

MINUTES

Name of the meeting: 16th Board of Studies Meeting
 of Computer Science and Engineering Department
 held on 13/12/2016, at 2:00 A.M./P.M. under the chairmanship of Sri. Dr. V. Srikanth
 at Room Number: C408, C-Block, KL University



K L University

u/s 8 of UGC Act, 1956
 Koneru Lakshmaiah Education Foundation

To
 The Dean - Academics
 K L University
 Vaddeswaram

Dear Sir,

**Sub: Minutes of the BOS meeting, Computer Science & Engineering Dept.
 held on 13-12-16 at C408 2:00 PM to 5:00 PM Reg.,**

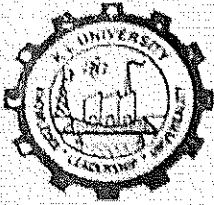
Enclosed, Please find B.Tech [CSE] - Program Curriculum & Syllabus approved by BOS for the following

- I. Minutes of the 16th BOS- CSE Meeting and Annexure for agenda items
 - a. Minutes of the DAC Meetings held on 10th November and 13th December.
 - i. Revised LTP, PBL(Project based lab) implementation, Evaluation criteria for B.Tech [CSE]- 2014-15 & 2015-16 Curriculum and Syllabus.
 - ii. Summarization of Changes In B.Tech CSE 2015 - 2016 Syllabus
 - b. Revised LTP for Professional Core Courses of B.Tech [CSE]-2015-16 and Revised PBL(Project based lab) implementation to Core Courses of B.Tech [CSE]-2014-15
 - c. Revised outcomes and Blooms taxonomy Levels of some courses for B.Tech [CSE]-2015-16.

Thanking You,

Yours sincerely

Dr.V.Srikanth
 Chairman BOS - CSE



K L University

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KARNATAKA LAKSHMIJAH EDUCATION FOUNDATION

Minutes of the BOS meeting, Computer Science & Engineering Dept. held on 13-12-2016 at C408, 2:00 PM to 5:00 PM.

The following agenda items are discussed and the resolutions passed are marked against them:-

S.No	Agenda Item	Resolution
1.	Confirmation of Previous Minutes of the DAC Meeting. a) Revised LTP, PBL(Project based lab) implementation, and Evaluation criteria for B.Tech [CSE]- 2014-15 & 2015-16 Curriculum and Syllabus. b) Summarization of Changes In B.Tech CSE 2015 - 2016 Syllabus.	Confirmed
B.Tech program		
2.	Revised LTP, PBL(Project based lab) implementation, and Evaluation criteria for B.Tech [CSE]- 2014-15 & 2015-16 Curriculum and Syllabus. Annexure - I	Approved
3.	Approved the Syllabus with revised outcomes and Blooms taxonomy Levels of some courses for B.Tech [CSE]-2015-16. Annexure - II, Annexure - III	Approved

1. Discussed the Previous Minutes of the DAC Meeting.
2. As some Professional Core Courses doesn't require lab component and project component, BOS Approved the Revised LTP for Professional Core Courses of B.Tech [CSE]-2015-16 and Revised PBL(Project based lab) component implementation to Core Courses of B.Tech [CSE]-2014-16. BOS also Approved the Evaluation criteria for B.Tech [CSE]-2015-16 Curriculum Refer Annexure - I
3. Approved the Syllabus with revised outcomes and Blooms taxonomy Levels of some courses for B.Tech [CSE]-2015-16. Annexure - II, Annexure - III

Consequent to these resolutions, the necessary changes shall be carried out in the course structure and framework and the same will be circulated within a week.

Dr. V. Srikanth
Chairman BOS - CSE

MINUTES

Name of the meeting: 16th Board of Studies Meeting
of: Computer Science and Engineering Department
held on: 13/12/2016, at 2:00 A.M./P.M. under the chairmanship of Sr. Dr. V. Srikanth
at: Room Number - C408, C-Block, K.L. University.



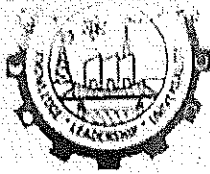
K L University

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BOS- MEMBERS
CSE DEPARTMENT

13/12/2016

S.No	Name	Designation	Signature
1.	Dr. V. SRIKANTH	Chairman	
2.	Dr. D.V.L.N. SOMAYAJULU	External Member	
3.	Mr. M. MUNI REDDY	External Member	
4.	Dr. L. S. S. REDDY	Member	
5.	Dr. V. CHANDRA PRAKASH	Member	
6.	Dr. G RAMAKRISHNA	Member	
7.	Dr. S. VENKATESWARLU	Member	
8.	Dr. K. SUBRAHMANYAM	Member	
9.	Dr. M. R. NARASING RAO	Member	
10.	Dr. B. VIJAYA BABU	Member	
11.	Dr. D. RAJESWARA RAO	Member	
12.	Dr. M.S.R PRASAD	Member	
13.	Dr. K. V. V. SATYANARAYANA	Member	
14.	Dr. K. THIRUPATHI RAO	Member	
15.	Dr. B. THIRUMALA RAO	Member	
16.	Dr. V. KRISHNA REDDY	Member	
17.	Dr. Y. PRASANTH	Member	
18.	Dr. K RAJASEKHAR	Member	

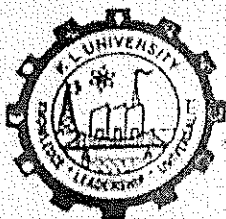


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13/12/2016

19.	Dr. P. SAI KIRAN	Member	
20.	Dr. G. SRIDEVI	Member	
21.	Dr. GANDHARBA SWAIN	Member	
22.	Dr. K. SUBBA RAO	Member	
23.	Dr. T. NARAYAN SANKAR	Member	
24.	Dr. M. SREEDEVI	Member	
25.	Dr. N. SRINIVASU	Member	
26.	Dr. C. M. SHEELA RANI	Member	
27.	Dr. P. RAJARAJESWARAI	Member	
28.	Dr. V. VIJAYARAJA	Member	
29.	Dr. M. NAGABHUSHANA RAO	Member	
30.	Dr. V. RAMA KRISHNA	Member	
31.	Dr. S. SATYANARAYANA	Member	
32.	Dr. G. KRISHNA MOHAN	Member	
33.	Dr. V. SUCHARITA	Member	
34.	Dr. K.V.DURGA KIRAN	Member	
35.	Dr. B. NAGA JAGADESH	Member	
36.	Dr. K. BHAGAVAN	Member	
37.	Dr. P. M. ASHOK KUMAR	Member	
38.	Dr. P. SELVA PERUMAL	Member	
39.	Dr. C. V. P. R. PRASAD	Member	
40.	Dr. M. NAGESWARA RAO	Member	
41.	Dr. J. AMUDHAVEL	Member	
42.	Mr. M. VISHNUVARDHAN	Member	
43.	Mrs. CH. RADHIKA RANI	Member	
44.	Mrs. V. DIVYA	Member	



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BOS- MEMBERS CSE DEPARTMENT

29th June, 2016

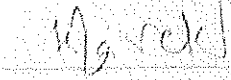
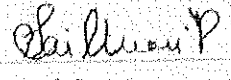
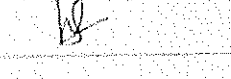
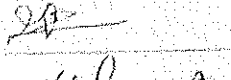




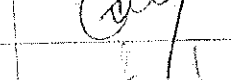

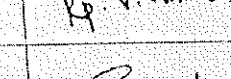

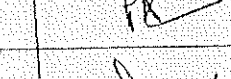



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1.	Dr.V. SRIKANTH	Chairman	
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5.	Dr.V.CHANDRA PRAKASH	Member	
6.	Dr. G RAMAKRISHNA	Member	
7.	Dr.S.VENKATESWARLU	Member	
8.	Dr. K. SUBRAHMANYAM	Member	
9.	Dr.M.R.NARASING RAO	Member	
10.	Dr.B.VIJAYA BABU	Member	
11.	Dr.D.RAJESWARA RAO	Member	
12.	Dr. M.S.R PRASAD	Member	
13.	Dr.K.V.V.SATYANARAYANA	Member	
14.	Dr.K.THIRUPATHI RAO	Member	
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16.	Dr.V.KRISHNA REDDY	Member	
17.	Dr.Y.PRASANTH	Member	

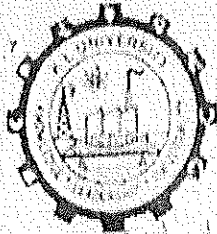


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29th June, 2016.

18.	Dr. K RAJASEKHAR	Member	
19.	Dr.P.SAI KIRAN	Member	
20.	Dr.G.SRIDEVI	Member	
21.	Dr.GANDHARBA SWAIN	Member	
22.	Dr.K.SUBBA RAO	Member	
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27.	Dr.C.M.SHEELA RANI	Member	
28.	Dr.A.V. KRISHNA PRASAD	Member	
29.	Dr. G. KRISHNA MOHAN	Member	
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32.	Mr.A.V.PRAVEEN KRISHNA	Member	
33.	Mrs.V.DIVYA	Member	

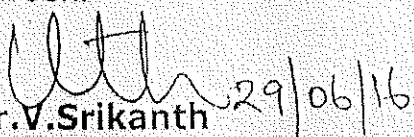


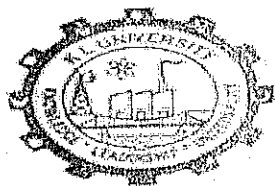
The following agenda items are discussed and the resolutions passed are marked against them:-

S.No	Agenda Item	Resolution
1.	Confirmation of Previous Minutes of Meeting on 26/6/16	Confirmed
B.Tech and M.Tech program		
2.	Revised Syllabus for C&DS of B.Tech [CSE]	Approved
3.	Revised Syllabus for Simulation and Modeling of B.Tech [CSE]	Approved
4.	Approved for new Syllabus for IOT of M.Tech	Approved

1. For 2015-16 regulations syllabus modification of C & DS into two halves, C & DS-1 and the syllabus up to the end of trees, C & DS-2 syllabus from stacks to hashing
2. For 2015-16 regulations syllabus modification of Simulation & Modeling
3. Introducing new M.Tech Programs from the academic year 2016-17: M.Tech – Internet of Things.

Consequent to these resolutions, the necessary changes shall be carried out in the course structure and framework and the same will be circulated within a week.


Dr. V. Srikanth 29/06/16
Chairman BOS - CSE
Dr. V. SRIVANTHI
Head of the Department
Computer Science and Engineering
KL UNIVERSITY
MADESWARAM-522-502, Guntur Dt.



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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Date:08-06-2016

Department Academic Committee Meeting

The following Agenda Items are discussed and the resolutions passed are marked against them.

Serial Number	Agenda Item	Resolution
1.	Proposed for the Confirmation of previous minutes of meeting.	Confirmed and to discuss in BOS.
2.	To discuss feedback obtained from various stake holders.	Confirmed and to discuss in BOS.
3.	To discuss on External Result Analysis.	Confirmed and to discuss in BOS.
4.	To discuss on the reccommendations sugested by course coordinators.	Confirmed and to discuss in BOS.
B.Tech and M.Tech Program		
5.	To discuss and revise syllabus for ADS and split it into C&DS1 and C&DS2 of B.Tech(CSE)	Confirmed. To comply with the OBE for B.Tech CSE and on the external result analysis, and course coordinator recommendations, the course syllabus is recommended for revision.
6.	To discuss and revise the syllabus for simulation and modelling of B.Tech(CSE)	Confirmed. To comply with the recommendations of stake holders and Prerequisite course coordinator.
7.	To discuss and revise the syllabus of B.Tech(CSE) 2016-2017 regulation in R16 Annexure(B.Tech)-I	Confirmed and to be discussed in BOS.
8.	To discuss and specify new syllabus for IOT of M.Tech	Confirmed.

Dr. G. Krishna Mohan

Alternate HOD

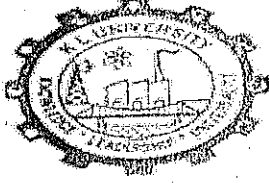
Computer Science & Engineering

Koneru Lakshmaiah Education Foundation

(Deemed to be University)

Guntur Hills, VADDESWARA-522 502

Guntur District, Andhra Pradesh.




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All programs for 2016-17 has been framed to be in relevance to APIIC, Human Resource Development Policy, Govt. of India, National Skill Development Corporation, Govt. of India, Confederation of Indian Industries, ABET, NBA norms, O*NET and AICTE statutory norms.

Thus, framed curriculum has been developed through framing of Program Educational Objectives (PEO's) which are mapped to the university Vision and Mission, which are there by disseminated into Student Outcomes (SO's) which thereby have been developed into relevant Course Outcomes (CO's).

The resolutions are forwarded to BOS committee, for the approval.


HOD-CSE

Dr. G. Krishna Mohan
Alternate HOD
Computer Science & Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, VADDESWARAM-522 502
Chittoor District, Andhra Pradesh.



K L University

(Koneru Lakshmaiah Education Foundation)

Deemed to be University, Estd. u/s 3 of UGC Act, 1956

Accredited by NAAC as 'A' Grade University Approved by AICTE - ISO 9001-2008 Certified
Campus: Greenfields, Vaddeswaram - 522502, Guntur District, Andhra Pradesh, INDIA.

Phone: +91-863-2399999 Fax: +91-863- 2388999

Admin Off: 29-36-28, Museum Road, Governorpet, Vijayawada - 520 002, Ph: +91-866-2577719, Fax: +91-866-2577717.

Department of Computer Science and Engineering

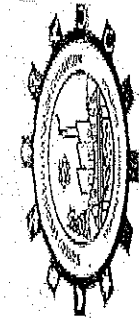
Alumni Feedback on Curriculum

Academic Year (2014-15) Sem 2

1. To include quality concepts in Software Testing course and reframe the course name accordingly.
2. Network Security related courses can be added in to the curriculum since need for forensics is required widely.
3. Course Emphasizing on the usage of Animation Tools can be included in to curriculum.
4. Automata courses must cover fundamentals of Natural Language processing.
5. Certificate course based on gaming to be introduced.
6. To include new course on Graph Analytics.
7. For C and DS, Advanced Data structures to be introduced to prepare students towards high end jobs and to enhance programming skills.
8. To change Compiler Design to Language and Compilers as Principles of Programming languages concepts and include Low level program compilation to high level program compilation process.
9. To modify Computer Networks course syllabus by including Python Network programming and NS3 concepts.
10. Big Data and IOT streams can be added newly in M.Tech programs.
11. A course on any foreign languages could be introduced for employability.
12. Research opportunities require courses like Automata and Soft computing in Post graduate program.


HOD-CSE

Dr. G. Krishna Mohan
Alternate HOD
Computer Science & Engineering
Koneru Lakshmaiah Education Foundation
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Green Fields, VADDESARAM - 522 502
Guntur District, Andhra Pradesh.



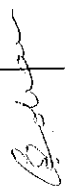
KONERU LAKSHMAIAH EDUCATION FOUNDATION
 (Deemed to be University estd. U/s. 3 of the UGC Act, 1956)
 (NAAC Accredited "A" Grade University)

Department of Computer Science Engineering
 R16 Annexure(B.Tech)-I

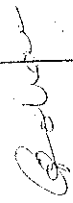
Sno	Course Code	Course Title	L-T-P	Credits	CO NO	Description of the Course Outcome	PS										Type	Rationale										
							a	b	c	d	e	f	g	h	i	j			k	l	o	2						
1	15 EN 1101	Rudiments of Communication Skills	2-0-0	2	CO 1	Remember speech sounds and apply stress and intonation rules to enhance pronunciation skills.														Retained from previous curriculum	Enhances Skills in communication which intum helps in achieving Employability							
2	15 EN 1202	Interpersonal Communication Skills	2-0-0	2	CO 1	Understand the method of identifying the meaning of words from the context and form sentences using words.														Retained from previous curriculum	Enhances Skills in communication which intum helps in achieving Employability							
3	15 EN 2103	Professional Communication Skills	0-0-4	2	CO 1	Understand the concept of Group Discussion and listen and speak effectively during the discussion.														Retained from previous curriculum	Enhances Skills in communication which intum helps in achieving Employability							

Dr. G. Krishna Mohan
 Head of Department
 Computer Science Engineering
 Koneru Lakshmaiah Education Foundation
 (Deemed to be University)
 Green Fields, VADESWARAM-522 501
 Guntur District, Andhra Pradesh

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale						
																			O	O								
4	15 EN 2204	Employability Skills	0-0-4	2	11	CO 3	Understand skimming & scanning, and apply the types of reasoning in comprehending the information.							3						1			Employability					
					12	CO 4	Understand the mechanics and application of presentation skills.				1													2				
					13	CO 1	Analyze one's own strength as a speaker/ Communicator and use discretion while listening.				2													1		Retained from previous curriculum	Enhances Skills in communication which inturn helps in achieving Employability	
					14	CO 2	Apply and analyze various concepts of writing strategies in professional communication skills like, reports, resume and minutes of the meeting.										3								2			
					15	CO 3	Understand the organization of the passage and also analyze the tone, attitude and style of the author.											2							1			
					16	CO 4	Acquire knowledge of and apply people skills in various social organizational and corporate ambiances.										2								1			
5	15 EN 3105	Verbal and Quantitative Reasoning	0-0-4	2	17	CO 1	Understand the method of identifying synonyms and antonyms and analyze the meaning of a word from the context.														1		Retained from previous curriculum	Enhances Skills in communication which inturn helps in achieving Employability				
					18	CO 2	Analyze issues and arguments in the process of critical reasoning and apply grammar rules to correct sentences.																		1			
					19	CO 3	Apply the Concepts of basic Algebra and their importance while solving the problems																			1		
					20	CO 4	Apply the short-cut methods on the concepts of different models in Calendars, Clocks, Blood relations and various types of arrangements.																			1		
					21	CO 1	Understand and analyze the depth of a topic and use the advanced levels in creative speaking and debating.																				1	


Dr. G. Krishna Mohan
 Alternate HOD
 Computer Science & Engineering
 Kuvempu University Education Foundation
 Mysuru (Planned to be University)
 GREENFIELD, MADHESWARANPETA SE
 GURUPURAM, ANCHALU, ANCHALU DISTRICT, KARNATAKA

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale							
																			O	O									
7	15 EN 3206	Corporate Communication Skills	0-0-4	2	22	CO 2	Understand and analyze various strategies involved in writing an essay and apply various styles in writing.							2						1	2	Retained from previous curriculum	Enhances Skills in communication which in turn helps in achieving Employability						
						CO 3	Understand and analyze the given text critically and answer questions on critical reasoning based on the given information.												3								1		
						CO 4	Acquire knowledge on various employability skills & analyze a situation and develop adaptability.													3									2
						CO 5	Apply the Concepts of basic geometry and their importance while solving the problems.													2									3
						CO 1	Understand the importance of Environmental education and conservation of natural resources.													1									1
8	15 GN 1001	Ecology and Environment	2-0-0	2	CO 2	Understand the importance of ecosystems and biodiversity.																2	Retained from previous curriculum	Helps to understand the importance of Environment & Sustainability					
					CO 3	Apply the environmental science knowledge on solid waste management, disaster management and EIA process.																						1	
					CO 1	Understand and identify the basic aspiration of human beings											1											1	
9	15 GN 1002	Human Values	2-0-0	2	CO 2	Envisage the roadmap to fulfill the basic aspiration of human beings.																2	Retained from previous curriculum	Helps to understand the importance of Environment & Sustainability					
					CO 3	Analyze the profession and his role in this existence.																						2	
					CO-1	Formulate physical laws and relations mathematically in the form of first order differential equations and identify a method for solving and interpreting the results.																							1


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10	15 MT 1001	Single Variable Calculus and Matrix Algebra	2.2.2	4	33	CO-2	Formulate physical laws and relations mathematically in the form of second/higher order differential equations and identify a method for solving and interpreting the results.	1												2			Enhances the skills towards Mathematical foundations																																																																																																																																																																																								
																								34	CO-3	Provide solutions for Fourier series of periodic/non-periodic phenomenon in models involving differential equations.	1																																																																																																																																																																																				
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																																																																						36	CO-5	Verify the solution of problems through MATLAB.																																																																																																																																							
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																																																																																																																																											39	CO 3	Model the given phenomena as a partial differential equations of first and second orders																																																																		
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																																																																																																																																																																																									41	CO 5	Verify the solution of problems through MATLAB.																				
43	CO 2	Predict the relationship between two variables and construct the linear and non-linear regression lines for the given data	2																																																																																																																																																																																																												

Retained from previous curriculum

Dr. G. Trishna Mohan
 Associate HOD
 Enhances the skills towards Mathematical foundations
 Computer Skills towards Educational Foundation
 Koneru Lakshmaiah Education Foundation
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 Guntur District, Andhra Pradesh

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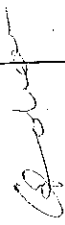
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2.2.2

Probability and Stochastic

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale						
																			1	2								
12	15 ME 1001	Models			44	CO 3	Model the Single and multi server markovian queuing models with finite and infinite capacity.												2	2		foundations						
						CO 4	Verify and validate the simulation models.																	2	2			
						CO 5	Verify the solution of problems through MATLAB/MINITAB.																			2	2	
						CO 1	Apply the concept of forces, governing static equations and analyze planer system of forces. Apply different analytical methods on spatial system of forces and analyzing them																			2	2	
						CO 2	Understanding the concepts of planar and non-planar system of parallel forces and analyzing them. estimate moment of inertia of lamina and material bodies																				2	2
13		Mechanics	2-2--2	4	49	CO 3	Analyzing the rigid bodies under translation and rotation with and without considering forces.														1		Retained from previous curriculum					
						CO 4	Understanding the engineering mechanics physical systems prepare and demonstrate the models with the help of mechanics concepts to solve the engineering problems																		1			
						CO 5	Apply the concepts of mechanics and carryout different experiments and analyze the results																			2		
						CO 1	Understand the concepts of crystallography and crystalline imperfections in order to determine crystal structures and to identify defects in crystals																			1		
						CO 2	Understand electrical and optical properties of materials and apply them to know various mechanisms involved in electrical, electronic, optical, optoelectronic devices.																			1		



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 Andhra Pradesh

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale							
																			O	O									
14	15 PH 1001	Engineering Materials	2-2--2	4	54	CO 3	Understand mechanical and thermal properties of materials and apprehend their importance in identification of materials for specific engineering applications	1												1		Retained from previous curriculum	Enhances the skills in Engineering Foundational Concepts						
						CO 4	Understand magnetic properties of materials and apply them to know various mechanisms involved in magnetic memory devices and transformers.	1																	1				
						CO 5	Understand various properties of materials and apply the knowledge to execute the related experiments to get hands on experience and also to develop some inter disciplinary projects.	1																			1		
						CO-1	Predict potential complications from combining various chemicals or metals in an engineering setting.	1																			1		
						CO-2	Discuss fundamental aspects of electrochemistry and materials science relevant to corrosion phenomena.	1																				1	
15	15 CY 1001	Engineering Chemistry	2-2--2	4	59	CO-3	Examine water quality and select appropriate purification technique for intended problem.	1															Retained from previous curriculum	Enhances the skills in Engineering Foundational Concepts					
						CO-4	Apply phase rule, polymers, conducting polymers and nano chemistry to engineering processes.	1																			1		
						CO-5	An ability to analyze & generate experimental skills.	1																				1	
						CO-1	Acquire the Knowledge of basic biology																					1	
						CO-2	Acquire the Knowledge of Human Biological Systems																						1
16	15 BT 1001	Biology for Engineers	2-0-0	2	64	CO-3	Acquire Knowledge on Microorganisms and Biosensors																Retained from previous curriculum	Enhances the skills in Engineering Foundational Concepts					
						CO-1	Acquire Knowledge of basic biology																				1		
						CO-2	Acquire the Knowledge of Human Biological Systems																					1	
					65	CO-1	Understand the basic principles of engineering design.																						

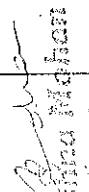
Dr. G. A. Viswanath
 Engineering Education
 Foundation
 Hyderabad
 Computer Science & Engineering
 Department
 J. V. N. Engineering College
 Guntur District, Andhra Pradesh.

Retained from previous curriculum
 (Decided to be University Curriculum)
 /ADDESWARAM-512-50
 Guntur District, Andhra Pradesh.

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale								
																			O	2										
17	15 GN 1004	Introduction to Engineering	2-0-2	3	66	CO-2	Understand the aspects of critical thinking and problem solving in engineering								2						2		Enhances to know the foundations of Engineering and helps to achieve employability							
							Apply to knowledge of critical thinking to frame real-world problems and provide basic solution approach to such problems from engineering perspective																				2			
							Understand and analyze the possible career options in Engineering and develop strategic plan, career targets and mechanism to achieve the same.																						3	
							Draft orthographic Projections, Isometric views, projection of planes, Manually and prepare Models in workshop by using drawings.																						2	Retained from previous curriculum
							Draft orthographic projections, isometric views, projection of solid and sections of solid Manually																						2	
18	15 ME 1002	Engineering Graphics	0-0-6	3	70	CO-2	Practicing house wiring through Auto Cad																Enhances the foundational engineering skills							
							Develop 2D & 3D components using Auto Cad Software																				2			
							Understand and apply the fundamentals of a measurement system, characteristics, and metrology using simulation and experimentation tools.																						2	
							Understand various electrical & computer parameters, and apply different measuring techniques on various electrical parameters using simulation and experimentation tools.																							2


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Sno	Course Code	Course Title	L-T-P	Credits	SNO	NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale									
																			O	O											
19	15 GN 1003	Measurements	0-0-4	2	77	CO-3	Understand electronic & electro-physical parameters, and apply measuring techniques on electronic parameters using simulation and experimentation tools.	2	2											2		Enhances the foundational engineering skills									
20	15 EC 2002	Signal Analysis	2-2--2	4	80	CO 1	Demonstrate signals and their Spectra	2	2												2	Course Removed	Enhances the Common Engineering Skills								
21	15GN2205	Coding Skills-1	0-0-4	2	85	CO1	Apply the concepts of basic programming to solve the basic problems, pattern based problems	3													3	Retained from previous curriculum	Enhances the coding skill								
21	15GN2205	Coding Skills-1	0-0-4	2	86	CO2	Build solutions for problems on Numbers and array based problems, functions, recursion	3													3	Retained from previous curriculum	Enhances the coding skill								
21	15GN2205	Coding Skills-1	0-0-4	2	87	CO-3	Solve problems solutions for character/string based problems and pointers	3													3	Retained from previous curriculum	Enhances the coding skill								
21	15GN2205	Coding Skills-1	0-0-4	2	88	CO-4	Build solutions to programs on Data structures concepts	3													3	Retained from previous curriculum	Enhances the coding skill								
21	15GN2205	Coding Skills-1	0-0-4	2	89	CO1	Understand measures of efficiency to algorithms, different sorting techniques and the operations of linked lists and various height balanced trees.	1													3	Retained from previous curriculum	Enhances the coding skill								
21	15GN2205	Coding Skills-1	0-0-4	2	90	CO2	Analyze algorithms and operations of non-linear data structure Graphs.	2													3	Retained from previous curriculum	Enhances the coding skill								


 Dr. G. Kirishna Mahant
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 VADDESWARAM-522

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale												
																			O	O														
22	15CS2104	Advanced Data Structures	2-2-2	4	91	CO3	Demonstrates the ability to organize and represent complex data using Advanced Tree Data Structures for a common practical application.	2				2									3		Enhances the coding skills											
								2																	3									
								3																										
								2																										
								3																										
23	15CS1001	C Programming & Data Structures	2-4-2	5	94	CO1	Illustrates how problems are solved using computers and programming.	2													3		Retained from previous curriculum	Enhances the opportunity in employment										
								2																										
								2																										
								2																										
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								2																										
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								2																										
23	15 CS 2208	Computer Networks	2-2-2	4	99	CO1	Understand OSI and TCP/IP Models and basics of physical layer and their issues	1													2		Retained from previous curriculum	Basic principles of networking is taught for skill development										
								2																										
								2																										
								2																										
23	15 CS 2208	Computer Networks	2-2-2	4	101	CO3	Analyze and implement the algorithms of network and transport layers and concerned services	2																										
								3																										
23	15 CS 2208	Computer Networks	2-2-2	4	102	CO4	Evaluate and execute the concepts of TCP, UDP, and the application layer conceptions	3																										
								2																										

Dr. P. K. Venkatesh
Associate HOD

Sno	Course Code	Course Title	L-1-P	Credits	SNO	NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale										
																			O	O												
24	15CS2007	Data Base System	2-2--2	4	103	CO5	Demonstrate the basic concepts of protocols and their design including client/server models, connection oriented and connection-less models					2								2												
					104	CO1	Explain the advantages of DBMS, its Characteristics, Concepts and ER-Model.	1															3	Retained from previous curriculum								
					105	CO2	Demonstrate Relational Database using SQL detailing the role of Relational Algebra and Relational Calculus	2																3			coding and data retrieval used in application development is taught for employability and skill development					
					106	CO3	Illustrate the normal forms of Relational DBMS detailing the process of normalization.								2									3								
					107	CO4	Examine Transaction Management, Concurrency Control, File Organizations, Indexing, and Storing data.								2									3								
					108	CO5	Create and Access Data Base for given Applications						2											3								
					25	15 CS 2003	Discrete Mathematics	2-2--2	4	109	CO1	Apply the concept of sets, relations, functions and discrete structures, Count discrete event occurrences													2	Retained from previous curriculum						
										110	CO2	Apply Propositional logic and First order logic to solve	2														2			Skill Development by gaining knowledge regarding the foundational mathematics		
										111	CO3	Formulate and solve recurrence relations, Apply algebraic structures and lattices.																2				
										112	CO4	To identify the basic properties of graphs and trees and model simple applications																	2			
										113	CO5	Relate practical examples to the appropriate set, function																	2			
					26						The student will be able to understand Basic Concepts of OOP, apply the concepts of classes and objects through Java Language.	2				2								3	Retained from previous curriculum							


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Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale							
																			O	O									
27	15CS2002	Object Oriented Programming	2-2--2	4		CO2	The student will be able to apply the concepts of constructors, Overloading, parameter passing, access control, Inheritance.	2				2									3		Enhances the opportunity to achieve employment						
								2				2													3				
								2				2														3			
								2				2														3			
								2				2														3			
28	15CS2206	Operating Systems	2-2--2	4		CO1	Understand the basic concepts of operating system, OS structure and process concepts.	1				1									2	Retained from previous curriculum	Basic management of computer system taught for skill development						
								2				2														2			
								2				2															2		
								1				1					1											2	
																			3										2
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Dr. G. Krishna Mohan
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V. V. Krishna University

Slno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	PS										Type	Rationale													
								a	b	c	d	e	f	g	h	i	j			k	l	o	o									
29	15 CS 2105	Software Engineering	2-2--2	4		CO1	Comprehend software development life cycle and prepare SRS document															Retained from previous curriculum	Principles of software development taught for the better employability									
30	15 CS 3109	Theory of Computation	2-2--2	4		CO1	Understand formal machines, languages and computations																Retained from previous curriculum	System design concepts are taught for skill development								
31	15 CS 3110	Algorithm Design and Analysis	2-2--2	4		CO1	Analyze time and space complexity																	Retained from previous curriculum	Knowledge on fine tuning and design of algorithms for the requirement which enhances the skills in basic concepts of computer science							

Dr. S. Rishabh Kumar
Alternate HOD
Computer Science & Engineering
Education Found

Sno.	Course Code	Course Title	L-T-P	Credits	S NO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS O 1	PS O 2	Type	Rationale					
																							PS O 1	PS O 2			
32	15 CS 3112	Information Assurance & Security	2-2--2	4	143	CO1	Perform packet sniffing and analyze packets for vulnerabilities	2												2		Retained from previous curriculum	Skill Development in learning various Security techniques and tools				
						CO2	Identify system vulnerabilities of communication Protocols	2																	2		
						CO3	Design firewalls , Authentication Protocols		2																	2	
						CO4	Analyze encryption algorithms			2																2	
						CO5	Developing an application using public key encryption techniques which supports digital signing concepts				2															2	
33	15CS3111	Artificial Intelligence	2-2--2	4	148	CO1	Students will be able to apply PROLOG programming for the AI concepts					2								3		Retained from previous curriculum	Fundamental principles are taught of the upcoming technologies for Skill Development				
						CO2	Students will be able to relate methods for encoding Knowledge in computer systems	1																3			
						CO3	Students will be able to Interpret the Problems and search related to AI	1																	3		
						CO4	Students will be able to infer Slot-and-filler structures and architecture of neural networks as connectionist models	1																	3		
						CO5	Demonstrate the basic concepts of artificial intelligence in the Laboratory				2														3		
34	15 CS 4171	Machine Learning	3-0-0	3	153	CO1	Explain the differences among the styles of learning,supervised, reinforcement, unsupervised, inductive and deductive	2												2		Retained from previous curriculum	Enhances the understanding in upcoming technologies and benefits the student to improve the employability				
						CO2	Comprehend probabilistic methods for learning																	2			
						CO3	Understand Multivariate regression and Classification	2																	2		
						CO4	Understand rule based knowledge and Analyze clustering	2																	2		


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 Computer Science & Engineering
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Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale									
																			O	I											
35					157	CO1	Understand current and evolving Web languages for integrating media and user interaction in both front end and back end elements of a Web site					2								3		Retained from previous curriculum	All modern webbased development is taught for improving employability skills								
						CO2	Understand Java-Script functions and CSS				2														3						
						CO3	Understand game and industrial platforms				2															3					
						CO4	Understand, analyze and build dynamic and interactive web sites, Design and implementation of modern SOA and SOA-specific methodologies, technologies and standards																			3					
						CO5	Install and manage server software and Mobile programming tools.																				3				
36	15 CS 3214	Languages & Compilers	2-2--2	4	162	CO1	Analyzing the design issues involved in various constructs of programming languages, Design top-down and bottom-up parsers						2								2	Retained from previous curriculum	Useful for the skill development, good to design new languages								
						CO2	Develop syntax directed translation schemes, Design and implement LR parser																			2					
						CO3	Use formal grammars to specify the syntax of Languages																				2				
						CO4	Analyzing the methods and tools to define syntax and semantics of a languages																				2				
						CO5	Analyzing the methods and tools to define syntax and semantics of a languages																				2				
						CO1	Distinguish centralized computing and distributed computing and detailing formal model of a distributed message passing system and the complexity measures of message passing between systems presenting important abstractions for designing distributed programs																								
						CO1	Distinguish centralized computing and distributed computing and detailing formal model of a distributed message passing system and the complexity measures of message passing between systems presenting important abstractions for designing distributed programs																								
						CO1	Distinguish centralized computing and distributed computing and detailing formal model of a distributed message passing system and the complexity measures of message passing between systems presenting important abstractions for designing distributed programs																								
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						CO1	Distinguish centralized computing and distributed computing and detailing formal model of a distributed message passing system and the complexity measures of message passing between systems presenting important abstractions for designing distributed programs																								
37					167	CO1	Distinguish centralized computing and distributed computing and detailing formal model of a distributed message passing system and the complexity measures of message passing between systems presenting important abstractions for designing distributed programs	2												3	Retained from previous curriculum	Dr. O. Krishna Mohan Alternate HOD Computer Science & Engineering Acharya Education Founda									

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcomes	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale			
																			O	O					
					168	CO2	Identify the leader by coordinating among processors, elaborating formal models for shared memory system and memory requirement for solving mutual exclusion problem.	2				2											Basic principles of distributed software over networking environment is taught for skill development		
	15 CS 3215	Parallel & Distributed Computing	2-2--2	4	169	CO3	Utilize DSM model for inter process communication showing relationship between various types of shared objects and Identify clock synchronization problem applying tight bounds to synchronize clocks.	2				2													
					170	CO4	Examine the process of realizing reliable fault tolerance in distributed system reflecting the specific type of faulty behavior and illustrate simulation that makes Byzantine failures appear to be crash failures	2				2													
					171	CO5	Experiment with laboratory programs and develop a small project along with his/her team members.	2				2													
38					172	CO1	Design and analyze the existing routing protocols using NS	2																Retained from previous curriculum	Internet kind of protocols are taught for skill development
	15 CS 3251	TCP/IP Protocol Suite	3-0-0	3	173	CO2	Identify solution for each functionality at each layer	2																	
					174	CO3	Identify solution for each functionality at each layer	2																	
					175	CO4	Case Study: Simulation Of Network Protocols Using NS												2						
39					176	CO1	Discuss methodologies for analyzing networks of	2																Retained from previous curriculum	Installations of multiple networks and designing is taught for skill development
					177	CO2	Demonstrate knowledge of recent research in the area and exhibit technical writing and presentation skills.					2													Installation of multiple networks and designing is taught for skill development
	15 CS 4159	Network Architecture and Design	3-0-0	3	178	CO3	Explain the key concepts and algorithms in complex network analysis.	2																Retained from previous curriculum	Installation of multiple networks and designing is taught for skill development

Slno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale								
																			O	I										
40	15 CS 4160	Network Security	3-0-0	3	179	CO4	Apply a range of techniques for characterizing network structure.					2										3								
					180	CO1	Analysis and design of algorithms to implement secure protocols.	2																	2	Retained from previous curriculum				
					181	CO2	Discuss security properties and limitations of wired networks																			2				
					182	CO3	Describe the architecture for public and private key cryptography and how public key infrastructure (PKI) supports network security	2																		2		Security issued related to networked environment is practiced for skill development and employability		
41	15 CS 4161	Wireless communications and Networks	3-0-0	3	183	CO4	Describe common types of vulnerabilities and attacks in web applications, and defenses against them																2							
					184	CO1	Understand algorithm/protocols, environments and communication systems in mobile computing.	2																		2	Retained from previous curriculum			
					185	CO2	Evaluate the efficiency of modulation schemes and multiple access techniques.																			2				
					186	CO3	Analyze the performance of MAC, TCP protocols used for wired network and wireless networks.																			2			Principles of wireless systems are taught for skill	
42	15 CS 4162	Computer Forensics	3-0-0	3	187	CO4	Design and analyze the existing routing protocols for multi-hop wireless networks.	2															2							
					188	CO1	Discuss the security issues network layer and transport layer	2																		2	Retained from previous curriculum			
					189	CO2	Apply security principles in the application layer																				2			Principles of digital forensics are taught for skill development
					190	CO3	Apply their theoretical and practical knowledge in forensic computing, into the future and emerging technology	2																			2			
43	15 CS 4162	Computer Forensics	3-0-0	3	191	CO4	Use forensics tools, Analyze and validate forensics data																2							
					192	CO1	Determine the software measurement attributes and process metrics																			2	Retained from previous curriculum			

Sl. No	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale					
																			0	1			2				
	15 CS 3252	Software Metrics and Measurements	3-0-0	3	193	CO2	Plan and evaluate metrics for object oriented software projects	2													2		Software quality and effort estimation techniques are taught for skill development				
					194	CO3	Understand project monitoring and control Techniques																	2			
					195	CO4	Describe several process metrics for assessing and controlling a project. Assess the quality of a proposed metric.	2																	2		
					196	CO1	Design test cases suitable for a software development for different domains.	2																	2	Retained from previous curriculum	
44	15 CS 4163	Software Verification and Validation	3-0-0	3	197	CO2	Identify suitable tests to be carried out. Conduct an inspection or review of software source code for a small or medium sized software project.			2												2	Software validation and testing techniques are taught for skill development				
					198	CO3	Prepare test planning based on the document using automatic testing tools.	2																2			
					199	CO4	Document test plans and test cases designed			2															2		
					200	CO1	Analyze and combine design patterns to work together in software design.																		2	Retained from previous curriculum	
45	15 CS 4164	Software Architecture and Design Patterns	3-0-0	3	201	CO2	Refactor an existing software implementation to improve some aspect of its design			2												2	Software reusability patterns are taught for skill development				
					202	CO3	Discuss and select appropriate software architecture for a simple system suitable for a given scenario																	2			
					203	CO4	Implement the design patterns in an object oriented language.			2															2		
					204	CO1	Understand Requirements Specification & Management, Scope Management, Project	2																		2	Retained from previous curriculum
					205	CO2	Apply Software Project Effort and Cost Estimation																			2	Managing software projects

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Sno.	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS			Type	Rationale									
																			O	I	2											
47	15 CS 4165	Software Project Management	3-0-0	3	206	CO3	Apply the basic principles of risk management, Time Management, and Configuration Management in a variety of simple scenarios including a security situation.												2					and their risks, scheduling and budgeting are taught for skill development								
48	15 CS 3253	Enterprise Storage Systems	3-0-0	3	212	CO1	Understand storage systems	2																Retained from previous curriculum	Data storage systems and management is taught for skill development							
49	15 CS 4167	Parallel Algorithms	3-0-0	3	216	CO1	Understand Algorithms and sorting networks	2																Retained from previous curriculum	Concurrent algorithms are taught for the faster execution of program is taught for skill development							
50	15 CS 4168	Cloud Networking	3-0-0	3	220	CO1	Understand data center networking standards	2																Retained from previous curriculum	Networking concepts are linked with cloud environment usage is taught for skill development							

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 and Engineering
 for skill development
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Slno	Course Code	Course Title	L-T-P	Credits	S NO	U NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale						
																			O	O								
51	15 CS 4169	Cloud Computing	3-0-0	3	223	CO4	Understand software defined networking					2											development					
					224	CO1	Identify the appropriate cloud services for a given Application				2														Retained from previous curriculum	Basic fundamentals of cloud are taught for skill development		
					225	CO2	Analyze Cloud infrastructure including Google Cloud and Amazon Cloud.				2																	
					226	CO3	Analyze authentication, confidentiality and privacy issues in Cloud computing environment.				2																	
					227	CO4	Determine financial and technological implications for selecting cloud computing platforms				2																	
52	15 CS 4170	High Performance Computing	3-0-0	3	228	CO1	Analyze the performance of GPU memory hierarchy and MPI programming	2																Retained from previous curriculum	Latest libraries of parallel algorithms are taught for skill development			
					229	CO2	Develop parallel programs using OpenCL library and understand FPGA-Based Supercomputer						2															
					230	CO3	Develop mixed mode programs for Multicore, GPU and cluster optimization systems				2																	
					231	CO4	Generate parallel programs for matrix, graph and sorting problems using Cuda, OpenMP library				2																	
					232	CO1	Understand the working of neural networks to store and process information				2																Retained from previous curriculum	Genetic algorithms for problem solving is taught for skill development
53	15 CS 3254	Soft Computing	3-0-0	3	233	CO2	Build optimal classifiers using genetic algorithms					2																
					234	CO3	Apply ANN, RNN models and various soft computing frame works.						2															
					235	CO4	Understand Fuzzy Logic Systems and develop Fuzzy logic controllers				2																	
54																						Retained from previous curriculum	Retained from Alternate EOP					

Palva
 Krishna Mohan
 Retained from Alternate EOP
 Engineering Education Foundation
 Computer Science Education Foundation
 KOREJU Lakshmaiah Education Foundation
 (Deemed to be University)
 VADDESWARAM-525

Sno	Course Code	Course Title	L-T-P	Credits	SNO	C NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS	PS	PS	Type	Rationale							
																								1	2	0	0	0		
55	15 CS 4183	Big Data & Optimization	3-0-0	3	237	CO2	Understand issues related to R Representation					2										2	Achieving expertise in Bigdata Concepts							
					238	CO3	Apply population based search and develop query processing strategies					2														2				
					239	CO4	Understand applications like Travelling Salesman Problem	2																			2			
					240	CO1	Analyze the natural language text.	2																			2	Retained from previous curriculum		
56	15 CS 4172	Natural Language Processing	3-0-0	3	241	CO2	Identify the challenges of representing meaning and Generate natural language.					2											2	Principles of natural language principles are introduced for skill development						
					242	CO3	Identify the challenges of representing meaning and Generate natural language.	2																			2			
					243	CO4	Simulate, apply, or implement classic and stochastic algorithms for parsing natural language.								2													2		
					244	CO1	Understand Image representation and modeling	2																				1	Retained from previous curriculum	
					245	CO2	Apply image transformation methods								2														1	Computer graphics concepts at advanced level are taught for enhances the skills.
					246	CO3	Implement image processing algorithms	2																					1	
					247	CO4	Design of face detection and recognition algorithms								2															
248	CO1	Characterize and contrast the standard agent architectures.	2																				1	Retained from previous curriculum						
57	15 CS 4174	Multi Agent Systems	3-0-0	3	249	CO2	Create logical agents to do inference using first order logic.					2												1	Agent based software systems are taught for the better management of software for enhancing the skills					
					250	CO3	Demonstrate using appropriate examples how multi-agent systems support agent interaction	2																				1		
					251	CO4	Describe the primary paradigms used by learning agents								2														1	
					252	CO1	Contrast forward and backward rendering	2																					3	Retained from previous curriculum

Mr. *[Signature]*
 Alternate HOD
 Computer Science & Engineer
 Lakshmi Education Fou
 (Deemed to be University)
 Green Fields, VADESWARAM-52

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS O		Type	Rationale							
																			1	2									
59	15 CS 3255	2D/3D Graphics	3-0-0	3	253	CO2	Construct CSG models from simple primitives, such as cubes and quadric surfaces.	2													3	Retained from previous curriculum	Computer graphics concepts at advanced level are taught for skill development						
							254	CO3	Analyze affine and vector geometry	2																3			
							255	CO4	Understand Bezier and B-Spline Curves	2																		3	
							256	CO1	Describe the media communications and supporting devices commonly associated with multimedia information and systems	2																		3	
60	15 CS 4175	Multimedia Technologies	3-0-0	3	257	CO2	Demonstrate the use of content-based information analysis in a multimedia information system.	2														Retained from previous curriculum	Computer graphics concepts of multi media are taught for skill development						
							258	CO3	Critique multimedia presentations in terms of their appropriate use of audio, video, graphics, color, and other information presentation concepts with Quality of Service In Network Multimedia Systems	2																3			
							259	CO4	Implement a multimedia application using an authoring system and Middleware for Multimedia																2			3	
							260	CO1	Discuss the concepts of Game design and development.																				3
61	15 CS 4176	Game Graphics Programming	3-0-0	3	261	CO2	Design the processes, and use mechanics for game development. Create interactive Games.			2												Retained from previous curriculum	Computer graphics concepts like game design are taught for skill development						
							262	CO3	Explain the Core architectures of Game Programming.																			3	
							263	CO4	Use Game programming platforms, frame works and engines																				3
							264	CO1	Understand interpolation & Describe several approaches to using a computer as a means for interacting with and processing data																				

Dr. S. S. Srinivasan
 Head, Department of Computer Science and Engineering
 Anna University, Chennai
 Computer graphics concepts

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale										
																			O	O												
62	15 CS 4177	Visualization	3-0-0	3	265	CO2	Explain kinematic linkages and motion capture	2													3		at advanced level are taught for skill development									
							266	CO3	Understand modeling and animating human figures	2																3						
							267	CO4	Apply facial animation, behavioral animation													2						3				
							268	CO1	Design and implement a mobile application using OPENGL ES2.0, Phonegap HTML5 and JS	2																		3	Retained from previous curriculum			
63	15 CS 4178	Cross Platform Mobile Development	3-0-0	3	269	CO2	Design and develop mobile apps, using Android as development platform, with key focus on user			2													Portable devices based application is taught for skill development									
							270	CO3	Discuss the constraints that mobile platforms put on developers.	2																3						
							271	CO4	Discuss the performance vs. power tradeoff							2												3				
							272	CO1	Understand System dynamics models with interactions: competition, predator-prey models, spread of disease models	2																			2	Retained from previous curriculum		
64	15 CS 3256	Modeling and Simulation for Sciences	3-0-0	3	273	CO2	Apply Cellular automaton diffusion simulations: spreading of fire, formation of biofilms					2											Different modeling and simulation techniques are practised for the skill development									
							274	CO3	Understand Monte Carlo simulations	2																		2				
							275	CO4	Determine system dynamics projects throughout, such as modeling falling and skydiving, enzyme kinetics, the carbon cycle, economics and fishing.									2												2		
							276	CO1	Determine the convergence region for a finite difference method and Solve PDE.	2																				2	Retained from previous curriculum	
64	15 CS 4179	Scientific Computing and Visualization	3-0-0	3	277	CO2	Solve nonlinear differential equations by numerical methods.						2										Principles of computing techniques and algorithms are taught for skill development									
							278	CO3	To use iterative methods to solve systems of non-linear equations	2																			2			
							279	CO4	Understand volume Visualization, Optimization and Minimum Principles	2																					2	
																																2

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS			Type	Rationale					
																			O	K	O							
65	15 CS 4180	Parallel Computing	3-0-0	3	280	CO1	Describe the levels of parallelism including task, data, and event parallelism	2														Retained from previous curriculum	Concurrent algorithms are taught for the better utilization of CPU is taught for skill development					
						CO2	Understand Distributed Shared Memory Systems And Programming	2																				
						CO3	Apply standard numerical algorithms to solve ODEs and PDEs. Use computing systems to solve systems of equations		2																			
						CO4	Understand Mutex-Free Synchronization and The Transactional Memory Approach	2																				
66	15 CS 4181	Optimization and Game Theory	3-0-0	3	284	CO1	Determine the optimum solution to constrained and unconstrained.	2														Retained from previous curriculum	Principles of optimization techniques for game development in order to enhance the skills.					
						CO2	Determine average queue length and waiting times of queuing models.	2																				
						CO3	Determine optimum solution to transportation problem Using PERT/CPM	2																				
						CO4	Determine the integer solutions to Linear Programming Problems.														2							
67	15 CS 4182	Discrete Event Simulation	3-0-0	3	288	CO1	Discrete-Event Simulation Framework for modeling and simulation to a range of problem areas	2														Retained from previous curriculum	New Techniques are introduced to for the design of software systemd for skill development					
						CO2	Understand Activity-Based Modeling and Simulation	2																				
						CO3	Understand Activity-Based Modeling and Simulation	2																				
						CO4	Understand event graph modeling for simulation															2						
68	15 CS 4183	Big Data & Optimization	3-0-0	3	292	CO1	Understand issues related to R Representation	2													Retained from previous curriculum	Efficiency of system in big data						
						CO2	Understand issues related to R Representation																					
						CO3	Apply population based search and develop query processing strategies																					

Dr. G. Pradeep Kumar
 Efficiency of system in big data
 Achievement in big data
 Dr. G. Pradeep Kumar
 HOD
 Computer Applications & Engineering
 Kanneru Lakshmi Bai Skill Development University
 (Deemed to be University)
 Green Fields, VADGESWARAHILL-52

Sl. No.	Course Code	Course Title	L-T-P	Credits	S NO	NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS			Type	Rationale							
																			O	1	2									
69	15 CS 4185	Information Visualization & Graph Analytics	3-0-0	3	295	CO4	Understand applications like Travelling Salesman Problem	2																						
					300	CO1	Understand Fuzzy Logic Systems and develop Fuzzy logic controllers	2																			Retained from previous curriculum	Graph based analysis is taught for skill enhancement and to use at different application areas of computer science		
					301	CO2	Apply Extracting Salient Structures for data cleansing				2																			
					302	CO3	Analyze and evaluate Stats and Layout	2																						
					303	CO4	Analyze Point-and-Click: Graph Tools like NodeXL, Gephi, Cytoscape								2															
70	15 CS 4186	Data Science & Big Data Analytics	3-0-0	3	304	CO1	Understand big data challenges in different domains including social media, transportation, finance and medicine	2																		Retained from previous curriculum	Latest concepts like big data and its analysis is taught for employability and skill development			
					305	CO2	Analyze scalability and performance of relational model, SQL and emergent systems. Apply the statistical analysis methods.															2								
					306	CO3	Comprehend machine learning and algorithms for data analytics.	2																						
					307	CO4	Analyze Map-Reduce programming model for better optimization																	2						
71	15 CS 3257	Data Warehousing and Mining	3-0-0	3	308	CO1	Student should be able to Understand the necessity of data preprocessing in construction of data warehouse.	1																		Retained from previous curriculum	Working on tools of data warehousing increases the chances of employability			
					309	CO2	Student should be able to Analyze multidimensional data using OLAP tools to facilitate effective data mining.	2																						
					310	CO3	Student should be able to Apply the concepts of data analysis and clustering to postulate accurate classification model for a given problem.																							

Dr. G. Krishna Rao

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale							
																			O	O									
72	15 CS 30A6	FUNDAMENTALS OF DBMS	3-0-0	3	311	CO4	Student should be able to Recommend a methodology forming complex data types and detection of anomaly for the given Application.	3													3								
							312	CO1	Understand the fundamentals of database management systems including data models, database architectures, and database manipulations and be able to model ER-diagrams	2															2				
							313	CO2	Understand the theories and techniques in developing database applications and be able to write queries, functions and procedures with help of SQL			2															2		
							314	CO3	Understand the theories and techniques in developing database applications and be able to write queries, functions and procedures with help of SQL			2															2		
							315	CO1	Comprehend software development life cycle and prepare SRS document			2															2		
73	15 CS 30A7	FUNDAMENTALS OF SOFTWARE ENGINEERING	3-0-0	3	316	CO2	Apply software design and development techniques, understand software process improvement					2										2							
							317	CO3	Identify verification and validation methods in a software engineering project			2													2				
74	15 CS 30A8	FUNDAMENTALS OF INFORMATION TECHNOLOGY	3-0-0	3	318	CO1	Understand the architectural design of a computer and various basic concepts of operating systems and programming fundamentals		2													2							
							319	CO2	Analyze various software development methodologies and gain capability to design databases.					2													2		

Dr. C. Lakshmaiah
 Head
 Branch, Studies & Research
 in order to
 Attending HOD
 Computer Science & Engineering
 Computer Science Education Four
 (Presented to be University)
 Dr. C. VANDESVARAM-42

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale
																			0	1		
					320	CO3	Analyze various software development methodologies and gain capability to design databases.					2										employability skills
75	15 IE 3250	Term Paper	0-0-4	2	321	CO	To enhance Practical exposure towards solving complex engineering problems in order to achieve Research Exposure					2					2				Retained from previous curriculum	Enhances Practical exposure towards solving complex engineering problems in order to achieve employability
76	15 IE 4048	Practice School	0-0-16	8	322	CO	To enhance Practical exposure towards solving complex engineering problems in order to achieve Industrial Exposure				2	3					2				Retained from previous curriculum	Enhances Practical exposure towards solving complex engineering problems in order to achieve employability
77	15 IE 4049	Minor Project	0-0-4	2	323	CO	To enhance Practical exposure towards solving complex engineering problems in order to achieve Research and Industrial Exposure					2									Retained from previous curriculum	Enhances Practical exposure towards solving complex engineering problems in order to achieve employability
78	15 IE 4050	Major Project	0-0-16	8	324	CO	To enhance Practical exposure towards solving complex engineering problems in order to achieve Research and Industry Exposure				3	3									Retained from previous curriculum	Enhances Practical exposure towards solving complex engineering problems in order to achieve employability
79	FL	Foreign Language			325	CO	To improve Communication skills in Other Languages											3	3		Retained from previous curriculum	Enhances effective communication skills in order to achieve employability for

Sno	Course Code	Course Title	L-T-P	Credits	S NO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale			
																			O	O					
80	ME	Management Elective	3-0-0	3	326	CO	To enhance the Management Skills and to learn Professional Ethics						2							1	2	Retained from previous curriculum	Understand professional and ethical responsibility in order to achieve Management Skills		
81	15CS512	Computational Complexity	3-0-2	4	314	CO1	Advances in Computing deals with the theoretical foundations of information and computation and their implementation and application in computer systems	1						2								Retained from previous curriculum	Useful for the skill development, good to design new languages		
82	15CS513	Machine Intelligence	3-0-2	4	316	CO3	That continue to be of significant, lasting value in this rapidly expanding field.	2						2								Retained from previous curriculum	Enhances the understanding in upcoming technologies and benefits the student to improve the employability		
83					317	CO4	Software Environments for Distributed systems and clouds: Parallel and Distributed Programming Models	2						2								Retained from previous curriculum	To frame a mathematical		
					318	CO1	Explain the differences among the styles of learning: supervised, reinforcement, unsupervised, inductive and deductive	2					2								2				
					319	CO2	Comprehend probabilistic methods for learning						2								2				
					320	CO3	Understand Multivariate regression and Classification	2														2			
					321	CO4	Understand rule based knowledge and Analyze clustering	2														2			
					322	CO1	Evaluate mathematical expressions by using different types of operations on numbers.	1						1								Retained from previous curriculum	To frame a mathematical		
					323	CO2	Simplify expressions and solve equations & inequations.						2									Retained from previous curriculum	To frame a mathematical		

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	PS											Type	Rationale				
								a	b	c	d	e	f	g	h	i	j	k			l	o	o	
84	15CS514	Optimization Techniques	3-0-2	4	324	CO3	Apply different types of arithmetic expressions to solve given problems.								1								Retained from previous curriculum Useful for the skill development, good to design new languages	
					325	CO4	Apply methods, to find areas, volumes and use graphs to reduce non-linear to linear forms.											2						
	326	CO1	Understand the functionality and design the CPU functional units - control unit, registers, the arithmetic and logic unit, the instruction execution unit, and the interconnections among these components.																					
	327	CO2	Understand, analyze and design main, cache and virtual memory organizations.																					
	328	CO3	Understand, analyze and design different types of I/O transfer techniques																					
85	15CS515	Device Management	3-0-2	4	329	CO4	Understand the design issues of RISC and CISC CPUs and the design issues of pipeline architectures																	
					330	CO1	Analyzing the design issues involved in various constructs of programming languages. Design top-down and bottom-up parsers																	
	331	CO2	Develop syntax directed translation schemes, Design and implement LR parser																					
	332	CO3	Use formal grammars to specify the syntax of Languages																					
	333	CO4	Analyzing the methods and tools to define syntax and semantics of a languages																					
86	15CS516	Formal Methods	3-0-2	4	334	CO1	Examine the space and time complexities of basic algorithms																	
					335	CO2	Demonstrate Greedy and Dynamic programming methodology for solving optimization problems																	

Dr. G. Krishna Mohan
 Alternate HOD
 Retained from previous curriculum
 Computer Engineering
 Design Education Found
 University
 (Decided to be University Curriculum)

S.No	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale							
																			O	O									
	13OE456	Design and Analysis	3-0-2	4	336	CO3	Apply back tracking and branch and bound methodology for searching same state space trees					2								2			algorithms for the requirement for skill development						
							Identify the purpose of NP-hard, NP-complete hard graph problems and illustrate PRAM algorithms	1																2					
							Understand the basic concepts of operating system, OS structure and process concepts.	1									1								2				
							Apply the concepts Process Scheduling algorithms and Process Synchronization Problems.	2									2								2			Retained from previous curriculum	Basic management of computer system taught for skill development
87	13OE455	Principles of Operating Systems	3-0-2	4	340	CO3	Solve the concept of the Deadlock, Memory Management and Virtual Memory Concepts.	2				2								2									
							Demonstrate file system interface, structure, file allocation methods, free space management and threads.	1								1								2					
							Understand the overall compiler architecture and design of Lexical Analyzer									2									2				
							Construct the parser using the Yacc tool									2									2				
88	13OE457	Theory of Computations	3-0-2	4	344	CO3	Analyze Syntax directed definition and its translations schemes, intermediate code					2								2									
							Apply the code optimization and generation techniques in the development of a compiler.									2								2					
							Understand Algorithms and sorting networks	1	2																				
							Ability to design and analyze parallel algorithms	2																					
89	13OE458	Parallel Processing	3-0-2	4	348	CO3	Apply graph and search algorithms on sorting networks	1													2								
							Understand arithmetic and randomized computations	2	2																				
							Understand the overall compiler architecture and design of Lexical Analyzer									2													
							Construct the parser using the Yacc tool									2													

Sno	Course Code	Course Title	L-T-P	Credits	SNO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale					
																		O-1	O-2							
90	130E459	Data Analytics	3-0-2	4	350	CO1	Acquire the ability to identify potential sources of data and distinguish between quantitative and qualitative data	1					2								Retained from previous curriculum	This course helps in data analysis for cloud environment				
					351	CO2	Learn to identify and describe a variety of analysis tools that will assist in processing data.	2																		
					352	CO3	Demonstrate basic data analysis techniques and show how this analysis can contribute to a business' future growth	2																		
					353	CO4	Learn how to effectively communicate the results of your analysis.	2																		

[Signature]
HOD-CSE

Curriculum Review Committee
Date: _____
Page: _____



K L University

(Koneru Lakshmaiah Education Foundation)

Deemed to be University, Estd. u/s 3 of UCC Act, 1956

Accredited by NAAC as 'A' Grade University & Approved by AICTE & ISO 9001-2008 Certified

Campus: Greenfields, Vaddeswaram - 522502, Guntur District, Andhra Pradesh, INDIA.

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Department of Computer Science and Engineering

Alumni Feedback on Curriculum

Academic Year (2016-17) Sem 4

1. Network Theory and Signal analysis can be removed.
2. Tools for Simulation and modeling can be used.
3. Thermodynamics course can be removed.
4. Hectic syllabus structure for compiler design makes the subject tough for the students.


HOD-CSE

Dr. G. Krishna Mohan

Alternate HOD

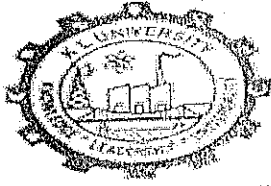
Computer Science & Engineering

Koneru Lakshmaiah Education Foundation

(Campus: Greenfields)

Green Fields, Vaddeswaram - 522502

Guntur District, Andhra Pradesh



K. L. University

U/S 2 of UGC Act, 1956
Koneru Lakshmaiah Education Foundation

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Date: 13-12-2016

Department Academic Committee Meeting

The following Agenda Items are discussed and the resolutions passed are marked against them.

The points discussed in the meeting are:

1. Dr. V.Srikanth, HOD- CSE department addressed the issue on which the meeting is to be conducted.
 - I. Discussion on summarizing the changes to contents, courses outcomes and Blooms taxonomy levels of B.Tech [CSE] 2015-2016 - Program curriculum & syllabus.
 - II. The members of the DAC did not recommend the syllabus change of course (15CS3216) Graphics and visualization and change of the title to the course (15CS4175) Multimedia Technologies.
 - III. DAC recommended the changes to only courses outcomes and Blooms taxonomy levels of B.Tech [CSE] 2015-2016 – Program Curriculum & Syllabus . Annexure I.
 - IV. To discuss and revise B.Tech(CSE) curriculum and Syllabus of 2016-2017 regulations in R16 Annexure(B.Tech)-I.

All programs for 2016-17 has been framed to be in relevance to APIIC, Human Resource Development Policy, Govt. of India, National Skill Development Corporation, Govt. of India, Confederation of Indian Industries, ABET, NBA norms, O*NET and AICTE statutory norms.

Thus framed curriculum has been developed through framing of Program Educational Objectives (PEO's) which are mapped to the university Vision and Mission, which are there by disseminated into Student Outcomes (SO's) which thereby have been developed into relevant Course Outcomes (CO's).

The resolutions are forwarded to BOS committee, for the approval.


HOD-CSE

Dr. G. Krishna Mohan

Alternate HOD

Computer Science & Engineering

Koneru Lakshmaiah Education Foundation
(Deemed to be University)

Green Fields, VADDESWAREM-522 502
Anantapur District, Andhra Pradesh.

KL UNIVERSITY

DEPARTMENT OF CSE

Industry personnel feedback on the curriculum

SUMMARY REPORT - A.Y. 2016-17

S No	Date	Feedback	Industry person	Industry
1	17-09-2016	Recommended that usage of tools should be improved and to be brought into the syllabus for software engineering course	Mr. K. Srinivas	Tech Mahindra
2	20-11-2016	Informed that it would be very difficult for the student to do projects for all courses, he recommended to have one project per one semester	Mr. Bhawmesh Gandhi	Mphasis
3	27-11-2016	Informed that it is over burden if the student has to do projects for all subjects suggested to allocate projects for more relevant courses	Mrs. Kavita	CTS



HOD-CSE

Mr. V. Srinivas
Head of the Department
Computer Science and Engineering
KL University
Vellore



K L University

(Koneru Lakshmaiah Education Foundation)

Estd. u/s 3 of UGC Act 1956

Green Fields, Vaddeswaram, (via) K.C. Works P.O. - 522 502, Guntur District, A.P.

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Constituent College KLCE Accredited by NAAC with CGPA 3.76/4.00

Approved by A.I.C.T.E ± Accredited by N.B.A.± ISO 9001-2000 Certified

CONSOLIDATED REPORT ON FEEDBACK GIVEN BY ACADEMIC PEERS

2016-17 (SEMESTER 2)

Sno	Date	Feedback	Resource person name
1	June 2017	<p>1. Providing wide variety of subject clusters is very much helpful to the students to master themselves in a domain of their interest.</p> <p>2. Introduction of design oriented approach in operating systems subject may help the students to get insight into the implementation of various functionalities of any operating system.</p> <p>3. In software engineering course it is better to introduce all the basic concepts of lifecycle so as to bring overall view of the software development process of the industry. (All the students irrespective of their elective need to study this)</p>	<p>Dr.M.Babu Reddy, Department of CSE, Krishna University, Krishna District.</p>
2	June 2017	<p>Include industry oriented subjects.</p>	<p>Dr.P.Radhika Prof.&Principal, Dept of CSE, Vignan Nirula Institute of Technology &Science for women, Guntur.</p>


HOD-CSE

Dr. E. Suresh Babu

Head of the Department
Computer Science and Engineering
K L UNIVERSITY
VADDESWARAM-522 502, A.P.



K L University

(Koneru Lakshmaiah Education Foundation)

Estd. u/s 3 of UGC Act 1956

Green Fields, Vaddeswaram, (via) K.C. Works P.O. - 522 502, Guntur District, A.P.

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CONSOLIDATED REPORT ON FEEDBACK GIVEN BY ACADEMIC PEERS

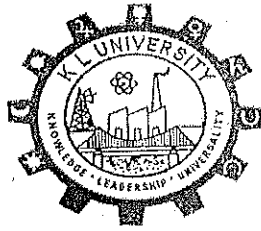
2016-17 (SEM 2)

	Excellent	Very Good	Good	Average	Total
Feed back(in %)	67	33	0	0	100

HOD-CSE

Dr. E.Suresh Babu

Dr. E. SURESH BABU
Head of the Department
Computer Science and Engineering
K L UNIVERSITY
VADDESWARAM-522502 (A.P.)



K L University

(Koneru Lakshmaiah Education Foundation)

Estd. u/s 3 of UGC Act 1956

Green Fields, Vaddeswaram, (via) K.C. Works P.O. - 522 502, Guntur District, A.P.

Phones: 08645-246948, 246615 ' FAX: 08645-247249, 0866-2577902

Constituent College KLCE Accredited by NAAC with CGPA 3.76/4.00

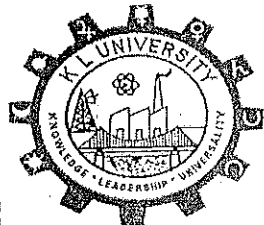
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CONSOLIDATED REPORT ON FEEDBACK GIVEN BY ACADEMIC PEERS

2016-17

Sno	Date	Feedback	Resource person name
1	March 2017	Existing Course Structure is Good.	Dr.Vivek S Deshpande Professor, Dept of IT, MIT Pune
2	March 2017	Existing Regulation Course Structure, Sequence of Courses are good.	Dr.G.RamaKoteswararao Profesor Dept of IT, V.R.Sidhartha Colg.of Engg, Kanuru, VJD.
3	March 2017	Existing Curriculum is Good.	Dr.Satyaprasad Professor of.CSE, Acharya Nagarjuna University.

Dr. V. SRIKANTH
Head of the Department
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K L UNIVERSITY
VADDESARAM P.O. 522 502, Guntur DI



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CONSOLIDATED REPORT ON FEEDBACK GIVEN BY ACADEMIC PEERS

2016-17

	Excellent	Very Good	Good	Average	Total
Feed back(in %)	0	32	68	0	100

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Department of Computer Science and Engineering

Alumni Feedback on Curriculum

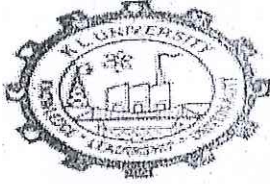
Academic Year (2016-17) Sem 2

1. Network Theory and Signal analysis can be removed.
2. Tools for Simulation and modelling can be used.
3. Thermodynamics course can be removed.

HOD-CSE

Dr. G. Krishna Mohan

Computer Science and Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green Fields, Vaddeswaram - 522 502
Guntur District, Andhra Pradesh.



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Date:08-06-2016

Department Academic Committee Meeting

The following Agenda Items are discussed and the resolutions passed are marked against them.

Serial Number	Agenda Item	Resolution
1.	Proposed for the Confirmation of previous minutes of meeting.	Confirmed and to discuss in BOS.
2.	To discuss feedback obtained from various stake holders.	Confirmed and to discuss in BOS.
3.	To discuss on External Result Analysis.	Confirmed and to discuss in BOS.
4.	To discuss on the recommendations suggested by course coordinators.	Confirmed and to discuss in BOS.
B.Tech and M.Tech Program		
5.	To discuss and revise syllabus for ADS and split it into C&DS1 and C&DS2 of B.Tech(CSE)	Confirmed. To comply with the OBE for B.Tech CSE and on the external result analysis, and course coordinator recommendations, the course syllabus is recommended for revision.
6.	To discuss and revise the syllabus for simulation and modelling of B.Tech(CSE)	Confirmed. To comply with the recommendations of stake holders and Prerequisite course coordinator.
7.	To discuss and revise the syllabus of B.Tech(CSE) 2016-2017 regulation in R16 Annexure(B.Tech)-I	Confirmed and to be discussed in BOS.
8.	To discuss and specify new syllabus for IOT of M.Tech	Confirmed.

Dr. G. Krishna Mohan

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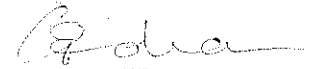
K L University

U/S 3 of UGC Act, 1956
Koneru Lakshmaiah Education Foundation

All programs for 2016-17 has been framed to be in relevance to APIIC, Human Resource Development Policy, Govt. of India, National Skill Development Corporation, Govt. of India, Confederation of Indian Industries, ABET, NBA norms, O*NET and AICTE statutory norms.

Thus, framed curriculum has been developed through framing of Program Educational Objectives (PEO's) which are mapped to the university Vision and Mission, which are there by disseminated into Student Outcomes (SO's) which thereby have been developed into relevant Course Outcomes (CO's).

The resolutions are forwarded to BOS committee, for the approval.


HOD-CSE

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Department of Computer Science and Engineering

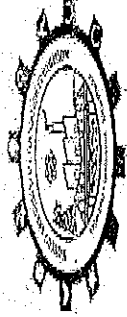
Alumni Feedback on Curriculum

Academic Year (2014-15) Sem 2

1. To include quality concepts in Software Testing course and reframe the course name accordingly.
2. Network Security related courses can be added in to the curriculum since need for forensics is required widely.
3. Course Emphasizing on the usage of Animation Tools can be included in to curriculum.
4. Automata courses must cover fundamentals of Natural Language processing.
5. Certificate course based on gaming to be introduced.
6. To include new course on Graph Analytics.
7. For C and DS, Advanced Data structures to be introduced to prepare students towards high end jobs and to enhance programming skills.
8. To change Compiler Design to Language and Compilers as Principles of Programming languages concepts and include Low level program compilation to high level program compilation process.
9. To modify Computer Networks course syllabus by including Python Network programming and NS3 concepts.
10. Big Data and IOT streams can be added newly in M.Tech programs.
11. A course on any foreign languages could be introduced for employability.
12. Research opportunities require courses like Automata and Soft computing in Post graduate program.


HOD-CSE

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Guntur District, Andhra Pradesh.




KONERU LAKSHMINARAYANA EDUCATION FOUNDATION
 (Deemed to be University 680, U.S. 3 of the USC Act, 1956)
 (NAAC Accredited "A" Grade University)

Department of Computer Science Engineering
 RI16 Annexure(B.Tech)-I


Sno	Course Code	Course Title	L-T-P	Credits	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale							
																		O	Q									
1	15 EN 1101	Fundamentals of Communication Skills	2-0-0	2	CO 1	Remember speech sounds and apply stress and intonation rules to enhance pronunciation skills.							1						1	1	Retained from previous curriculum	Enhances Skills in communication which inturn helps in achieving Employability						
2	15 EN 1202	Interpersonal Communication Skills	2-0-0	2	CO 1	Understand the method of identifying the meaning of words from the context and form sentences using words.							1						2	2	Retained from previous curriculum	Enhances Skills in communication which inturn helps in achieving Employability						
3	15 EN 2103	Professional Communication Skills	0-0-4	2	CO 1	Understand the concept of Group Discussion and listen and speak effectively during the discussion.							1					2	2	Retained from previous curriculum	Enhances Skills in communication which inturn helps in achieving Employability							

Dr. G. Krishna Mohan
 Enhances Skills
 Computer Science & Engineering
 Koneru Lakshminarayana Education Foundation
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 Green Fields, VADESWARAM-522 50
 Guntur District, Andhra Pradesh

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale				
																			O	O						
4	15 EN 2204	Employability Skills	0-0-4	2	11	CO 3	Understand skimming & scanning, and apply the types of reasoning in comprehending the information.							3						1		Employability				
					12	CO 4	Understand the mechanics and application of presentation skills.				1												2			
					13	CO 1	Analyze one's own strength as a speaker/ Communicator and use discretion while listening.										2							1		Retained from previous curriculum
					14	CO 2	Apply and analyze various concepts of writing strategies in professional communication skills like, reports, resume and minutes of the meeting.										3							2		
5	15 EN 3105	Verbal and Quantitative Reasoning	0-0-4	2	15	CO 3	Understand the organization of the passage and also analyze the tone, attitude and style of the author.								2						1	Retained from previous curriculum	Enhances Skills in communication which inturn helps in achieving Employability			
					16	CO 4	Acquire knowledge of and apply people skills in various social organizational and corporate ambiances.										2								1	
					17	CO 1	Understand the method of identifying synonyms and antonyms and analyze the meaning of a word from the context.																			1
					18	CO 2	Analyze issues and arguments in the process of critical reasoning and apply grammar rules to correct sentences.																			1
					19	CO 3	Apply the Concepts of basic Algebra and their importance while solving the problems																			1
					20	CO 4	Apply the short-cut methods on the concepts of different models in Calendars, Clocks, Blood relations and various types of arrangements.																			1
					21	CO 1	Understand and analyze the depth of a topic and use the advanced levels in creative speaking and debating.																			1
6																										


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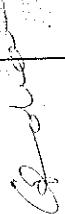
Sno	Course Code	Course Title	L-T-P	Credits	S NO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS	PS	Type	Rationale								
																							0	1	2					
7	15 EN 3206	Corporate Communication Skills	0-0-4	2	22	CO 2	Understand and analyze various strategies involved in writing an essay and apply various styles in writing.								2								Enhances Skills in communication which in turn helps in achieving Employability							
						CO 3	Understand and analyze the given text critically and answer questions on critical reasoning based on the given information.											3									1			
						CO 4	Acquire knowledge on various employability skills & analyze a situation and develop adaptability.													3									2	
						CO 5	Apply the Concepts of basic geometry and their importance while solving the problems.														2									3
						CO 1	Understand the importance of Environmental education and conservation of natural resources.													1										1
8	15 GN 1001	Ecology and Environment	2-0-0	2	27	CO 2	Understand the importance of ecosystems and biodiversity.										1						Helps to understand the importance of Environment & Sustainability							
					28	CO 3	Apply the environmental science knowledge on solid waste management, disaster management and EIA process.												2							1				
					29	CO 1	Understand and identify the basic aspiration of human beings											1										1		
9	15 GN 1002	Human Values	2-0-0	2	30	CO 2	Envisage the roadmap to fulfill the basic aspiration of human beings.															Helps to understand the importance of Environment & Sustainability								
					31	CO 3	Analyze the profession and his role in this existence.												2								2			
					32	CO-1	Formulate physical laws and relations mathematically in the form of first order differential equations and identify a method for solving and interpreting the results.																						1	


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Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale													
																			O	O															
10	15 MT 1001	Single Variable Calculus and Matrix Algebra	2.2.2	4	33	CO-2	Formulate physical laws and relations mathematically in the form of second/higher order differential equations and identify a method for solving and interpreting the results.	1												2		Enhances the skills towards Mathematical foundations													
								1																											
11	15 MT 1203	Multivariate Calculus	2.2.2	4	34	CO-3	Provide solutions for Fourier series of periodic/non-periodic phenomenon in models involving differential equations.	1														Retained from previous curriculum	Enhances the skills towards Mathematical foundations												
15 MT 2005	Probability and Stochastic	2.2.2	4	35	CO-4	Apply numeric solution methods for a system of linear algebraic equations and application oriented matrix eigenvalue problems.	1															Retained from previous curriculum	Enhances the skills towards Mathematical foundations												
15 MT 2005	Probability and Stochastic	2.2.2	4	36	CO-5	Verify the solution of problems through MATLAB.																													
15 MT 2005	Probability and Stochastic	2.2.2	4	37	CO 1	Determine the maximum and minimum values for the function involving two variables	2																												
15 MT 2005	Probability and Stochastic	2.2.2	4	38	CO 2	Calculate the length of the arc, area, volume of the surface of a solid revolution	2																												
15 MT 2005	Probability and Stochastic	2.2.2	4	39	CO 3	Model the given phenomena as a partial differential equations of first and second orders																													
15 MT 2005	Probability and Stochastic	2.2.2	4	40	CO 4	Solve the partial differential equations by analytical and finite difference methods	2																												
15 MT 2005	Probability and Stochastic	2.2.2	4	41	CO 5	Verify the solution of problems through MATLAB.																													
15 MT 2005	Probability and Stochastic	2.2.2	4	42	CO 1	Construct the probability distribution of a random variable, based on a real-world situation, and use it to compute expectation and variance	2																												
15 MT 2005	Probability and Stochastic	2.2.2	4	43	CO 2	Predict the relationship between two variables and construct the linear and non-linear regression lines for the given data																													

Dr. G. Ishra Molan
 Associate HOD
 who teaches the
 Computer Skills towards
 Mathematical Foundations
 (Keerthi Lalshimbara Education Foundation)
 (Deemed to be University)
 Green Fields, VADESWARAM-520 010
 Guntur District, Andhra Pradesh


Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS			Type	Rationale								
																			0	1	2										
12	15 ME 1001	Models				CO 3	Model the Single and multi server markovian queuing models with finite and infinite capacity.												2	2			Enhances the skills in Engineering Foundational Concepts								
							CO 4	Verify and validate the simulation models.																	2	2					
							CO 5	Verify the solution of problems through MATLAB/MINITAB.																		2	2				
							CO 1	Apply the concept of forces, governing static equations and analyze planer system of forces. Apply different analytical methods on spatial system of forces and analyzing them					2															2		Retained from previous curriculum	
							CO 2	Understanding the concepts of planar and non-planar system of parallel forces and analyzing them. estimate moment of inertia of lamina and material bodies					2																2		
13		Mechanics	2-2--2	4		CO 3	Analyzing the rigid bodies under translation and rotation with and without considering forces.					1												Retained from previous curriculum							
							CO 4	Understanding the engineering mechanics physical systems prepare and demonstrate the models with the help of mechanics concepts to solve the engineering problems								1												1			
							CO 5	Apply the concepts of mechanics and carryout different experiments and analyze the results					2																2		
							CO 1	Understand the-concepts of crystallography and crystalline imperfections in order to determine crystal structures and to identify defects in crystals																						1	
							CO 2	Understand electrical and optical properties of materials and apply them to know various mechanisms involved in electrical, electronic, optical, optoelectronic devices.																							1


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 Alternate HOD
 Computer Science & Engineering
 Education Foundation
 Koneru Lakshmaiah Education University
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 Green Fields, VADDESWARAM, G.

Sno	Course Code	Course Title	L-T-P	Credits	SNO	J NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale											
																			O	O													
14	15 PH 1001	Engineering Materials	2-2--2	4	54	CO 3	Understand mechanical and thermal properties of materials and apprehend their importance in identification of materials for specific engineering applications	1												1		Retained from previous curriculum	Enhances the skills in Engineering Foundational Concepts										
15	15 CY 1001	Engineering Chemistry	2-2--2	4	57	CO-1	Predict potential complications from combining various chemicals or metals in an engineering setting.	1													1	Retained from previous curriculum	Enhances the skills in Engineering Foundational Concepts										
16	15 BT 1001	Biology for Engineers	2-0-0	2	62	CO-1	Acquire the Knowledge of basic biology		1												1	Retained from previous curriculum	Enhances the skills in Engineering Foundational Concepts										

Dr. G. V. Srinivas Mohan
 Assistant Professor
 ARIUNITS HOD
 Science & Engineering
 Computer Education Foundat
 Retained from previous curriculum
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 Guntur District, Andhra Pradesh.

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale							
																			0	1									
17	15 GN 1004	Introduction to Engineering	2-0-2	3	66	CO-2	Understand the aspects of critical thinking and problem solving in engineering								2						2		Enhances to know the foundations of Engineering and helps to achieve employability						
							Apply to knowledge of critical thinking to frame real-world problems and provide basic solution approach to such problems from engineering perspective								2											2			
							Understand and analyze the possible career options in Engineering and develop strategic plan, career targets and mechanism to achieve the same.					3																	
							Draft orthographic Projections, Isometric views, projection of planes, Manually and prepare Models in workshop by using drawings.																			2			Retained from previous curriculum
18	15 ME 1002	Engineering Graphics	0-0-6	3	70	CO-2	Draft orthographic projections, isometric views, projection of solid and sections of solid Manually													2			Enhances the foundational engineering skills						
							71																	2					
					72	CO-3	Draft Development of surfaces of solid																	2					
					73	CO-4	Practicing house wiring through Auto Cad																	2					
					74	CO-5	Develop 2D & 3D components using Auto Cad Software							2															
					75	CO-1	Understand and apply the fundamentals of a measurement system, characteristics, and metrology using simulation and experimentation tools.							2												2		Retained from previous curriculum	
18	15 ME 1002	Engineering Graphics	0-0-6	3	76	CO-2	Understand various electrical & computer parameters, and apply different measuring techniques on various electrical parameters using simulation and experimentation tools.																Enhances the foundational engineering skills						
																										2			


 Dr. G. Krishna Mohan
 Alternate HOD
 Applied Engineering
 Computer Science & Engineering
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Sno	Course Code	Course Title	L-T-P	Credits	SNO	SNO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale											
																			1	2													
19	15 GN 1003	Measurements	0-0-4	2	77	CO-3	Understand electronic & electro-physiological parameters, and apply measuring techniques on electronic parameters using simulation and experimentation tools.	2	2											2		Enhances the foundational engineering skills											
20	15 EC 2002	Signal Analysis	2-2-2	4	80	CO 1	Demonstrate signals and their Spectra	2	2												2	Course Removed	Enhances the Common Engineering Skills										
21	15GN2205	Coding Skills-J	0-0-4	2	85	CO1	Apply the concepts of basic programming to solve the basic problems, pattern based problems	3													3	Retained from previous curriculum	Enhances the coding skill										
21					86	CO2	Build solutions for problems on Numbers and array based problems, functions, recursion	3													3	Retained from previous curriculum	Enhances the coding skill										
21					87	CO-3	Solve problems solutions for character/string based problems and pointers	3													3	Retained from previous curriculum	Enhances the coding skill										
21					88	CO-4	Build solutions to programs on Data structures concepts	3													3	Retained from previous curriculum	Enhances the coding skill										
21					89	CO1	Understand measures of efficiency to algorithms, different sorting techniques and the operations of linked lists and various height balanced trees.	1													1	Retained from previous curriculum	Enhances the coding skill										
21					90	CO2	Analyze algorithms and operations of non-linear data structure Graphs.	2													2	Retained from previous curriculum	Enhances the coding skill										


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Alternate HOD
Computer Science & Engineering
Koneru Lakshmaiah Education Foundation
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SRI SUDARSHAN VADDESWARAM-522

Sno.	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale						
																			O	O								
22	15CS2104	Advanced Data Structures	2-2-2	4	91	CO3	Demonstrate the ability to organize and represent complex data using Advanced Tree Data Structures for a common practical application.	2				2								3		Retained from previous curriculum	Enhances the coding skills					
							92	CO4	Analyze different hashing techniques and various heap organizations	2															3			
							93	CO5	The student will be able to understand and execute lab experiments and develop a small project along with his/her team members.	3							3										3	
							94	CO1	Illustrate how problems are solved using computers and programming.	2																	3	
							95	CO2	Interpret & Illustrate user defined C functions and different operations on list of data.	2																	3	
23	15CS1001	C Programming & Data Structures	2-4-2	5	96	CO3	Implement Linear Data Structures and compare them						2								3	Retained from previous curriculum	Enhances the opportunity in employment					
							97	CO4	Implement Linear Data Structures and compare them								2									3		
							98	CO5	Apply the knowledge obtained by the course to solve real world problems.																	2	3	
							99	CO1	Understand OSI and TCP/IP Models and basics of physical layer and their issues	1																	2	
							100	CO2	Demonstrate Data Link layer issues and medium access control sub layers concepts																			2
23	15 CS 2208	Computer Networks	2-2-2	4	101	CO3	Analyze and implement the algorithms of network and transport layers and concerned services													2	Retained from previous curriculum	Basic principles of networking is taught for skill development						
							102	CO4	Evaluate and execute the concepts of TCP, UDP and the application layer conceptions																2			
																									3			

Dr. D. K. ...
Associate HOD

Sno	Course Code	Course Title	L-T-P	Credits	SNO	NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale						
																			O	O								
24	15CS2007	Data Base System	2-2--2	4	103	CO5	Demonstrate the basic concepts of protocols and their design including client/server models, connection oriented and connection-less models					2								2								
					104	CO1	Explain the advantages of DBMS, its Characteristics, Concepts and ER-Model.	1															3	Retained from previous curriculum				
					105	CO2	Demonstrate Relational Database using SQL detailing the role of Relational Algebra and Relational Calculus	2																3			coding and data retrieval used in application development is taught for employability and skill development	
					106	CO3	Illustrate the normal forms of Relational DBMS detailing the process of normalization.								2									3				
					107	CO4	Examine Transaction Management, Concurrency Control, File Organizations, Indexing, and Storing data.								2									3				
					108	CO5	Create and Access Data Base for given Applications						2											3				
					109	CO1	Apply the concept of sets, relations, functions and discrete structures, Count discrete event occurrences																	2	Retained from previous curriculum			
					110	CO2	Apply Propositional logic and First order logic to solve						2											2				Skill Development by gaining knowledge regarding the foundational mathematics
25	15 CS 2003	Discrete Mathematics	2-2--2	4	111	CO3	Formulate and solve recurrence relations, Apply algebraic structures and lattices.													2								
					112	CO4	To identify the basic properties of graphs and trees and model simple applications															2						
					113	CO5	Relate practical examples to the appropriate set, function																2					
26						The student will be able to understand Basic Concepts of OOP, apply the concepts of classes and objects through Java Language.	2				2							3	Retained from previous curriculum			Dr. O. Krishna Mohan Alternate HOD						

Sno.	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale									
																			O	P											
27	15CS2002	Object Oriented Programming	2-2--2	4	115	CO2	The student will be able to apply the concepts of constructors, Overloading, parameter passing, access control, Inheritance.	2				2									3		Enhances the opportunity to achieve employment								
								116	CO3	The student will be able to apply Packages, Interfaces, Exception Handling.	2															3					
								117	CO4	The student will be able to apply I/O Streams and understand Basic Concepts of Multi - Threading	2							2											3		
								118	CO5	Students will be able to develop programs and projects in java.	2							2												3	
								119	CO1	Understand the basic concepts of operating system, OS structure and process concepts.	1							1												2	
120	CO2	Apply the concepts Process Scheduling algorithms and Process Synchronization Problems.	2							2											2										
121	CO3	Solve the concept of the Deadlock, Memory Management and Virtual Memory Concepts.	2							2											2										
122	CO4	Demonstrate file system interface, structure, file allocation methods, free space management and threads.	1							1											2										
123	CO5	Create and develop a project along with his/her team members.									3										2										
28	15GN3205	Coding Skills-2	0-0-4	2	124	CO1	Apply the concepts of basic programming to solve the basic problems, pattern based problems	3				3									3	Introduced newly	Enhances the coding skill								
								125	CO2	Build solutions for problems on Numbers and array based problems, functions, recursion	3																3				
								126	CO3	Solve problems solutions for character/string based problems and pointers	3							3												3	
								127	CO4	Build solutions to programs on Data structures concepts	3							3													3


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Sl. No.	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS	OS	Type	Rationale				
																							1	2		
29	15 CS 2105	Software Engineering	2-2--2	4			Comprehend software development life cycle and prepare SRS document				2									3	Retained from previous curriculum	Principles of software development taught for the better employability				
																							CO1	2	3	
																							CO2	2	3	
																							CO3		2	3
																							CO4	2	3	
CO5		2	3																							
30	15 CS 3109	Theory of Computation	2-2--2	4			Understand formal machines, languages and computations	2												2	Retained from previous curriculum	System design concepts are taught for skill development				
																							CO1		2	
																							CO2	2	2	
																							CO3		2	
																							CO4		2	
CO5		2																								
31	15 CS 3110	Algorithm Design and Analysis	2-2--2	4			Analyze time and space complexity				2									3	Retained from previous curriculum	Knowledge on Fine tuning and design of algorithms for the requirement which enhances the skills in basic concepts of computer science				
																							CO1		3	
																							CO2		3	
																							CO3		3	
																							CO4		3	
CO5		3																								

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Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale								
																			O	I										
32	15 CS 3112	Information Assurance & Security	2-2--2	4	143	CO1	Perform packet sniffing and analyze packets for vulnerabilities	2												2		Retained from previous curriculum	Skill Development in learning various Security techniques and tools							
						CO2	Identify system vulnerabilities of communication Protocols	2																2						
						CO3	Design firewalls, Authentication Protocols		2																					
						CO4	Analyze encryption algorithms			2																				
						CO5	Developing an application using public key encryption techniques which supports digital signing concepts				2																			
33	15CS3111	Artificial Intelligence	2-2--2	4	148	CO1	Students will be able to apply PROLOG programming for the AI concepts				2									3		Retained from previous curriculum	Fundamental principles are taught of the upcoming technologies for Skill Development							
						CO2	Students will be able to relate methods for encoding Knowledge in computer systems	1																						
						CO3	Students will be able to Interpret the Problems and search related to AI	1																						
						CO4	Students will be able to infer Slot-and-filler structures and architecture of neural networks as connectionist models	1																						
						CO5	Demonstrate the basic concepts of artificial intelligence in the Laboratory				2																			
34	15 CS 4171	Machine Learning	3-0-0	3	153	CO1	Explain the differences among the styles of learning: supervised, reinforcement, unsupervised, inductive and deductive	2														Retained from previous curriculum	Enhances the understanding in upcoming technologies and benefits the student to improve the employability							
						CO2	Comprehend probabilistic methods for learning				2																			
						CO3	Understand Multivariate regression and Classification	2																						
						CO4	Understand rule based knowledge and Analyze clustering	2																						

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Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS	PS	PS	Type	Rationale						
																								O	O	O			
35	15 CS 3113	Platform based development	2-2--2	4	157	CO1	Understand current and evolving Web languages for integrating media and user interaction in both front end and back end elements of a Web site					2											Retained from previous curriculum	All modern webbased development is taught for improving employability skills					
						CO2	Understand Java-Script functions and CSS				2																		
						CO3	Understand game and industrial platforms				2																		
						CO4	Understand,analyze and build dynamic and interactive web sites,Design and implementation of modern SOA and SOA-specific methodologies,technologies and standards																		3	3			
						CO5	Install and manage server software and Mobile programming tools.																		3	3			
36	15 CS 3214	Languages & Compilers	2-2--2	4	162	CO1	Analyzing the design issues involved in various constructs of programming languages, Design top-down and bottom-up parsers					2											Retained from previous curriculum	Useful for the skill development, good to design new languages					
						CO2	Develop syntax directed translation schemes, Design and implement LR parser				2																		
						CO3	Use formal grammars to specify the syntax of Languages				2																		
						CO4	Analyzing the methods and tools to define syntax and semantics of a languages																		2	2			
						CO5	Analyzing the methods and tools to define syntax and semantics of a languages																		2	2			
						CO1	Distinguish centralized computing and distributed computing detailing formal model of a distributed message passing system and the complexity measures of message passing between systems presenting important abstractions for designing distributed programs				2																		Retained from previous curriculum

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Sno	Course Code	Course Title	L-T-P	Credits	S NO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale					
																			O	O							
	15 CS 3215	Parallel & Distributed Computing	2-2--2	4	168	CO2	Identify the leader by coordinating among processors, elaborating formal models for shared memory system and memory requirement for solving mutual exclusion problem.	2				2								3		Basic principles of distributed software over networking environment is taught for skill development					
					169	CO3	Utilize DSM model for inter process communication showing relationship between various types of shared objects and Identify clock synchronization problem applying tight bounds to synchronize clocks.	2				2								3							
					170	CO4	Examine the process of realizing reliable fault tolerance in distributed system reflecting the specific type of faulty behavior and illustrate simulation that makes Byzantine failures appear to be crash failures	2				2								3							
					171	CO5	Experiment with laboratory programs and develop a small project along with his/her team members.	2				2								3							
38	15 CS 3251	TCP/IP Protocol Suite	3-0-0	3		CO1	Design and analyze the existing routing protocols using NS	2												2	Retained from previous curriculum	Internet kind of protocols are taught for skill development					
							Identify solution for each functionality at each layer	2															2				
							Identify solution for each functionality at each layer	2																		2	
							Case Study: Simulation Of Network Protocols Using NS																		2		
39	15 CS 4159	Network Architecture and Design	3-0-0	3		CO1	Discuss methodologies for analyzing networks of	2													3	Installations of multiple networks and designing is taught for skill development					
							Demonstrate knowledge of recent research in the area and exhibit technical writing and presentation skills.																		3		
							Explain the key concepts and algorithms in complex network analysis.	2																		3	

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale							
																			O	I									
					179	CO4	Apply a range of techniques for characterizing network structure.				2										3								
40	15 CS 4160	Network Security	3-0-0	3	180	CO1	Analysis and design of algorithms to implement secure protocols.	2														Retained from previous curriculum							
					181	CO2	Discuss security properties and limitations of wired networks																		Security issued related to networked environment is practiced for skill development and employability				
					182	CO3	Describe the architecture for public and private key cryptography and how public key infrastructure (PKI) supports network security	2																					
					183	CO4	Describe common types of vulnerabilities and attacks in web applications, and defenses against them																2						
41	15 CS 4161	Wireless communications and Networks	3-0-0	3	184	CO1	Understand algorithm/protocols, environments and communication systems in mobile computing.	2														Retained from previous curriculum							
					185	CO2	Evaluate the efficiency of modulation schemes and multiple access techniques.																						
					186	CO3	Analyze the performance of MAC, TCP protocols used for wired network and wireless networks.																					Principles of wireless systems are taught for skill	
					187	CO4	Design and analyze the existing routing protocols for multi-hop wireless networks.	2																					
42	15 CS 4162	Computer Forensics	3-0-0	3	188	CO1	Discuss the security issues network layer and transport layer	2														Retained from previous curriculum							
					189	CO2	Apply security principles in the application layer																					Principles of digital forensics are taught for skill development	
					190	CO3	Apply their theoretical and practical knowledge in forensic computing, into the future and emerging technology	2																					
					191	CO4	Use forensics tools, Analyze and validate forensics data																						
43						Determine the software measurement attributes and process metrics															Retained from previous curriculum								

S.no.	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale						
																			O	I								
44	15 CS 3252	Software Metrics and Measurements	3-0-0	3		CO2	Plan and evaluate metrics for object oriented software projects	2												2		Software quality and effort estimation techniques are taught for skill development						
						CO3	Understand project monitoring and control Techniques																	2				
						CO4	Describe several process metrics for assessing and controlling a project. Assess the quality of a proposed metric.	2																	2			
						CO1	Design test cases suitable for a software development for different domains.	2																	2		Retained from previous curriculum	
45	15 CS 4163	Software Verification and Validation	3-0-0	3		CO2	Identify suitable tests to be carried out. Conduct an inspection or review of software source code for a small or medium sized software project.	2													2		Software validation and testing techniques are taught for skill development					
						CO3	Prepare test planning based on the document using automatic testing tools.	2																	2			
						CO4	Document test plans and test cases designed	2																		2		
						CO1	Analyze and combine design patterns to work together in software design.																			2		Retained from previous curriculum
						CO2	Refactor an existing software implementation to improve some aspect of its design	2																			2	
						CO3	Discuss and select appropriate software architecture for a simple system suitable for a given scenario																				2	
						CO4	Implement the design patterns in an object oriented language.	2																			2	
						CO1	Understand Requirements Specification & Management, Scope Management, Project	2																			2	
46					CO2	Apply Software Project Effort and Cost Estimation															2		Managing software projects					
																								2				

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Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS	PS	Type	Rationale
																			O	O		
																			1	2		
	15 CS 4165	Software Project Management	3-0-0	3	206	CO3	Apply the basic principles of risk management, Time Management, and Configuration Management in a variety of simple scenarios including a security situation.											2				and their risks, scheduling and budgeting are taught for skill development
					207	CO4	Apply the basic principles of risk management.	2														
47					208	CO1	To Understand and Illustrate the basic concepts of JavaScript functions and XML namespace	2														
					209	CO2	Describe fundamentals of API interface through JDBC				2											
	15CS3287	Dynamic Web Publishing	3-0-0	3	210	CO3	To learn the interpreter and its conversion to a servlet using JSP	2														Tolerance in computing systems and handling projects are taught for skill development
					211	CO4	To learn the asynchronous data exchange techniques using AJAX and management of session				2											
					212	CO1	Understand storage systems	2														
48					213	CO2	Understand Networking Technologies	2														
	15 CS 3253	Enterprise Storage Systems	3-0-0	3	214	CO3	Understand object based and unified storage	2														
					215	CO4	Apply security and management				2											
					216	CO1	Understand Algorithms and sorting networks	2														
49					217	CO2	Ability to design and analyze parallel algorithms					2										
	15 CS 4167	Parallel Algorithms	3-0-0	3	218	CO3	Apply graph and search algorithms on sorting networks					2										
					219	CO4	Understand arithmetic and randomized computations	2														
					220	CO1	Understand data center networking standards	2														
50					221	CO2	Understand server virtualization, Switch Fabric Technology					2										
	15 CS 4168	Cloud Networking	3-0-0	3	222	CO3	Cloud Data Center Networking Topologies	2														

C. P. Pal
 Networking concepts are linked with cloud environment usage is taught for skill development.
 Green Fields, VADESWAL, Haryana

Sno	Course Code	Course Title	L-T-P	Credits	S NO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale						
																			1	2								
51	15 CS 4169	Cloud Computing	3-0-0	3	223	CO4	Understand software defined networking					2									2		development					
					224	CO1	Identify the appropriate cloud services for a given Application				2													2	Retained from previous curriculum			
					225	CO2	Analyze Cloud infrastructure including Google Cloud and Amazon Cloud.				2														2	Basic fundamentals of cloud are taught for skill development		
					226	CO3	Analyze authentication, confidentiality and privacy issues in Cloud computing environment.				2														2			
					227	CO4	Determine financial and technological implications for selecting cloud computing platforms								2											2		
52	15 CS 4170	High Performance Computing	3-0-0	3	228	CO1	Analyze the performance of GPU memory hierarchy and MPI programming		2													2	Retained from previous curriculum					
					229	CO2	Develop parallel programs using OpenCL library and understand FPGA-Based Supercomputer							2											2	Latest libraries of parallel algorithms are taught for skill development		
					230	CO3	Develop mixed mode programs for Multicore, GPU and cluster optimization systems								2										2			
					231	CO4	Generate parallel programs for matrix, graph and sorting problems using Cuda, OpenMP library					2														2		
53	15 CS 3254	Soft Computing	3-0-0	3	232	CO1	Understand the working of neural networks to store and process information		2													2	Retained from previous curriculum					
					233	CO2	Build optimal classifiers using genetic algorithms								2										2	Genetic algorithms for problem solving is taught for skill development		
					234	CO3	Apply ANN, RNN models and various soft computing frame works.									2									2			
					235	CO4	Understand Fuzzy Logic Systems and develop Fuzzy logic controllers					2														2		
					236	CO1	Understand issues related to R Representation					2														2	Retained from previous curriculum	

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SNo	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale						
																			O	O								
59	15 CS 3255	2D/3D Graphics	3-0-0	3	253	CO2	Construct CSG models from simple primitives, such as cubes and quadric surfaces.	2													3		Computer graphics concepts at advanced level are taught for skill development					
						CO3	Analyze affine and vector geometry	2																	3			
						CO4	Understand Bezier and B-Spline Curves	2																		3		
						CO1	Describe the media communications and supporting devices commonly associated with multimedia information and systems	2																		3		
60	15 CS 4175	Multimedia Technologies	3-0-0	3	256	CO2	Demonstrate the use of content-based information analysis in a multimedia information system.	2														3	Computer graphics concepts of multi media are taught for skill development					
						CO3	Critique multimedia presentations in terms of their appropriate use of audio, video, graphics, color, and other information presentation. concepts with Quality of Service In Network Multimedia Systems	2																	3			
						CO4	Implement a multimedia application using an authoring system and Middleware for Multimedia	2																		3		
						CO1	Discuss the concepts of Game design and development.	2																		3		
61	15 CS 4176	Game Graphics Programming	3-0-0	3	259	CO2	Design the processes, and use mechanics for game development. Create interactive Games.	2														3	Computer graphics concepts like game design are taught for skill development					
						CO3	Explain the Core architectures of Game Programming.	2																		3		
						CO4	Use Game programming platforms, frame works and engines	2																			3	
						CO1	Understand interpolation & Describe several approaches to using a computer as a means for interacting with and processing data	2																				3

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 Computer graphics concepts

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale										
																			O	I												
62	15 CS 4177	Visualization	3-0-0	3	265	CO2	Explain kinematic linkages and motion capture	2													3		at advanced level are taught for skill development									
							266	CO3	Understand modeling and animating human figures	2															3							
							267	CO4	Apply facial animation, behavioral animation													2					3					
							268	CO1	Design and implement a mobile application using OPENGL ES2.0, Phonegap HTML 5 and JS	2																	3	Retained from previous curriculum	Portable devices based application development is taught for skill development			
63	15 CS 4178	Cross Platform Mobile Development	3-0-0	3	269	CO2	Design and develop mobile apps, using Android as development platform, with key focus on user			2																						
							270	CO3	Discuss the constraints that mobile platforms put on developers.	2																3						
							271	CO4	Discuss the performance vs. power tradeoff				2															3				
							272	CO1	Understand System dynamics models with interactions: competition, predator-prey models, spread of disease models	2																			2	Retained from previous curriculum		
							273	CO2	Apply Cellular automaton diffusion simulations: spreading of fire, formation of biofilms									2											2		Different modeling and simulation techniques are practised for the skill development	
							274	CO3	Understand Monte Carlo simulations	2																				2		
							275	CO4	Determine system dynamics projects throughout, such as modeling falling and skydiving, enzyme kinetics, the carbon cycle, economics and fishing.											2										2		
64	15 CS 4179	Scientific Computing and Visualization	3-0-0	3	276	CO1	Determine the convergence region for a finite difference method and Solve PDE.	2															Retained from previous curriculum	Principles of computing techniques and algorithms are taught for skill development								
							277	CO2	Solve nonlinear differential equations by numerical methods.																			2				
							278	CO3	To use iterative methods to solve systems of non-linear equations	2																				2		
							279	CO4	Understand volume Visualization, Optimization and Minimum Principles	2																					2	

Sno	Course Code	Course Title	L-T-P	Credits	SNO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS			Type	Rationale			
																		O	I	2					
69	15 CS 4185	Information Visualization & Graph Analytics	3-0-0	3	295	CO4	Understand applications like Travelling Salesman Problem	2												2					
					300	CO1	Understand Fuzzy Logic Systems and develop Fuzzy logic controllers	2														2	Retained from previous curriculum	Graph based analysis is taught for skill enhancement and to use at different application areas of computer science	
					301	CO2	Apply Extracting Salient Structures for data cleansing			2													2		
					302	CO3	Analyze and evaluate Stats and Layout	2															2		
					303	CO4	Analyze Point-and-Click: Graph Tools like NodeXL, Gephi, Cytoscape				2												2		
304	CO1	Understand big data challenges in different domains including social media, transportation, finance and medicine	2															3	Retained from previous curriculum						
70	15 CS 4186	Data Science & Big Data Analytics	3-0-0	3	305	CO2	Analyze scalability and performance of relational model, SQL and emergent systems. Apply the statistical analysis methods.											2			3		Latest concepts like big data and its analysis is taught for employability and skill development		
					306	CO3	Comprehend machine learning and algorithms for data analytics.	2														3			
					307	CO4	Analyze Map-Reduce programming model for better optimization														2			3	
					308	CO1	Student should be able to Understand the necessity of data preprocessing in construction of data warehouse.	1																3	Retained from previous curriculum
71	15 CS 3257	Data Warehousing and Mining	3-0-0	3	309	CO2	Student should be able to Analyze multidimensional data using OLAP tools to facilitate effective data mining.	2	2											3		Working on tools of data warehousing increases the chances of employability			
					310	CO3	Student should be able to Apply the concepts of data analysis and clustering to postulate accurate classification model for a given problem.	2	2												3				

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Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS			Type	Rationale							
																			O	O	O									
72	15 CS 30A6	FUNDAMENTA LS OF DBMS	3-0-0	3	311	CO4	Student should be able to Recommend a methodology forming complex data types and detection of anomaly for the given Application.	3													3									
							Understand the fundamentals of database management systems including data models, database architectures, and database manipulations and be able to model ER-diagrams	2																		2				
							Understand the theories and techniques in developing database applications and be able to write queries, functions and procedures with help of SQL																							
							Understand the theories and techniques in developing database applications and be able to write queries, functions and procedures with help of SQL	2																						
							Comprehend software development life cycle and prepare SRS document	2																						
73	15 CS 30A7	FUNDAMENTA LS OF SOFTWARE ENGINEERING	3-0-0	3	315	CO1	Apply software design and development techniques, understand software process improvement					2																		
							Identify verification and validation methods in a software engineering project	2																						
							Understand the architectural design of a computer and various basic concepts of operating systems and programming fundamentals	2																						
							Analyze various software development methodologies and gain capability to design databases.																							
							Retained from previous curriculum	2																						
74	15 CS 30A8	FUNDAMENTA LS OF INFORMATION TECHNOLOGY	3-0-0	3	316	CO2	Apply software design and development techniques, understand software process improvement					2																		
							Identify verification and validation methods in a software engineering project	2																						
							Understand the architectural design of a computer and various basic concepts of operating systems and programming fundamentals	2																						
							Analyze various software development methodologies and gain capability to design databases.																							
							Retained from previous curriculum																							

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 Associate HOD
 Computer Science & Engineering
 Lakshmaiah Education Four
 (Open to be University)
 VADDESWARAN-72

Slr0	Course Code	Course Title	L-T-P	Credits	SNO	NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale	
																			O	O			
					320	CO3	Analyze various software development methodologies and gain capability to design databases.					2										employability skills	
75	15 IE 3250	Term Paper	0-0-4	2	321	CO	To enhance Practical exposure towards solving complex engineering problems in order to achieve Research Exposure					2					2				Retained from previous curriculum	Enhances Practical exposure towards solving complex engineering problems in order to achieve employability	
76	15 IE 4048	Practice School	0-0-16	8	322	CO	To enhance Practical exposure towards solving complex engineering problems in order to achieve Industrial Exposure				2	3					2				Retained from previous curriculum	Enhances Practical exposure towards solving complex engineering problems in order to achieve employability	
77	15 IE 4049	Minor Project	0-0-4	2	323	CO	To enhance Practical exposure towards solving complex engineering problems in order to achieve Research and Industrial Exposure					2									Retained from previous curriculum	Enhances Practical exposure towards solving complex engineering problems in order to achieve employability	
78	15 IE 4050	Major Project	0-0-16	8	324	CO	To enhance Practical exposure towards solving complex engineering problems in order to achieve Research and Industry Exposure				3	3									Retained from previous curriculum	Enhances Practical exposure towards solving complex engineering problems in order to achieve employability	
79	PL	Foreign Language			325	CO	To improve Communication skills in Other Languages												3	3		Retained from previous curriculum	Enhances effective communication skills in order to achieve employability

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS	PS	PS	Type	Rationale								
																								1	2	1	2				
84	15CS514	Optimization Techniques	3-0-2	4	324	CO3	Apply different types of arithmetic expressions to solve given problems.						1										Useful for the skill development, good to design new languages								
							325	CO4	Apply methods to find areas, volumes and use graphs to reduce non-linear to linear forms.								2	1										Retained from previous curriculum			
84	15CS515	Device Management	3-0-2	4	326	CO1	Understand the functionality and design the CPU functional units - control unit, registers, the arithmetic and logic unit, the instruction execution unit, and the interconnections among these components.			2													Useful for the skill development, good to design new languages								
							327	CO2	Understand, analyze and design main, cache and virtual memory organizations.			2																Retained from previous curriculum			
							328	CO3	Understand, analyze and design different types of I/O transfer techniques			2																			
							329	CO4	Understand the design issues of RISC and CISC CPUs and the design issues of pipeline architectures			2																			
							330	CO1	Analyzing the design issues involved in various constructs of programming languages, Design top-down and bottom-up parsers			2																			
85	15CS516	Formal Methods	3-0-2	4	331	CO2	Develop syntax directed translation schemes, Design and Implement LR parser					2											Useful for the skill development, good to design new languages								
							332	CO3	Use formal grammars to specify the syntax of Languages																			Retained from previous curriculum			
							333	CO4	Analyzing the methods and tools to define syntax and semantics of a languages								2														
86					334	CO1	Examine the space and time complexities of basic algorithms																Useful for the skill development, good to design new languages								
							335	CO2	Demonstrate Greedy and Dynamic programming methodology for solving optimization problems		1																			Retained from previous curriculum	

Dr. G. Krishna Mohan
Alternate HOD
Computer Engineering
Design Education Found
University of Hyderabad
(Proposed to be University)

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS	OS	O	Type	Rationale								
																								1	2						
87	130E456	Design and Analysis	3-0-2	4	336	CO3	Apply back tracking and branch and bound methodology for searching same state space trees					2									2		algorithms for the requirement for skill development								
							identify the purpose of NP-hard, NP-complete hard graph problems and illustrate PRAM algorithms	1																		2					
	130E455	Principles of Operating Systems	3-0-2	4	338	CO1	Understand the basic concepts of operating system, OS structure and process concepts.	1				1										2	Retained from previous curriculum	Basic management of computer system taught for skill development							
							Apply the concepts Process Scheduling algorithms and Process Synchronization Problems.	2																			2				
							Solve the concept of the Deadlock, Memory Management and Virtual Memory Concepts.	2									2														
							Demonstrate file system interface, structure, file allocation methods, free space management and threads.	1									1														
							Understand the overall compiler architecture and design of Lexical Analyzer										2														
							Construct the parser using the Yacc tool										2														
							Analyze Syntax directed definition and its translations schemes, intermediate code										2														
							Apply the code optimization and generation techniques in the development of a compiler.																						2	2	
88	130E457	Theory of Computations	3-0-2	4	342	CO1	Understand Algorithms and sorting networks	1	2														Retained from previous curriculum	Enhances Practical exposure towards solving complex engineering problems in order to achieve employability							
							Ability to design and analyze parallel algorithms	2																							
							Apply graph and search algorithms on sorting networks	1																							
							Understand arithmetic and randomized computations	2	2																						
89	130E458	Parallel Processing	3-0-2	4	346	CO1	Understand Algorithms and sorting networks	1	2														Retained from previous curriculum	This course to helps in getting the knowledge of concurrent algorithms and for skill development							
							Ability to design and analyze parallel algorithms	2																							
							Apply graph and search algorithms on sorting networks	1																							
							Understand arithmetic and randomized computations	2	2																						

Sno	Course Code	Course Title	L-T-P	Credits	SNO	CO NO	Description of the Course Outcome	a	b	c	d	e	f	g	h	i	j	k	PS		Type	Rationale						
																			1	2								
90	130E459	Data Analytics	3-0-2	4	350	CO1	Acquire the ability to identify potential sources of data and distinguish between quantitative and qualitative data	1						2								Retained from previous curriculum	This course helps in data analysis for cloud environment					
					351	CO2	Learn to identify and describe a variety of analysis tools that will assist in processing data.	2					2															
					352	CO3	Demonstrate basic data analysis techniques and show how this analysis can contribute to a business' future growth	2									2											
					353	CO4	Learn how to effectively communicate the results of your analysis.	2										2										

[Signature]

HOD-CSE

Department of Computer Science and Engineering
 Anna University, Chennai
 600 025



K L University

(Koneru Lakshmaiah Education Foundation)

Deemed to be University, Estd. u/s of UGC Act, 1956

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Department of Computer Science and Engineering

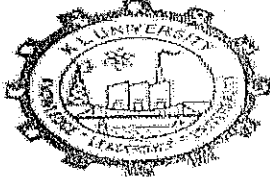
Alumni Feedback on Curriculum

Academic Year (2016-17) Sem I

1. Network Theory and Signal analysis can be removed.
2. Tools for Simulation and modeling can be used.
3. Thermodynamics course can be removed.
4. Hectic syllabus structure for compiler design makes the subject tough for the students.

G. Krishna Mohan
HOD-CSE

Dr. G. Krishna Mohan
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Guntur District, Andhra Pradesh



K. L. University

U/S 3 OF UGC ACT, 1956
Koneru Lakshmaiah Education Foundation

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Date:13-12-2016

Department Academic Committee Meeting

The following Agenda Items are discussed and the resolutions passed are marked against them.

The points discussed in the meeting are:

1. Dr. V.Srikanth, HOD- CSE department addressed the issue on which the meeting is to be conducted.
 - I. Discussion on summarizing the changes to contents, courses outcomes and Blooms taxonomy levels of B.Tech [CSE] 2015-2016 - Program curriculum & syllabus.
 - II. The members of the DAC did not recommend the syllabus change of course (15CS3216) Graphics and visualization and change of the title to the course (15CS4175) Multimedia Technologies.
 - III. DAC recommended the changes to only courses outcomes and Blooms taxonomy levels of B.Tech [CSE] 2015-2016 – Program Curriculum & Syllabus . Annexure I.
 - IV. To discuss and revise B.Tech(CSE) curriculum and Syllabus of 2016-2017 regulations in R16 Annexure(B.Tech)-I.

All programs for 2016-17 has been framed to be in relevance to APHC, Human Resource Development Policy, Govt. of India, National Skill Development Corporation, Govt. of India, Confederation of Indian Industries, ABET, NBA norms, O*NET and AICTE statutory norms.

Thus framed curriculum has been developed through framing of Program Educational Objectives (PEO's) which are mapped to the university Vision and Mission, which are there by disseminated into Student Outcomes (SO's) which thereby have been developed into relevant Course Outcomes (CO's).

The resolutions are forwarded to BOS committee, for the approval.

HOD-CSE

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Alternate HOD

Computer Science & Engineering
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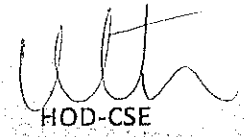
KL UNIVERSITY

DEPARTMENT OF CSE

Industry personnel feedback on the curriculum

SUMMARY REPORT - A.Y. 2016-17

S No	Date	Feedback	Industry person	Industry
1	17-09-2016	Recommended that usage of tools should be improved and to be brought into the syllabus for software engineering course	Mr. K. Srinivas	Tech Mahindra
2	20-11-2016	Informed that it would be very difficult for the student to do projects for all courses, he recommended to have one project per one semester	Mr. Bhawmesh Gandhi	Mphasis
3	27-11-2016	Informed that it is over burden if the student has to do projects for all subjects suggested to allocate projects for more relevant courses	Mrs. Kavita	CTS



HOD-CSE

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Head of the Department
Department of Science and Engineering
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Constituent College KLCE Accredited by NAAC with CGPA 3.76/4.00

Approved by A.I.C.T.E ± Accredited by N.B.A.± ISO 9001-2000 Certified

CONSOLIDATED REPORT ON FEEDBACK GIVEN BY ACADEMIC PEERS

2016-17 (SEMESTER 2)

Sno	Date	Feedback	Resource person name
1	June 2017	<p>1. Providing wide variety of subject clusters is very much helpful to the students to master themselves in a domain of their interest.</p> <p>2. Introduction of design oriented approach in operating systems subject may help the students to get insight into the implementation of various functionalities of any operating system.</p> <p>3. In software engineering course it is better to introduce all the basic concepts of lifecycle so as to bring overall view of the software development process of the industry. (All the students irrespective of their elective need to study this)</p>	<p>Dr.M.Babu Reddy, Department of CSE, Krishna University, Krishna District.</p>
2	June 2017	<p>Include industry oriented subjects.</p>	<p>Dr.P.Radhika Prof.&Principal, Dept of CSE, Vignan Nirula Institute of Technology &Science for women, Guntur.</p>

HOD-CSE

Dr. E. Suresh Babu

Head of the Department
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VADDESWARAM-522 502



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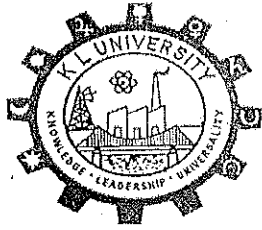
2016-17 (SEM 2)

	Excellent	Very Good	Good	Average	Total
Feed back(in %)	67	33	0	0	100

HOD/CSE

Dr. E.Suresh Babu

Dr. E. SURESH BABU
Head of the Department
Computer Science and Engineering
KL UNIVERSITY
VADDESARAM-SCTE, GUNTUR



KL University

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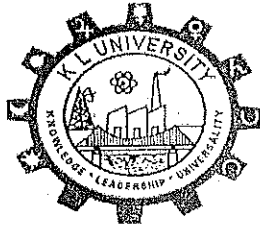
CONSOLIDATED REPORT ON FEEDBACK GIVEN BY ACADEMIC PEERS

2016-17

Sno	Date	Feedback	Resource person name
1	March 2017	Existing Course Structure is Good.	Dr.Vivek S Deshpande Professor, Dept of IT, MIT Pune
2	March 2017	Existing Regulation Course Structure, Sequence of Courses are good.	Dr.G.RamaKoteswararao Profesor Dept of IT, V.R.Sidhartha Colg.of Engg, Kanuru, VJD.
3	March 2017	Existing Curriculum is Good.	Dr.Satyaprasad Professor of.CSE, Acharya Nagarjuna University.

Uth

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Head of the Department
Computer Science and Engineering
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CONSOLIDATED REPORT ON FEEDBACK GIVEN BY ACADEMIC PEERS

2016-17

	Excellent	Very Good	Good	Average	Total
Feed back(in %)	0	32	68	0	100

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Department of Computer Science and Engineering

Alumni Feedback on Curriculum

Academic Year (2016-17) Sem 2

1. Network Theory and Signal analysis can be removed.
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3. Thermodynamics course can be removed.

[Signature]
HOD-CSE

Dr. G. Krishna Kumar

Head of Department

Department of Computer Science and Engineering

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