The PAB applauds the Department for the actions they have taken on last year’s recommendations. The progress made in adopting new technologies with a focus on programming principles and professionalism has noticeably improved the quality and quantity of IPFW CS graduates and interns. We appreciate the Department’s commitment to building a strong & dynamic program to support the NE Indiana technology sector.

PAB members continue to be excited about engaging with the Computer Science Department and look forward to increased interaction with faculty and students. We are supportive of the department’s efforts regarding the senior capstone project, expansion of on-line high school programs, sponsoring local programming challenges and encourage further development in these areas. Further, the PAB is very interested in opportunities to present to, meet, and talk with students regarding real world experiences after college.

The PAB recommends the Department continue to focus on instructing students how to craft quality code and understanding the theory behind object-oriented development. The PAB agrees with the Department’s decision to adopt C# and further requests JavaScript and JavaScript Frameworks be built integrated into the curriculum as well. As a long term strategy, the Department should strive to become language agnostic and develop a structure to evolve with the latest cutting edge programming languages.

The senior capstone projects offer sponsors a valuable way to interact with IPFW CS students. To further enhance the value of the projects to both students and sponsors, the PAB recommends:

- The sponsor be required to assign a company IT project manager. This would enhance execution of the project and allow for additional learning opportunities.
- Project teams include students from other IPFW departments. This could include Information System students for project management/testing, Engineering students for hardware or Business students for product owners.
- Shift the project to use an Agile methodology to help maintain student engagement.
- Allowing for multiple companies to co-sponsor over one or multiple years Proof-of-Concept/Research related projects.
- The creation of a CS Department led Junior “mini-Capstone” project that focuses students on project management and positions them for success on the Senior Capstone Project.
• The PAB encourages the Department to provide course offerings consistent with new technologies required in the workplace which include:
  o Continuous integration and deployment.
  o Automated testing.
  o Database design, and development.
  o Cloud technologies
  o Cloud Computing
  o DevOps

• To increase enrollment and local value of the CS program, the PAB recommends that IPFW drive to be known as a “specialist” school in the following areas:
  o Analytics & Data Science
  o Machine Learning
  o Cyber Security
  o Robotics