B. P. PODDAR INSTITUTE OF MANAGEMENT & TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
LABORATORY NAME: DENNIS RITCHIE LAB(C104)
ACADEMIC YEAR: 2018-2019 ODD SEMESTER
LIST OF EXPERIMENTS

SOFTWARE ENGINEERING (CS791)

TOPIC (in Syllabus)	LIST OF EXPERIMENTS (Designed as per syllabus)	CO	PO/ PSO
Preparation of requirement document for standard application problems in **standard format**	Developing a System Requirements Specification Document (as per **IEEE SRS template**) for a simulated real life case study. This case study is used as a running example for other assignments successively.	CO1, CO5	PO1, PO2, PO4, PO9, PO10, PO12
	Developing a System design document focusing on data design using relational model approach. Students should study the case study and design ERD and appropriate table structures for the same	CO2, CO5	PO1, PO2, PO3, PO4, PO5, PO8, PO9, PO10, PO12
	Developing a Functional design document using SSAD paradigm of development. Students should study the case study and design DFD including decomposition till last level and development of specifications for a sample process of the case study	CO2, CO5	
Use Case diagram, Class diagram, Sequence diagram and prepare Software Design Document using tools like Rational Rose	Develop the Design Document using OOAD approach based on the same case study and draw Usecase, Activity, Class, Sequence diagrams using Microsoft Visio installed in the lab. Use of open source tools available online for free is encouraged .	CO2, CO5	
Project Schedule preparation	Project planning generating PERT charts & identifying critical path and activities using a tool MS Project	CO3, CO5	PO1, PO2, PO3, PO4, PO5, PO8, PO9, PO10, PO11, PO12
	Project planning using Gantt chart using a tool MS Project. Exploring options of resource allocation and resource usage views on the tool	CO3, CO5	
Estimation of project size using Function Point (FP) for calculation	Software estimation using Function Point metrics for a given problem and thereafter develop the same for a given case study.	CO3, CO5	
Compute Process and Product Metrics	Software estimation using size oriented metrics - COCOMO	CO3	
Design Test Script/Test Plan (both Black box and White Box approach)	Unit Testing using White box approach – Control Flow Graph, Cyclomatic complexity, Test paths	CO4, CO5	PO1, PO2, PO3, PO4, PO5, PO10, PO12
	Integration Testing based on structured chart	CO4, CO5	