## MylpfwAdvisor A Software System for Guiding Student Course Scheduling

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The goal of the MylpfwAdvisor project is to create an intelligent software system that will guide a student through course schedule construction from matriculation through graduation.

At the heart of MylpfwAdvisor is a constraint-satisfaction problem solver. This sophisticated third-party component takes a student's time, credit hour and cost constraints together with unsatisfied degree requirements and course preferences and generates a plausible schedule. Embedded in the system will be access to the student's curriculum, academic progress record and current IPFW course offerings as well as knowledge of what courses may be used to satisfy what requirements, e.g. General Education Area IV.

Major features of the system include:

- "Bingo Sheet" maintenance for BS and BA Computer Science majors as well as BS Information Systems majors
- On-demand printing of "Bingo Sheet"
- Highlighting of unfulfilled requirements
- Automatic identification of courses that fulfill each specific course requirement
- Course scheduling profile tailored to the preferences of each student
- Automatic schedule generation based on scheduling profile and available courses
- Recommendations for what course to take to fulfill a specific General Education requirement based on past CS/IS majors' preferences
- Advisor query capabilities to, for example, list all majors who are eligible to take a given course or who have received a given grade in a completed course.

The system must have a secure, web-based interface and service-oriented architecture.