COURSE TITLE	CC306 Software Development Project- 1
COURSE CODE	CC-306
COURSE CREDIT	5
Session Per Week	3
Total Teaching Hours	40 HOURS

AIM

This course provides an opportunity for students to apply the knowledge and skills acquired in the core courses to larger and more complex problems and to gain experience in working in teams.

LEARNING OUTCOMES

The student would be able to..

1. Students will be exposed to software development process by choosing a typical business/scientific/administrative/system application.
2. Define project scope, assess feasibility, and establish a project schedule.
3. Get some experience in working with a client organization.
4. Gain experience in working in a group for successfully developing the deliverables.

Mode of study: Half / One day off to work on the project in a week. (Atleast three hours must be allotted in weekly timetable for discussion/preparation of deliverables)

COURSE CONTENT

- ❖ Students are expected to work on the following during the semester.
  1. Doing System Analysis
  2. Preparing System Flow Diagram
  3. Developing Entity Relationship Diagram
  4. Developing Data Flow Diagram / UML Diagram
  5. Building Data Dictionary
- ❖ **Guidelines:**
  - ➢ Group size: 2 or 3 students
- ❖ **Where to look for Project?**
  - ➢ Government Organizations
  - ➢ Local Self Government (Municipalities, Panchayats, Urban Development Authorities etc.) or public / private bodies or NGOs.
  - ➢ Public Sector Organizations
  - ➢ Educational institutes

	➤ Trading/Business houses
	➤ Private Organizations
	➤ Software Consultancy companies (only if the project work seem to be original and beneficial)
	➤ A challenging in-house software project.
	➤ The location of the organization is immaterial. It can be
	   ▪ Local in the city
	   ▪ In the vicinity of the city
	➤ Mostly the work will have to be done at home or the institute.	

	❖ **Which Project to Avoid?**
	➤ The project of system study
	➤ Involves only modification in existing software, such as porting of software or few updates
	➤ Involves only data storage and retrieval without any processing.
	➤ Conventional small applications such as
	   ▪ Library Management
	   ▪ Examination (conduct or Results)
	   ▪ Educational Institute Management
	   ▪ Payroll
	   ▪ Accounting system or inventory
	   ▪ Human Resource
	Note: Students can take up any of the above only if the application would handle real volume and will have substantial complexities.	

	❖ **Preferred Projects:**
	➤ Will be such as that caters to Innovative areas/ideas
	➤ Use of emerging technology –
	   ▪ RFID
	   ▪ GPS
	   ▪ Biometrics
	   ▪ Bioinformatics, GIS etc.
	➤ Challenging uses of Communication and Internet
	➤ Scientific applications
	➤ Graphics applications
	➤ Systems software and utilities
	➤ Embedded software
	➤ o ERP modules	

	❖ **Preferred Tools:** ➤ Students should feel free to use the tools of their choice subject to permission of the organization. ➤ Working on any acceptable project would give good exposure to use of analytical tools, programming skills and development tools. Hence, any programming or development environment should be acceptable. ❖ **Deliverables by the students:** ➤ At the end of the semester, the student should be able	

	to work on the identified the project and submit the documentation (hard copy) and the presentation.	

	❖ Documentation:
	   ➢ A hard copy of the documentation should consist of the following:
	   ➢ Cover Page
	   ➢ Company Certificate
	   ➢ College Certificate
	   ➢ Acknowledgement
	   ➢ Index (with page nos.)
	   ➢ Organization / Company Profile
	   ➢ Project Profile
	      ▪ Existing System
	      ▪ Proposed System
	      ▪ Development Tools and Technology used
	   ➢ System Flow Diagram (if applicable)
	   ➢ UML Diagram/Data Flow Diagram *
	   ➢ Entity Relationship Diagram *
	   ➢ Data Dictionary/Table Design *
	
	In applications which uses database.
	❖ Presentation:
	   ➢ Presentations can be prepared through slides using any Open Source / PowerPoint /Flash or any other multimedia tool, covering the work shown in the documentation.
	   ➢ During viva examination, students will be expected to satisfactorily answer questions pertaining to the project profile, diagrams and tables/data dictionary prepared by them.	