

# GUJARAT TECHNOLOGICAL UNIVERSITY

## Master in Computer Application (Integrated MCA)

Year III-(Semester-VI) (W.e.f. December, 2015)

**Subject Name:** User Defined Project 2

**Subject Code:** 4460604

### 1. Objectives:

- To solve industrial (or society or research) problems.
- To plan, schedule, and monitor the software project
- Development, coding, and testing of a large project cohesively.
- Documentation of project

### 2. Pre-requisites

- Software engineering, Coding language, RDBMS

### 3. Guidelines

- The project definition should be finalized during the summer break after 4<sup>th</sup> semester examinations. “ShodhYatras’ to industries in Sankuls (industry clusters) will help achieving this first major step. Any ‘good’ internal definition having a high application potential will also be acceptable.
- It is recommended that the team should be of 2-3 students.
- Project plan along with the division of work amongst team mates would have been prepared and got approved within a maximum of 5 days of the start of the project.
- Coding standards should be followed meticulously. At the minimum, the code should be self-documented, modular, and should use the meaningful naming convention.
- It is advisable that object-oriented methodology is used with reusability of classes and code, etc.
- The output reports must include MIS reports, if applicable.
- The documentation should include a chapter on “Learning during Project Work”, i.e. “Experience of Journey during Project Duration”.
- Data structure (database design) is mandatory. At least portions of code (preferably full code) is mandatory. Student may be asked to write the code related to the project during examination.
- If a student is compelled to follow certain instructions (by the external, i.e. organization’s guide) which he/she does not agree to, such a student must prepare a supplementary report to document his/her version and present it to the examiners if such a need arises.
- Internal guides (i.e. the faculty members) must devote the time allocated as per the timetable to guide the students for the project. The time allocation will be in accordance with the scheme for 6<sup>th</sup> semester project as given.
- The report should contain appropriate Test Plan and Test Cases.
- The project scope document should be created and can be used for evaluation by external examiner.

#### **4. Accomplishments of the student after completing the course:**

- Doing the project will enable the student to go through rich experience in developing large projects. Such an experience will include encountering various technical issues, finding sources to resolve the issues and finally finding the solution of all these issues satisfactorily.
- Thinking analytically, analyzing and synthesizing requirements and complicated information for getting a good comprehension of the solution methodology to be adopted.
- Ability to document and write well.
- Organizing the time effectively.
- Working with teammates and generating substantial output of the efforts.
- It will prepare the students for analyzing and programming for industrial problem and large projects work in future.

#### **5. Criteria for Evaluation of Software Projects**

- Project Definition: 10%
- Related project Study Analysis: 20 %
- Design & Development: 40%
- Implementation & Testing: 10%
- Creation of Project Report and User Manual: 20%