Paper No.:060011001
Course Name: Project
Course Credits: 23
Total Hours: Full Time, 6 Months
Prerequisites: All subjects of previous semesters.

Course Objectives:
This course is designed to provide industry experience to study, analyze, design, develop software or utility and test them for problems focused in the current trending applications and area of computer science.

[A] Time and Duration:
1. Project shall be 6 months and preferably being carried out in the industry.

[B] Team Formation and Guide Allocation:
1. A Project shall be carried either individually or in a team.
2. A student shall choose maximum 3 students per project team. In case if company insists more than 3 student members, prior written permission from the institute is absolutely necessary.
3. A student is not allowed to change the company in which he/she has confirmed the internship. In case of some unwanted circumstances, written application must be submit to Project Committee and whatever decision taken thereafter shall be accepted by the students.
4. A team shall be allocated an internal guide from institute to whom he/she shall have to report about the project's progress.
5. A team shall be assign guide at industry known as External guide by concern industry.
[C] Support and guidance team for Project

Support and Guidance Team is created so that student or guide can receive additional support for respective project work.

<table>
<thead>
<tr>
<th>Support and Guidance team</th>
<th>KBL, BAD, KYP, TPR, JBU, ADP, PBG</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Analysis and Design</td>
<td>JRS, ADP</td>
</tr>
<tr>
<td>Database Design</td>
<td>JKT, PBG</td>
</tr>
<tr>
<td>System Testing</td>
<td></td>
</tr>
<tr>
<td>Web based Development</td>
<td>PBN, JHT, VRF, RMP, KKB</td>
</tr>
<tr>
<td>Mobile based Development</td>
<td>NDT, DCP, ZMK</td>
</tr>
<tr>
<td>Content Management over Web Application</td>
<td>DCP, PRS, UYS</td>
</tr>
<tr>
<td>Data Analytics</td>
<td>BCP, JRS, JKT, CMT</td>
</tr>
<tr>
<td>IoT based Development</td>
<td>PRS, JAP</td>
</tr>
<tr>
<td>Project Development Support</td>
<td>Respective Guide</td>
</tr>
</tbody>
</table>

[D] Project Progress Task:

1. Project can be accomplished by using concepts, tools and/or technologies of the courses taken by the student during their earlier semesters or of any other course beyond the curriculum.
2. Teams are expected to plan their project tasks well in advance and execute the same with punctuality.
3. Students must keep track of submissions by timely referring the mails and guidelines/circular related to project work published on our website.
4. Once the confirmation and joining letter are submitted to the institute, rest submissions must be done to the internal guide.
5. Teams shall have to submit their Project Status Reports on company letterhead signed by external project guide on or before specified date. In case, if the any team member is not able to submit the hard copy on given deadline, ensure to mail the scanned copy of the report to the concerned internal project guide. Such scanned copy of report should be sent from concerned external guide’s email account.
6. For any query, a team can approach to the internal project Guide and the project coordinator via email.
7. Any critical challenges faced during project, should be immediately reported to internal guide through an email cc: to Project Coordinator and/or the Programme Coordinator.
[E] Roles and Responsibilities of Guide:

- **Internal Guide**:  
  1. Internal guide shall maintain each reports submitted by a team. At end of the semester Project Committee will ask for each report.  
  2. Internal guide should interact with student’s regular basis to know their system understanding and progress of the project.  
  3. Internal guide should read, verify and comment on draft versions of reports prepared by team before actual submission.  
  4. Discuss all the parameters on which focus of teams required.  
  5. Guide must ensure to remain in contact with external guide for necessary discussion and updating of project work’s progress.

- **External Guide**:  
  1. External guide have to work as a supervisor as well as mentor of the team for project related activities.  
  2. Submit feedback report of team worked under him/her guidance.

[F] Company Visit:

1. Internal guide of respective team will visit the company and meet external guide for knowing student’s progress.  
2. Company visit schedule will be given by Project Committee.  
3. Committee will also provide Company visit form and trainee (Students) evaluation form for taking feedback.

[G] Evaluation:

1. A continuous internal and external evaluation scheme shall be in practice to achieve quality and timeliness of project work.  
2. Continuous Internal Evaluation (CIE) shall be done as per parameter given in below table:

<table>
<thead>
<tr>
<th>Assessment Code</th>
<th>Assessment Type</th>
<th>Occurrence</th>
<th>Weightage in CIE of marks()</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Confirmation Letter</td>
<td>1</td>
<td>2.5%</td>
<td>On or before 1st November 2018</td>
</tr>
</tbody>
</table>
Table 1: Continuous Internal Evaluation (CIE) Parameters

[H] Project Presentation:

1. During presentation, student have to bring demonstration of their work. If company does not provide code or any confidential information, student must have to produce Non-Disclosure Certificate from the company. Students must have to produce certificate indicating the same in hard copy with the sign of external guide in each presentation (internal as well as external).

2. Student may be asked to write the code related to the project during presentation.

3. No make-up work shall be accepted for missed or failed presentation.

4. Presentation must be reviewed by external and internal guide. A review certificate must be submitted at time of presentation. [Note: A review certificate format will be provide by Project Committee before time of Presentation.]

5. Presentation template, objective and marks weightage is as below:

   Presentation template:
   - Project title, team member names, enrollment numbers, guide name (External & Internal)
   - Project definition
   - Identification of Needs
   - Functional and nonfunctional requirements
   - Technology Used
   - Use Case Diagram
   - Activity Diagram
   - Data Dictionary
- User Interface Design (Screenshot of functionality implemented and reports generated by working project)
- Test Cases (Screenshot of validations performed in project)
- Critical code of project

**Objectives and marks weightage of internal presentation**

**Objective:**
- To verify, students have fulfill the requirements or not.
- To do assessment of presentation skill, system analysis skill and technical skill.
- To assess software testing related skills of student.
- To identify individual contribution and efforts made by a student for the project.
- For providing idea of what modification in current work or new thing student can do for betterment of the project for external presentation.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Marks (Total Marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity regarding requirement and functional and non-functional requirements</td>
<td>10%</td>
</tr>
<tr>
<td>Technical Knowledge and Viva</td>
<td>40%</td>
</tr>
<tr>
<td>Conceptual Diagrams and Data Dictionary</td>
<td>20%</td>
</tr>
<tr>
<td>Presentation and Communication Skills</td>
<td>10%</td>
</tr>
<tr>
<td>Implementation and Testing</td>
<td>20%</td>
</tr>
</tbody>
</table>

*Table 2: Internal Presentation Marks Weightage*

**[1] Project Document submission:**

1. There shall be 2 documentation reports submission during the semester.
2. Project Document -1 will be partial document and Project Document -2 will be full hard bound copy of document. Refer Annexure III for marks weightage of documentation report.
3. Late submission of confirmation letter, joining letter or project progress reports shall be penalized as 5% of full marks per day for maximum five days after the cutoff date. In case, if a student failed to meet the deadlines, he/she shall receive zero marks in particular parameter.
4. As Project Document- 2, student shall have to submit hard bounded copy of project document compulsorily in the prescribed format along with soft copy in CD on the
day of Internal Presentation with dual approval of internal and external guide as well as signed certificates from institute as well as industry by concern authority.

5. Marks weightage of Project Documentations are as given below:

<table>
<thead>
<tr>
<th>Project Documentation</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Knowledge</td>
<td>40%</td>
</tr>
<tr>
<td>Conceptual Diagram</td>
<td>20%</td>
</tr>
<tr>
<td>Data Dictionary</td>
<td>20%</td>
</tr>
<tr>
<td>Functional &amp; non-functional requirements</td>
<td>10%</td>
</tr>
<tr>
<td>Formatting</td>
<td>5%</td>
</tr>
<tr>
<td>Reporting</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Table 3: Marks weightage of Project Documentation-1**

<table>
<thead>
<tr>
<th>Project Documentation</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation or Working Demo</td>
<td>80%</td>
</tr>
<tr>
<td>Validation &amp; Testing</td>
<td>10%</td>
</tr>
<tr>
<td>Incorporation of suggestion given in 1st Project document progress report</td>
<td>5%</td>
</tr>
<tr>
<td>Reporting</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Table 4: Marks weightage of Project Documentation-1**

**Project Document Report Format:** Document of project shall be create using following format.

i. **Title Page**

ii. **Project Certification Form (From Institute)**
    [The Institute certificate should be duly filled signed by internal project guide and program coordinator.]

iii. **Project Certification Form (From Company)**
    [The certificate should be filled signed by concern authority from industry (external project guide, company owner, HR authority, etc.)]

iv. **Nondisclosure Form**
    [Only if company does not provide code and data dictionary.]

v. **Declaration certificate**
    [A self-declaration regarding work originality and non-plagiarism. Declaration certificate format is given below.]

vi. **Acknowledgement**
    [All persons (e.g. guide technician, friends, and relatives) and organization/authorities who/which have helped in the understanding of the project shall be acknowledged.]

vii. **Table of Contents with page numbering**

viii. **List of Tables, Figures, schemes**

1. **Introduction**
   1.1. **Purpose**
[Purpose means the objective to develop a project. Purpose describes what a project is trying to achieve.]

1.2. Scope
[Project scope should have a good idea of what the project consists of (and what will not be part of the project). This statement will give a view of the project.]

1.3. Definition, Acronyms, and Abbreviations
[An abbreviation/acronym is a shortened form of a word or phrase.]
- Abbreviation example: O.S. means Operating System
- Acronym example: GHz, which stands for GigaHertz etc., which stands for et cetera
- Definition: a statement of the exact meaning of a word]

1.4. Technologies to be used
[Mention the technologies i.e. hardware and software to be used in your project development and required for deployment.]

2. System Analysis
2.1. Identification of Need
[Need describes the problem or issue, or situation where something needs to change to make things better, for a person, a group of people, an environment or an organization.]

2.2. Functionalities
[This phase describes the functionality in system in following two parts:
- Usual functionalities.
- Distinct functionalities.]

2.3. User Characteristics
[Identify classifications of users of your system. E.g. System administrator, client. And write user wise functionality available in proposed system.]

2.4. Software development process
[Software development process model methodology to be used, like e.g. Waterfall development, Prototyping or Other]

Note: Content should be placed which must be related to concerned project only.

3. Conceptual Diagram
3.1. Use case diagram
[A use case diagram defines interactions between external actors and the system to attain particular goals.]

3.2. Activity diagram
[Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency.]

4. System Design
4.1. Data Dictionary, integrity constraints
[A set of information describing the contents, format, and structure of a database and the relationship between its elements used to control access to and manipulation of the database.]

4.2. User Interface Design
[Snapshot of a project including validation with caption below]

4.3. Reports (if any)
[Snapshot of a project reports including input with caption below]
5. Testing
   5.1. Test cases
   5.2. Testing Reports including description

6. Future scope and further enhancement of the Project

7. Learning during Project Work, i.e. “Experience of Journey during Project Duration”

8. References
   [Enter the reference i.e. web, book or any other reference document taken for project development.]

**Guideline for Report Formatting:**
- Use A4 size page with 1" margin all sides.
- Header should include Project title and footer should contain page number and enrollment numbers.
- Chapter Name should be of Cambria font, 26 points, Bold.
- Main Heading should be of Cambria font, 16 points, Bold.
- Sub Heading should be of Cambria font, 12 points, Bold.
- Sub Heading of sub heading should be of Cambria font, 12 points, Bold, Italic.
- Paragraph should be of Cambria font, 12 points.
- Line spacing - 1.5 lines, before - 0, after - 0.
- No chapter number for references.
- Before chapter 1, give page number in roman letter (Title Page, Project Certification Form, Acknowledgements, Table of Contents/Index with page numbering, List of Tables, Figures, Schemes and Summary/abstract of the project work).

**Front Page Format:** Each project document must have front page as follows:
PROJECT

<<TITLE IN CAPITAL LETTERS>>

Submitted By,

<<Student’s Name (Enrollment Number)>>,

<<Student’s Name (Enrollment Number)>>

at

<<Company Name>>, <<city>>

Guided By,

<<Internal Guide Name>>

&

<<External Guide Name>>

for partial fulfillment of the requirements

for the Degree of 5 Years Integrated Master of Computer Applications

Shrimad Rajchandra Institute of Management and Computer Application,

Uka Tarsadia University.

April, 2019.
**Declaration Certificate:** Each project document must have declaration certificate page as follows:

**DECLARATION**

We hereby declare that the project titled “<<Project Title>>“ is fully implemented by us. It is neither paid nor copied. Even though, later on, in case of any infringement found for this project work, we are solely responsible for the same and understand that as per UGC norms, the University can revoke the degree conferred to us.

Student Name and Signature