems and software engineering. We provide our students with a durable foundation of computing skills to address a constantly evolving technical environment, promote their professional growth through application of industry-recognized best practices, and encourage community engagement through their participation in local and national computing organizations and outreach activities. We provide our community with expertise in computing, partnering with business, government, education and industry to fulfill diverse technical and training needs.

Criterion: #2: Accomplishments - Please list significant accomplishments from the last three years as they align with Plan 2020 goals

Question: I. Foster Student Success - Please list significant accomplishments from the last three years as they align with Plan 2020 goal area I: Foster student success.
In the past three years, the department has improved its enrollment, the number of degrees awarded, retention, and graduation rate. Specifically for the BS in Computer Science program, in the last three years (Fall 2010 - Spring 2014) we have awarded an average of 18 degrees per year, compared with 10 degrees per year in the three prior years. This growth of 80% has outpaced our improvement in majors (35%, from 140 to 189) and junior/senior level majors (72%, from 36 to 62) over the same period. Thus, the department is not only growing, but is also retaining and graduating a higher percentage of our students.

• 89% of our BS in Computer Science graduates from 2013-2014 were placed in computing jobs. When including all of our bachelor's degree recipients from the 2013-2014, our placement rate is 81%.

• We introduced year-long senior capstone projects, required for our computer science bachelor's degrees. The projects are sponsored by faculty and community partners.

• The department issues surveys for every undergraduate course, asking students to report how well the course achieved its specific learning outcomes. The learning outcomes have been approved by our accrediting agency. On a 5-point Likert scale (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree), our average scores in 2013 were 4.14 out of 5, with 13% of our classes achieving average scores over 4.5.

• Creation and staff of the ET 118 Tutoring Center, to help students in computer science and information systems.

• Creation an online BS degree program in Information Systems

**Question:** II. Creation of Knowledge - Please list significant accomplishments from the last three years as they align with Plan 2020 goal area II: Promote the Creation, Integration, and Application of Knowledge.
• 10 faculty members (83%) actively involved in research
• 19 published, peer-reviewed journal articles, 48 peer-reviewed conference articles.
• 1 published book, 1 edited book and 1 edited conference proceedings,
• 7 published book chapters over the past three years.
• 3 technical reports.
• 30 presentations
• 4 book reviews
• 7 pieces of software.
• 1 Co-Editor-in-Chief, 1 Associate Editor and 8 Editorial Board Members for 10 reputable Journals.
• Served as over 50 Conference Steering Committee Co-Chair, Conference Program Co-Chair,
Conference Program Committee members for more than 50 reputable international conferences.
• Professor Jin Soung Yoo presented her work “The Spatial Co-location Pattern Mining and Its
Applications,” at the most prestigious S. Korea organization, KAIST on June 13, 2011.
• Prof. Weilong Lee, Likai Cui, Jingmei Zhang, and Ling Chen (supported by their government)
were in residence at IPFW as visiting scholars collaborating with Prof. Sedlmeyer, Prof. Ng and
Prof. A. Liu.
• Dr. Joo Yoo has just been selected as a Faculty Fellow for the 2013 and 2014 Air Force Summer
Faculty Fellowship Program (Air Force SFFP). Recently two papers have been accepted for
publication in international conferences. She also helped her Master of Applied Computer Science
student, Mr. David Kimmey to obtain 2014 Air Force Summer Student Fellowship Program.
• Dr. Prepared a group of Computer Science students and led competitive programming teams,
who participated in the Association for Computing Machinery’s International Collegiate
Programming Contest in 2013. Our top team did very well, placing in the top 10% of teams from
non-Ph.D. institutions. They also beat over half of the teams from Ph.D.-granting institutions! This
performance earned them the 5th place overall at our site (one of four sites in the region), putting
us “on the podium” in the company of Notre Dame, Hope College, and two teams from the
University of Michigan.

Question: III. Regional Hub - Please list significant accomplishments from the last three years as
they align with Plan 2020 goal area III: Serve as a Regional Intellectual, Cultural, and
Economic Hub for Global Competitiveness.

• 7 grants totaling $252,736, in addition to 10 technical assistance project (TAP) agreements
totaling $81,862 have been secured over the past three years
• 4 unfunded proposal collaborations with non-profit or industrial partners (e.g., senior project
clients)
• The department took an active role in visiting high schools for launching dual credits program in
computer science (CS 11200 Survey Computer Science), and CS 160 Introduction to Computer
Science I. It grows continuously at DeKalb HS and Northrop HS. As of today, Concordia HS,
Canterbury HS, Adams Central HS, Wayne New Tech HS, Manchester HS, Huntington North HS,
etc. bring the computing awareness right into HS. This helps student recruitment for our
programs.
• Created and currently conducting a High School Programming Challenge and Problem Solving
Competition. This Competition contains 10 programming challenges, once per two weeks; and 1
problem solving competition at IPFW. The entire competition is scheduled to begin from the first
week of November and end at the middle of April.
• Professors Robert Sedlmeyer, Beomjin Kim and Britton Wolfe completed over 15 Technical
Assistant Projects.
• Professor Robert Sedlmeyer held 5 times for a week-long, half-day IPFW ETCS Summer Camp
“Adventures in Computing for Teens.” All participants completed and demonstrated independent
projects to family and friends on the last day of the camp.
Question: IV. - Create a Stronger Univ - Please list significant accomplishments from the last three years as they align with Plan 2020 goal area IV: Create a Stronger University through Improving the Support of Stakeholders and the Quality and Efficiency of the Organization.

n/a

Question: Other Accomplishments - Please list any other significant accomplishments from the last three years that do not align with Plan 2020.

n/a

Criterion: #3: Accreditations - Program specific accreditation and status

Question: Accreditations - What program-specific accreditations and status do you have, if any?

The Bachelor of Science in Computer Science is accredited by the Computing Accreditation Commission of ABET (Accreditation Board for Engineering and Technology)

Question: Constraints/Benefits - How do these accreditations constrain or benefit the work of your unit, if applicable?

ABET accreditation establishes that the quality of the educational experience meets the standards of the profession, and it increases and enhances employment opportunities for our graduates.

Criterion: #4: Laws and Mandates - Federal and state laws or mandates that your unit addresses

Question: Federal and State Laws - What federal and/or state laws or mandates do you address, if any?

n/a

Question: Constraints/Benefits - How do these federal and state laws or mandates constrain or benefit the work of your unit?

n/a

Criterion: #5: Inefficiencies - Activities that you spend resources on inefficiently or in ways that do not support the mission.

Question:
Inefficient use of resources - On what activities, if any, do you spend resources (money, time, people, etc.) inefficiently or in ways that do not support the mission of your unit or the university? List as many as apply.

None

**Criterion:** #6: IR and Budget Review - Review of your department profile and budget

**Question:** Contextualize IR data - Upon review of your IR Department Profile (for academic units) and FY 14-15 Budget information, are there any data you want to correct or contextualize? To view your profile or budget visit the Office of Institutional Effectiveness website: http://www.ipfw.edu/offices/ir/profiles/

None

**Criterion:** #7: Goal One - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal:

Renew ABET (Accreditation Board for Engineering and Technology) accreditation for BS in Computer Science.

Aligns with I.A.1 and I.A.2

High Priority

2. Comment on the goal’s measures:

Actions: Use data from classes to make them stronger- Not clear as to what data is to be used.

Metrics: The recommendations of the accreditation board.

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):

Stated No. Will need extra staff to accumulate and assemble data.

Challenges: Need enough faculty to revise curriculum to meet industry standards.

4. Comment on the goal’s relevance:

Relevant to Strategic Plan goals I.A.1 and I.A.2

5. Comment on the timeline of the goal:

2015 Summer- Prepare ABET report

2015 Fall- ABET visit

2016 Summer- ABET report arrives

Comment: Seems reasonable if extra staff and faculty can be assembled.

Possible opportunities for collaboration or suggestions for addressing a gap:

**Question:** Unit Goal - What is your unit goal?

Renew ABET accreditation for BS in Computer Science

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

I.A. Process Goals: Improve Measurement of Student Learning

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

High
**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

As part of our preparation for accreditation, our department has implemented a process for using data to improve our courses. The remaining focus for this goal is to compile the documentation of our program's quality.

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

The recommendations of the ABET accreditation team

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

No.

**Question:** Needed Resources - If you don't have enough resources, what additional resources do you need to accomplish this unit goal?

Staff to collect and assemble the data

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

The Department needs to have enough faculty that allows us to revise our curriculum to the needs of industry.

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

We prepare our report for ABET in Summer 2015. The site visit will take place in Fall 2015, with the report from ABET arriving in Summer 2016.

**Criterion:** #8: Goal Two - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal:

Provide education about computer science for local high school students through dual credit offerings and support for computing clubs.

Aligns with III.B, III.D, III.O.1a, and IV.O.1a (III.O.1a and IV.O.1a are outcomes)

High Priority

2. Comment on the goal’s measures:

Actions: Clearly stated actions to develop relationships with high schools

Metrics: Clear means of measurement of high school involvement.

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data)

Stated- Could achieve if faculty teach overload and produce less research. Stated need for another faculty line.

4. Comment on the goal’s relevance:

Relevant to III.B and III.D

Comment: Difficult to achieve with current faculty.

5. Comment on the timeline of the goal:

Stated 3-5 years

Comment: Reasonable if challenges stated can be overcome.

Possible opportunities for collaboration or suggestions for addressing a gap:

**Question:** Unit Goal - What is your unit goal?

Provide education about computer science for local high school students through dual credit offerings and support for computing clubs

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

III.B. Provide access to outstanding intellectual programming.

III.D. Provide non-credit enrichment experiences for the community.

III.O.1a All events are aligned with needs of the community and region and the university’s core mission.

IV.O.1a Constant enrollment of 9,000 undergraduate and 1,000 graduate degree seeking students.

**Question:**
Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

High

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

- Pursue connections with local high school teachers
- Train local high school teachers to offer dual credit courses
- Operate a regional contest for high school computing clubs

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

- Number of students enrolled in dual credit
- Number of students involved in the contest
- Feedback from students and high school teachers about the quality of our support

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

Yes, if we continue to overload our faculty teaching load, and less research work.

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

I wish I have another faculty line.

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

n/a

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

Three to five years

**Criterion:** #9: Goal Three - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal:

85% of bachelor’s and master’s graduates are placed in computing jobs or graduate school within one year of graduation.

Stated alignment with I.O.2a (Strategic Outcome)
High Priority

2. Comment on the goal's measures:

Actions: Stated meet with Professional Advisory Board. Prepare students for graduate school (unclear as to what means would be taken)

Metrics: Measure by number of enrollment in graduate school, graduates employed, and track unplaced graduates.

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):

Stated not enough resources. Will need extra data from graduates and alumni.

Challenges stated- effort needed to prepare students for graduate school and job market.

4. Comment on the goal's relevance:

Relevant to Strategic Plan outcome I.O.2a.

Comment: Stated earlier that 89% of recent graduates are employed in their field.

5. Comment on the timeline of the goal:

Stated 3 to 5 years

Possible opportunities for collaboration or suggestions for addressing a gap:

**Question:** Unit Goal - What is your unit goal?

85% of bachelor's and master's graduates are placed in computing jobs or graduate school within one year of graduation.

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

I.O.2a Number of recent graduates (one year) employed in field of study and/or attending graduate/professional school

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.
Question: Actions - What action(s) does your unit plan to take to support this unit goal?

- Meet regularly with our Professional Advisory Board to build close ties with local industry partners
- Help students who are interested in graduate studies prepare for those studies

Question: Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

- Number of graduates who are pursuing graduate studies
- Number of graduates who are employed in the field
- Information about graduates who are not placed

Question: Resources - Are you able to accomplish this unit goal with your current resources?

No

Question: Needed Resources - If you don't have enough resources, what additional resources do you need to accomplish this unit goal?

While the department collects its own information from our graduates, access to the institution’s information about alumni (including contact information and their current employment status, if available) would help fill gaps in our data.

Question: Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

Prepare sufficient graduated students and allow to place them in the work force.
Economic conditions that affect the job market

Question: Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

Three to five year.

Criterion: #10: Goal Four - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

Task Force:
1. Comment on the specificity of the goal:

Enhance partnership with regional industry and develop collaborative projects with partners beyond IPFW.

Aligns with goals I.E.3, II.C and III.A and outcome III.O2a

High Priority

2. Comment on the goal’s measures:

Actions: Meeting with Professional Advisory Board and recruit their members. Seek regional business sponsorships.

Metrics: Measure by number sponsorships of senior projects by regional, national, and international business, and faculty.

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):

Stated that resources are adequate

Challenges: Faculty and staff time to form regional partnerships.

4. Comment on the goal’s relevance:

Relevant to I.E.3, II.C and III.A

5. Comment on the timeline of the goal:

Stated goal will be a ‘continual enhancement’. (Unclear as to what this means)

Possible opportunities for collaboration or suggestions for addressing a gap:

**Question:** Unit Goal - What is your unit goal?

Enhance partnership with regional industry and develop collaborative projects with partners beyond IPFW

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

I.E.3. Build and strengthen relationships with regional partners to increase research and scholarly collaborations in signature programs.
II.C. Promote the development of opportunities for faculty and student engagement with the community for the application and integration of knowledge.
III.A. Expand meaningful collaborations and research opportunities with regional, national, and global partners.
III.O.2a Triple the number and increased value of technical assistance agreement-like contracts and consultations with regional business and industry to $1 million annually
**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

High

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

- Meet frequently with Professional Advisory Board members to enhance existing partnership
- Recruit new PAB members
- Solicit project proposals and their sponsorship from regional business

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

- Number of senior design projects sponsored by regional industry
- Number of projects establishing regional, national, and global collaborations
- Number of project proposals completed by faculty

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

Yes

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

n/a

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

Availability of staff and faculty time for developing partnership

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

It will be continual enhancement

**Criterion:** #11: Goal Five - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal

Grant 10% more bachelor's degrees in 2014-15 than 2013-2014.

Stated goal as outcome I.O.1b

Medium priority

2. Comment on the goal's measures:

Actions: Clear action steps of using more TAs, more emphasis on notification of students for registration and graduation

Metrics: Measurement of students receiving bachelor degrees.

3. Comment on the unit's ability to achieve the goal (include a consideration of the departmental profile and budget data):

Stated not adequate manpower to achieve goal. Would need more TA hours and conversion of spaces for more student interaction.

Challenges: Limitation of space and student workers.

4. Comment on the goal's relevance:

Not a stated alignment with a goal, but probably would be I.A.1

5. Comment on the timeline of the goal:

No timeline stated.

Possible opportunities for collaboration or suggestions for addressing a gap:

**Question:** Unit Goal - What is your unit goal?


**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

I.O.1b 1,600 baccalaureate degrees awarded annually

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Medium

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?
• Provide computer science-specific peer tutoring via teaching assistants
• Contact upperclassmen to encourage them to register and complete their degrees
• Notify students to apply for graduation at the appropriate time

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

• Number of bachelor's degrees awarded

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

No

**Question:** Needed Resources - If you don't have enough resources, what additional resources do you need to accomplish this unit goal?

• Funding for the equivalent of a full-time student worker (spread among several TAs) would enable us to fully staff our tutoring center
• Turning the oft-empty ETCS faculty lounge into a student lounge for ETCS students would free up our current lounge/tutoring room to focus on tutoring. While a student lounge might not seem important, it encourages peer connections, which are important for student persistence to graduation (e.g., Tinto, *The Review of Higher Education* 21.2 (1998) 167-177)

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

The space limitations listed in "additional resources"

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

**Criterion:** #12: Goal Six - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal:

All faculty actively engaged in research.

Stated outcome II.O.1a- (Goal could be II.A)

Medium Priority

2. Comment on the goal's measures:

Actions: Stated to provide faculty with support for research –Unclear as to what type of support

Metrics: Measured by peer-reviewed products and project and grant proposals

Comment: Unclear actions and as to whether metrics are used year to year or over a longer course of time.

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):

Stated that resources are available.

4. Comment on the goal’s relevance:

Relevant to Strategic Plan goal II.A.

5. Comment on the timeline of the goal:

Stated time line will be ‘a continual enhancement’. (unclear timeline, maybe ongoing)

Possible opportunities for collaboration or suggestions for addressing a gap:

**Question:** Unit Goal - What is your unit goal?

All faculty members actively engage in research

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

II. O.1a 100% of faculty with research assignment meet departmental expectations

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Medium

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?
Provide resources to faculty to support their research

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

- Peer-reviewed scholarly products
- Project/grant proposals completed by faculty

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

Yes

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

n/a

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

n/a

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

It will be continual enhancement

**Criterion:** #13: Goal Seven - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal:

Promote collaborative learning activities among students and faculty, including research projects and senior capstone projects.

Aligns with goals I.E.2 and II.B and outcome II.O.2a

Medium Priority

2. Comment on the goal's measures:

Actions: To encourage faculty and students to collaborate in research projects, and to provide space and resources to complete research (unclear as how 'encourage' is defined)

Metrics: Measure by number of faculty involved with student projects and students involved in faculty research (measurement could also be by success rates)

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):

Stated resources available.

Challenges: Student participation

4. Comment on the goal's relevance:

Relevant to goals I.E.2 and II.B

5. Comment on the timeline of the goal:

Stated as ‘a continual enhancement’ (unclear timeline, maybe ongoing)

Possible opportunities for collaboration or suggestions for addressing a gap:

**Question:** Unit Goal - What is your unit goal?

Promote collaborative learning activities among students and faculty, including research projects and senior capstone projects

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

I.E.2. Develop activities and experiences that promote success in student achievement through programs with strong student learning outcomes, high graduation rates, and strong job placement prospects.
II.B. Promote mentoring relationships between faculty and students engaged in creation, integration, and application of knowledge.
II.O.2a 100% of all graduating students will have engaged in a high impact educational experience
Question: Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Medium

Question: Actions - What action(s) does your unit plan to take to support this unit goal?

- Encourage faculty members to develop projects involving students
- Encourage students to participate in faculty-sponsored projects
- Provide students with space and resources to successfully complete their projects

Question: Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

- Number of faculty mentoring student projects
- Number of students involved in faculty-sponsored projects

Question: Resources - Are you able to accomplish this unit goal with your current resources?

Yes

Question: Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

n/a

Question: Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

Students' participation

Question: Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

It will be continual enhancement

Criterion: #14: Goal Eight - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

Task Force:
1. Comment on the specificity of the goal:

Refine our process for helping faculty use student learning data to improve their courses.

Aligns with I.A.1 and I.A.2

Low Priority

2. Comment on the goal's measures:

Actions: Clearly stated methods of improving courses over time by using faculty input and classroom student data.

Metrics: Measure by using data of faculty submission timeline for class improvement and higher learning outcome scores.

3. Comment on the unit's ability to achieve the goal (include a consideration of the departmental profile and

Stated that resources are available.

4. Comment on the goal's relevance:

Relevant to goals I.A.1 and I.A.2

5. Comment on the timeline of the goal:

No timeline stated.

Possible opportunities for collaboration or suggestions for addressing a gap:

**Question:** Unit Goal - What is your unit goal?

Refine our process for helping faculty use student learning data to improve their courses.

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

I.A.1. Improve quality and fidelity of assessment process of degree/certificate programs, General Education program, and Baccalaureate Framework with dedicated resources.
I.A.2. Use assessment data to improve student learning.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Low

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?
Our current process surveys the students, asking them how well the course fulfilled each of its stated learning outcomes (as approved by our accrediting board). The faculty receive the data from the anonymous surveys, then write suggestions for improving the course the next time, based on the survey results. These proposals are sent to the chair. To improve upon this process, we plan to...

- Provide clear, consistent deadlines for faculty to submit their suggestions for course improvements.
- Provide historical data as well as current-semester data in the reports to faculty, including faculty's previous suggestions for course improvement. This will help them see trends over time.
- Request that faculty comment on the extent to which their course changes for the current semester (i.e., suggestions from previous semesters) impacted the student learning data.

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

- The percent of courses that complete the learning outcome process on time
- The quality and quantity of insightful reflection by faculty
- Percent of courses that improve their average learning outcome scores or already have high scores (e.g., at least 4.2 out of 5.0)

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

Yes

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

n/a

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

n/a

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

n/a

**Criterion:** #15: Goal Nine - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal:

Offer a concentration in mobile computing, supported by a mobile computing lab.

Aligns with I.E.4 and II.A

Low Priority

2. Comment on the goal's measures:

Actions: Develop courses related to mobile lab, recruit mobile lab faculty, foster student activity involving mobile lab.

Metrics: Measure by documenting students using mobile lab resources, mobile lab research projects, and enrollment in mobile lab classes.

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):

Stated that resources are not available. Would need additional faculty and mobile lab hardware.

Challenges: Recruiting faculty with mobile lab expertise.

4. Comment on the goal's relevance:

Aligns with Strategic Plan goals I.E.4 and II.A

5. Comment on the timeline of the goal:

Fall 2016 if faculty can be hired by Fall of 2015

Possible opportunities for collaboration or suggestions for addressing a gap:

**Question:** Unit Goal - What is your unit goal?

Offer a concentration in mobile computing, supported by a mobile computing lab. (Mobile development is the skill in the highest demand by technical companies: [http://tinyurl.com/crqkgce](http://tinyurl.com/crqkgce))

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

I.E.4. Promote majors and programs with strong job placement opportunities in the region and beyond. II.A. Project future regional, national, and international demand for research and collaboration.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Low
Question: Actions - What action(s) does your unit plan to take to support this unit goal?

- Continue to develop courses related to mobile computing
- Request funding for mobile computing resources
- Recruit faculty candidates with mobile computing experience
- Continue fostering the Mobile Application Development Club
- Continue to solicit mobile application development projects for our senior capstone projects

Question: Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

Number of students that...
- Use mobile lab resources
- Enroll in mobile computing classes
- Work on mobile computing research projects
- Work on mobile computing capstone projects
- Participate in the Mobile Application Developers Club

Question: Resources - Are you able to accomplish this unit goal with your current resources?

No

Question: Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

- Funding for mobile computing hardware
- Additional faculty member with expertise in mobile computing

Question: Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

- Ability to recruit faculty with expertise in mobile computing

Question: Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

If we can add a faculty member starting Fall 2015, then Fall 2016 would be the target for having the concentration of courses established.

Criterion: #16: Goal Ten - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

Task Force:
1. Comment on the specificity of the goal:

Update program/curriculum that is aligned with regional needs or demands of the computing industry.

Aligns with goals I.E.2 and I.E.4

Low Priority

2. Comment on the goal’s measures:

Actions: Develop new course, improve curriculum, and recruit faculty that aligns with current demand of the field.

Metrics: Satisfaction of Public Advisory Board and feedback from course evaluations.

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):

Stated resources are available if faculty position is filled.

Challenges: Recruiting top faculty candidates

4. Comment on the goal’s relevance:

Relevant to goals I.E.2 and I.E.4

5. Comment on the timeline of the goal:

Stated as ‘a continual enhancement’ (Unclear as to timeline)

Possible opportunities for collaboration or suggestions for addressing a gap:

**Question:** Unit Goal - What is your unit goal?

Update program/curriculum that is aligned with regional needs or demands of the computing industry

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

I.E.4. Promote majors and programs with strong job placement opportunities in the region and beyond.
I.E.2. Develop activities and experiences that promote success in student achievement through programs with strong student learning outcomes, high graduation rates, and strong job placement prospects.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Low
**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

- Develop new courses and revise existing courses to prepare graduates for careers in the region and beyond
- Constantly improve curriculum reflecting the current demands
- Recruit faculty with expertise in state-of-the-art technology or/and demanded by regional industry

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

- Satisfaction of PAB members and alumni to the program/curriculum
- Utilize feedbacks from course evaluations and course learning outcome survey by students

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

Yes, if the vacant faculty position is filled

**Question:** Needed Resources - If you don't have enough resources, what additional resources do you need to accomplish this unit goal?

n/a

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

Recruiting faculty with needed expertise

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

It will be continual enhancement