



University of Colombo School of Computing

Module Descriptor

Master of Computer Science/Master of Science in Computer Science – 2025

Module Outline			
Course Code:	MCS4204		
Course Name:	Software Project management and Quality Assurance		
Number of Credits:	3	Semester:	4
Rubric:	Assignments:	40%	
	Final Exam:	60%	
Prerequisites:			
Mode of Delivery		Per Week	Total
	Lectures:	2 Hours	30 Hours
	Laboratory/Tutorial:	-	15 Hours

Course Description	
Goals	This course is designed to provide knowledge and skill in managing information technology projects. This course is mainly based on the ten project management knowledge areas presented in the internationally recognized Project Management Body of Knowledge. The first part of the course covers IT product development for those who are working (or intended to work) in software development organizations and the second part covers change management which includes social, economic, environmental, and political issues in deploying information systems. Various aspects of software quality attributes and means of achieving them, standards and frameworks are discussed in the last part of the course.
Learning Outcomes	Upon completion of this course, students will be able to do the following: LO1. Apply the ten general project management areas to IT related projects. LO2. Apply all five process groups--initiating, planning, executing,

	monitoring and controlling and closing in IT projects. LO3. Examine social, economic, environmental, and political issues in deploying IT projects and propose solutions to the identified issues. LO4. Appraise and select software tools for IT project management and software quality assurance.	
Assessment Plan	Individual in-class assignment(s) - 20%	LO1, LO2
	Individual Take Home Assignment(s) - 20%	LO3, LO4,
Learning Resources	<p>MOOC:</p> <ul style="list-style-type: none"> Software Product Management Specialization - https://www.coursera.org/specializations/product-management Learn to Program: Crafting Quality Code- https://www.coursera.org/learn/program-code Software Testing for developers: https://www.coursera.org/learn/codio-software-testing-for-developers <p>Text Books:</p> <ul style="list-style-type: none"> A Guide to the Project Management Body of Knowledge (<i>PMBOK® Guide</i>)—Fifth Edition (A new edition of the PMBOK® Guide will be released in Q3 2017.) Information Technology Project Management, Revised 7th Edition (ISBN-13: 978-1285847092 , ISBN-10: 1285847091) Software Quality Assurance: From Theory to Implementation 1st Edition (ISBN-13: 978-1285847092 , ISBN-10: 1285847091) Chapter 1-4 and Chapter 10 <p>Other Resources:</p> <ul style="list-style-type: none"> Sri Lanka Software Testing Board - http://www.sl-stb.org CSSL - Software Quality Assurance - https://www.cssl.lk/news/show/id/12 Training Course on Software Quality Assurance Using Test Automation Framework - http://ucsc.cmb.ac.lk/training-course-on-software-quality-assurance-using-test-automation-framework/ 	

Syllabus/Lesson Plan

Week	Topic(s)	Assignments**	Recommended Reading/Activity
1	Introduction to the course and information technology project management		Information Technology Project Management PMBOK, Chapter 1-2
2	Project Integration Management		Information Technology Project Management PMBOK
3	Project Scope Management		Information Technology Project Management PMBOK
4	Project Time Management	Assignment 1	Information Technology Project Management PMBOK
5	Project Cost Management		Information Technology Project Management PMBOK, Reflection on Online Software Project Management and Quality Assurance Course.
6	IT Project Quality Management - Part 1		Information Technology Project Management PMBOK
7	IT Project Quality Management - Part 2		Information Technology Project Management PMBOK

8	Project Communications Management		Information Technology Project Management PMBOK
9	Project Human Resource Management		Information Technology Project Management PMBOK
10	Project Procurement Management		Information Technology Project Management PMBOK
11	Project Risk Management	Assignment 2	Information Technology Project Management PMBOK
12	Financial Calculations for Project Appraisals		Information Technology Project Management PMBOK
13	Software Quality Assurance -Part 1		Software Quality Assurance: From Theory to Implementation
14	Software Quality Assurance -Part 2	Assignment 3	Software Quality Assurance: From Theory to Implementation
15	Software Quality Assurance -Part 3		Software Quality Assurance: From Theory to Implementation

**** All assignment reports submitted via LMS unless specified**

Course Administration			
Lecturer(s)in-charge	Dr. T.A. Weerasinghe, VL		
Telephone	0716890280	Email	taw@ucsc.cmb.ac.lk
Teaching Assistant(s)			
Telephone		Email	