DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (Regulation 2013)

COURSE OUTCOMES

R2013	HS6151 TECHNICAL ENGLISH - I	L	T	P	C
		3	1	0	4
CO 1	Speak clearly, confidently, comprehensibly, and communicate with one or many listeners using				
CO 2	Appropriate communicative strategies.				
CO 3	Write cohesively and coherently and flawlessly avoiding grammatical errors, using a wide				
CO 4	vocabulary range, organizing their ideas logically on a topic.				
CO 5	Read different genres of texts adopting various reading strategies.				

R2013	MA6151 MATHEMATICS - I	L	T	P	C
		3	1	0	4
CO 1	This course equips students to have basic knowledge and understanding in one fields of materials, integral and differential calculus.				

R2013	PH6151 ENGINEERING PHYSICS - I	L	T	P	C
		3	0	0	3
CO 1	The students will have knowledge on the basics of physics related to properties of matter, optics, acoustics etc., and they will apply these fundamental principles to solve practical problems related to materials used for engineering applications				

R2013	CY6151 ENGINEERING CHEMISTRY - I	L	T	P	C
		3	0	0	3
CO 1	The knowledge gained on polymer chemistry, thermodynamics. spectroscopy, phase rule and nano materials will provide a strong platform to understand the concepts on these subjects for further learning.				

R2013	GE6151 COMPUTER PROGRAMMING	L	T	P	C
		3	0	0	3
CO 1	Design C Programs for problems.				
CO 2	Write and execute C programs for simple applications				

R2013	GE6152 ENGINEERING GRAPHICS	L	T	P	C
		2	0	3	4
CO 1	Perform free hand sketching of basic geometrical constructions and multiple views of objects.				
CO 2	Do orthographic projection of lines and plane surfaces.				
CO 3	Draw projections and solids and development of surfaces				
CO 4	Prepare isometric and perspective sections of simple solids. ·				
CO 5	Demonstrate computer aided drafting.				

R2013	MA6351 TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATIONS	L	T	P	C
		3	1	0	4
CO 1	The understanding of the mathematical principles on transforms and partial differential equations would provide them the ability to formulate and solve some of the physical problems of engineering.				

R2013	CS6301 PROGRAMMING AND DATA STRUCTURES II	L	T	P	C
		3	0	0	3
CO 1	Design problem solutions using Object Oriented Techniques.				
CO 2	Apply the concepts of data abstraction, encapsulation and inheritance for problem solutions.				
CO 3	Critically analyse the various algorithms.				
CO 4	Apply the different data structures to problem solutions.				
CO 5	Use the control structures of C++ appropriately.				

R2013	CS6302 DATABASE MANAGEMENT SYSTEMS	L	T	P	C
		3	0	0	3
CO 1	Design Databases for applications.				
CO 2	Use the Relational model, ER diagrams.				
CO 3	Apply concurrency control and recovery mechanisms for practical problems.				
CO 4	Apply security concepts to databases.				
CO 5	Design the Query Processor and Transaction Processor.				

R2013	CS6303 COMPUTER ARCHITECTURE	L	T	P	C
		3	0	0	3
CO 1	Design arithmetic and logic unit.				
CO 2	Design and anlayse pipelined control units				
CO 3	Evaluate performance of memory systems.				
CO 4	Understand parallel processing architectures				

R2013	CS6401 OPERATING SYSTEMS	L	T	P	C
		3	0	0	3
CO 1	Design various Scheduling algorithms.				
CO 2	Apply the principles of concurrency.				
CO 3	Design deadlock, prevention and avoidance algorithms.				
CO 4	Compare and contrast various memory management schemes.				
CO 5	Design and Implement a prototype file systems.				
CO 6	Perform administrative tasks on Linux Servers.				

R2013	CS6402 DESIGN AND ANALYSIS OF ALGORITHMS	L	T	P	C
		3	0	0	3
CO 1	Design algorithms for various computing problems.				
CO 2	Analyze the time and space complexity of algorithms.				
CO 3	Critically analyze the different algorithm design techniques for a given problem.				
CO 4	Modify existing algorithms to improve efficiency.				

R2013	EC6504 MICROPROCESSOR AND MICROCONTROLLER	L	T	P	C
		3	0	0	3
CO 1	Design and implement programs on 8086 microprocessor.				
CO 2	Design Memory Interfacing circuits.				
CO 3	Design and implement 8051 microcontroller based systems.				
CO 4	Design I/O circuits.				

R2013	CS6403 SOFTWARE ENGINEERING	L	T	P	C
		3	0	0	3
CO 1	Identify the key activities in managing a software project.				
CO 2	Concepts of requirements engineering and Analysis Modeling.				
CO 3	Apply systematic procedure for software design and deployment.				
CO 4	Compare and contrast the various testing and maintenance.				
CO 5	Compare different process models.				

R2013	CS6504 COMPUTER GRAPHICS	L	T	P	C
		3	0	0	3
CO 1	Design two dimensional graphics.				
CO 2	Apply two dimensional transformations.				
CO 3	Design three dimensional graphics.				
CO 4	Apply three dimensional transformations.				
CO 5	Apply Illumination and color models.				
CO 6	Apply clipping techniques to graphics.				
CO 7	Design animation sequences.				

R2013	CS6601 DISTRIBUTED SYSTEMS	L	T	P	C
		3	0	0	3
CO 1	Discuss trends in Distributed Systems.				
CO 2	Apply network virtualization.				
CO 3	Apply remote method invocation and objects.				
CO 4	Design process and resource management systems				

R2013	IT6601 MOBILE COMPUTING	L	T	P	C
		3	0	0	3
CO 1	Explain the basics of mobile telecommunication system				
CO 2	Choose the required functionality at each layer for given application				
CO 3	Use simulator tools and design Ad hoc networks				
CO 4	Develop a mobile application.				
CO 5	Identify solution for each functionality at each layer				

R2013	CS6660 COMPILER DESIGN	L	T	P	C
		3	0	0	3
CO 1	Design and implement a prototype compiler.				
CO 2	Apply the various optimization techniques.				
CO 3	Use the different compiler construction tools.				

R2013	CS6703 GRID AND CLOUD COMPUTING	L	T	P	C
		3	0	0	3
CO 1	Apply grid computing techniques to solve large scale scientific problems.				
CO 2	Use the grid and cloud tool kits.				
CO 3	Apply the security models in the grid and the cloud environment.				
CO 4	Apply the concept of virtualization.				

R2013	CS6704 RESOURCE MANAGEMENT TECHNIQUES	L	T	P	C
		3	0	0	3
CO 1	Solve optimization problems using simplex method.				
CO 2	Apply integer programming and linear programming to solve real-life applications.				
CO 3	Use PERT and CPM for problems in project management				

| R2013	CS6801 MULTI-CORE ARCHITECTURES AND PROGRAMMING	L	T	P	C
		3	0	0	3
CO 1	Program Parallel Processors.				
CO 2	Develop programs using OpenMP and MPI.				
CO 3	Compare and contrast programming for serial processors and programming for parallel processors.				

R2013	CS6811 PROJECT WORK	L	T	P	C
		0	0	12	6
CO 1	On Completion of the project work students will be in a position to take up any challenging practical problems and find solution by formulating proper methodology.				

AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MAPPING OF COURSE OUTCOME WITH PROGRAM OUTCOMES (Batch 2014 - 2018)

2014-2018 batch   CO - PO Attainment Evaluation

Sl.Num	YEAR/SEMESTER	Semester	Course Code	SUBJECT NAME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	I Year	I Semester	HS6151	Technical English - I								2.9	2.9	2.9		2.9	2.9	2.8	2.8
2			MA6151	Mathematics - I	2.5	2.5	2.7						2.5				2.5	2.6	2.5
3			PH6151	Engineering Physics - I	2.7	2.6	2.9										2.5	2.7	2.8
4			CY6151	Engineering Chemistry - I	2.9	2.8	2.9										2.9	3	2.8
5			GE6151	Computer Programming	2.6	2.8	2.5					2.7	2.6	2.7		2.6	2.7	2.5	2.6
6			GE6152	Engineering Graphics	2.8	2.9	2.8					2.8	2.9	2.8		2.8	2.8	2.7	2.9
7			GE6161	Computer Practices Laboratory	3	3	2.8		2.9			2.9	2.8	2.8		3	3	2.9	2.8
8			GE6162	Engineering Practices Laboratory	3	2.7	3	2.9		3		2.9	3	3		3	3	2.8	3
9			GE6163	Physics and Chemistry Laboratory - I	2.9	3	3		3			2.8	3	3			3	2.9	3
10		II Semester	HS6251	Technical English - II		3	3					2.9	3	3		3	2.9	3	3
11			MA6251	Mathematics - II	2.5	2	2.6						2				2.5	2.4	2.2
12			PH6251	Engineering Physics - II	2.5	2.6	2.7										2.6	2.5	2.6
13			CY6251	Engineering Chemistry - II	2.4	2.5	2.6										2.3	2.3	2.5
14			CS6201	Digital Principles and System Design	2.4	2.3	2.4										2.2	2.4	2.3
15			CS6202	Programming and Data Structures I	2.1	2.2	2.2										2.1	2.2	2.4
16			GE6262	Physics and Chemistry Laboratory - II	3.0	3.0	2.8					3.0	3.0	3.0			3.0	2.8	3.0
17			CS6211	Digital Laboratory	3.0	3.0	3.0			3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0
18			CS6212	Programming and Data Structures Laboratory I	3.0	3.0	3.0					3.0	3.0	3.0		3.0	3.0	3.0	3.0
19	II Year	III Semester	MA6351	Transforms and Partial Differential Equations	2.2	2.0	2.0						2.0				1.9	2.1	2.0
20			CS6301	Programming and Data Structure II	2.5	2.7	2.7										2.8	2.8	2.7
21			CS6302	Database Management Systems	2.2	2.0	2.3										2.2	2.0	2.1
22			CS6303	Computer Architecture	2.5	2.7	2.6										2.4	2.5	2.6
23			CS6304	Analog and Digital Communication	2.6	2.5	2.4										2.4	2.6	2.5
24			GE6351	Environmental Science and Engineering	2.8	2.9	2.8				2.6	2.5	2.5			2.8	2.5	2.6	2.6
25			CS6311	Programming and Data Structure Laboratory II	3.0	3.0	3.0					3.0	3.0	3.0		3.0	3.0	3.0	3.0
26			CS6312	Database Management Systems Laboratory	3.0	3.0	3.0					2.8	2.9	2.8		3.0	2.9	2.8	2.9
27	II Year	IV Semester	MA6453	Probability and Queueing Theory	2.5	2.6	2.6		2.6				2.4	2.4		2.5	2.5	2.5	2.4
28			CS6551	Computer Networks	2.3	2.4	2.2										2.1	2.3	2.1
29			CS6401	Operating Systems	2.7	2.8	2.7										2.7	2.8	2.6
30			CS6402	Design and Analysis of Algorithms	2.5	2.4	2.4						2.5			2.4	2.4	2.3	2.5
31			EC6504	Microprocessor and Microcontroller	2.6	2.7	2.6							2.4		2.4	2.4	2.5	2.6
32			CS6403	Software Engineering	2.5	2.8	2.7		2.6	2.7		2.6	2.6	2.7		2.9	2.6	2.7	2.7
33			CS6411	Networks Laboratory	3.0	3.0	3.0					3.0	3.0	3.0		3.0	3.0	3.0	3.0

Mapping Of CO Vs PO

#	Sem	Code	Course															
34		CS6412	Microprocessor and Microcontroller Laboratory	3.0	3.0	3.0			3.0		3.0		3.0	3.0	3.0	3.0	3.0	3.0
35		CS6413	Operating Systems Laboratory	3.0	3.0	3.0			3.0		3.0		3.0	3.0	3.0	3.0	3.0	3.0
36		MA6566	Discrete Mathematics	2.7	2.5	2.6						2.5				2.5	2.4	2.6
37		CS6501	Internet Programming	2.6	2.4	2.4			2.4		2.1	2.5	2.5	2.2		2.4	2.6	2.4
38	V Semester	CS6502	Object Oriented Analysis and Design	2.9	2.8	2.9		2.8								2.8	2.8	2.7
39		CS6503	Theory of Computation	2.6	2.7	2.5				2.5		2.6				2.6	2.4	2.5
40		CS6504	Computer Graphics	2.9	2.8	2.9			3.0							2.8	2.7	2.8
41		CS6511	Case Tools Laboratory	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
42		CS6512	Internet Programming Laboratory	3.0	3.0	3.0	3.0					3.0	3.0	3.0	3.0	3.0	3.0	3.0
43	III Year	CS6513	Computer Graphics Laboratory	3.0	3.0	3.0			2.4		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
44		CS6601	Distributed Systems	2.7	2.5	2.6						3.0				2.4	2.5	2.5
45		IT6601	Mobile Computing	2.9	2.8	2.9			3.0							2.8	2.9	2.8
46		CS6660	Compiler Design	2.8	2.7	2.6			2.5		2.6	2.6	2.7		2.4	2.6	2.5	2.4
47		IT6502	Digital Signal Processing	2.6	2.5	2.6			3.0		3.0	3.0	3.0	3.0	3.0	2.5	2.6	2.6
48	VI Semester	CS6659	Artificial Intelligence	2.7	2.8	2.8										2.8	2.6	2.9
49		IT6702	Data mining	2.9	2.7	2.9										2.9	2.8	2.7
50		CS6611	Mobile Application Development Laboratory	3.0	3.0	3.0		3.0	3.0		3.0		2.9			3.0	3.0	3.0
51		CS6612	Compiler Laboratory	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0		3.0	3.0	3.0	3.0
52		GE6674	Communication and Soft Skills - Laboratory	3.0	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
53		CS6701	Cryptography and Network Security	2.4	2.4	2.5										2.5	2.3	2.4
54		CS6702	Graph Theory and Applications	2.7	2.6	2.8										2.7	2.5	2.8
55		CS6703	Grid and Cloud Computing	2.8	2.9	2.9	3.0				3.0	3.0	3.0	3.0	3.0	2.8	2.8	2.9
56	VII Semester	CS6704	Resource Management Techniques	2.6	2.7	2.8					3.0	3.0				2.8	2.5	2.8
57		CS6003	Ad-Hoc and Sensor Network	2.8	2.9	2.9										2.4	2.9	2.8
58		CS6007	Information Retrival	2.7	2.8	2.8										2.4	2.5	2.7
59		CS6711	Security Laboratory	3.0	3.0	3.0	3.0				3.0	3.0	3.0		3.0	3.0	3.0	3.0
60	IV Year	CS6712	Grid and Cloud Computing Laboratory	3.0	3.0	3.0		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
61		CS6801	Multi - Core Architectures and Programming	2.5	2.9	2.6										2.4	2.5	2.6
62		MG6088	Software Project Management	2.9	2.9	3.0										3.0	2.9	3.0
63	VIII Semester	CS6008	Human Computer Interaction	3.0	3.0	2.9	2.8									2.9	3.0	2.8
64		CS6811	Project Work	3.0	2.7	2.8	3.0	2.9	2.9	3.0	2.9	2.9	3.0	2.8	3.0	2.7	2.7	3.0
			Average	2.7	2.7	2.8	3.0	2.9	2.9	2.8	2.9	2.8	2.9	2.9	2.9	2.7	2.7	2.7
			Average Percentage	91.3	91.2	91.9	98.3	97.4	97.6	93.3	95.9	93.3	95.3	95.0	95.7	89.7	89.9	90.7
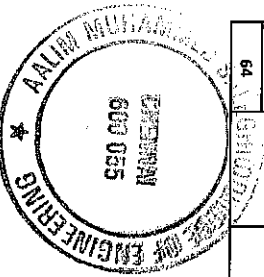
Contribution 1: Reasonable 2: Significant 3: Strong

6/8/18