Phase I:

In the first phase, various courses are allocated to faculty members using any Multi-Criteria Decision Making (MCDM) technique. We also need to take care of faculty workload constraints while allocating courses. The ordering of courses to faculty members will be stored in memory to deal with sudden faculty unavailability within the running semester.

Phase II:

In the second phase, a discipline-wise course timetable is constructed first by assigning faculty-course tuples to a suitable classroom and appropriate period. This course timetable of various disciplines of a school can then be combined to form a school's cumulative timetable. Here, the constraint violation can be handled locally. Finally, the course timetable of various schools can be combined to form the complete university course timetable. Graphically, the working mechanism of the second phase can be shown as follows:

Phase II:

