

Vision Document MUM Scheduling

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Compro is a graduate program at MUM that accepts students throughout the year – four times for international students and twice for US entries. As number of students and courses that need to be taken are diverse and relatively unpredictable, there is always a challenge on matching student number with courses provided in a given month (block).

Another challenge is matching the number of students requesting to take a certain course against class size (averaging about 25). Based on faculty availability, not all courses are available on every month. In some blocks, MUM might offer 8 or 9 elective classes, plus couple courses for FPP and MPP per entry. There are several areas of specialization for classes such as Advanced software development, Web Applications, big Data Science, machine learning, Software Design, Parallel Programming... etc.

As Most faculty have one or two areas of specialization, consideration is also taken into account on how faculties are assigned (or chose) course in a given block. Faculty need to be able to enter their profile and be able to view their scheduled classes. In addition, not all courses are of the same level as few 500 level courses have 400 level courses as prerequisites, hence system shall be designed to address this as well.

The Vision Document shall entail “managing the Compro schedule and allowing students to register for classes” as a challenge and “building a Compro schedule that integrates faculty availability and courses needed by students per entry. This tool shall also provide a Database and a user interface for faculty, staff, and students.”

A couple Challenge scenarios that will be addressed
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- a. Each Compro entry has a projected number of students entering in the FPP and MPP track. Compro entries must be sized by number of students and entered into the schedule.
- b. An entry will have a set of blocks with classes that are targeted for the MPP track and the FPP track. Blocks must be created for each entry and have a sequence number per entry track.

Problem Statement

The problem of	<i>managing the Compro schedule and allowing students to register for classes</i>
Affects	<i>administrators, faculty, and students .</i>
The impact is that	<i>scheduling is complex, must be manually maintained, and changed frequently.</i>
A successful solution would be	<i>one tool which builds a Compro schedule that integrates the business rules for faculty availability and courses needed by students per entry. This tool will provide a Database and a user interface that is easy to use for faculty, staff, and students.</i>

