

1	Name of Course/Module : SOFTWARE PROJECT MANAGEMENT						
2	Course Code: SPM 235						
3	Name(s) of academic staff:						
4	Rationale for the inclusion of the course /module in the programme: This module is to prepare students for undertaking large software projects. It introduces the students to the high-level strategies required for managing projects from their genesis to completion.						
5	Semester and Year offered: Year 2 Semester 3						
6	Course Hours	Face to Face				ILT	TSLT
		L	T	P	O		
	L=Lecture T=Tutorial P=Practical O=Others TSLT=Total student learning time	34	4	24	6	62	130
7	Credit Value: 3						
8	Prerequisite: Nil						
9	Course Learning Outcomes: On completion of this course students will be able to: <ul style="list-style-type: none">Describe the basic concepts and scope of software project management.Identify factors of risk, categorize and prioritize actions for eliminating risk.Analyse the approaches for managing and optimizing the software development process useful for leading a project.						
10	Transferable Skills: <ul style="list-style-type: none">Critical thinking and problem solving skillsLifelong learning and information managementLeadership skills						
11	Teaching –learning and assessment strategy <ul style="list-style-type: none">LecturesTutorials At the end of the programme, students are given an opportunity to evaluate the course and the lecturer.						
12	Synopsis: The course module is designed to prepare software project managers, novice or experienced, with project management skills needed to better manage software projects. It covers software life cycle process, software life cycle models, software estimation, project planning project monitoring & control.						
13	Mode of Delivery: Lectures, Tutorials, Practical.						



14	Assessments Methods and Types: Assignments 20% Mid Exam 20% Final Exam 50% Quiz 10% Total 100%							
15	Content Outline of the course/module and the SLT per topic							
	No	Subject description	Face to face				ILT	Total
			Lecture	Tutorial	Practical	Others		
	1	Course Overview Introduction to Software Project Management: <ul style="list-style-type: none">Importance of software project managementActivities methodologiesCategories of software projectsSetting objectivesManagement principlesManagement control	3	1	-	-	4	8
	2	Software Life Cycle Process (ISO/IEC 12207): <ul style="list-style-type: none">Software process and process modelsChoice of process models	2	1	-	-	3	6
	3.	Software Life Cycle Models: <ul style="list-style-type: none">Waterfall Model / Traditional ModelRapid Application DevelopmentAgile MethodsExtreme ProgrammingSCRUMCOCOMO Model	3	-	3	-	6	12
	4	Software Estimation: <ul style="list-style-type: none">Project schedulesActivitiesSequencing and scheduling	2	-	2	-	4	8



5.	Project Planning Project Monitoring & Control: <ul style="list-style-type: none"> Strategic program management Stepwise project planning A generic project model 	2	-	2	-	4	8
6.	Risk Management: <ul style="list-style-type: none"> Concepts of risks and risk management Risk management activities Network planning models Critical path methods Risk identification Assessment monitoring PERT Chart 	3	-	3	-	6	12
7.	Software Measurement	2	-	2	-	4	8
8.	Requirements Management	2	-	2	-	4	8
9.	Software Test Management Verification & Validation: <ul style="list-style-type: none"> Types of software testing Manual testing Automated testing Black box testing White box testing 	3	-	3	-	6	12
10.	Software Configuration Management (SCM): <ul style="list-style-type: none"> Centralized control team organization Decentralized control team organization Mixed control team organization 	3	1	-	-	4	8
11.	Problem Resolution: <ul style="list-style-type: none"> Project metrics Earned value analysis 	2	-	2	-	4	8



	12.	Software Quality Assurance (SQA): <ul style="list-style-type: none"> • Software qualities • Software quality standards - ISO standards for software organization • Comparison between ISO 9001 & SEI CMM 	3	-	3	-	6	12
	13.	Software Reviews: <ul style="list-style-type: none"> • Gantt charts • Automated tools 	2	-	2	-	4	8
	14.	Software Process Improvement: <ul style="list-style-type: none"> • Budgeting 	2	1	-	-	3	6
		Total	34	4	24	-	62	124
16.	Main references supporting the course: <ul style="list-style-type: none"> • Information Technology Project Management – Providing measurable organizational value by Jack T. Marchewka. 							

