K.S.R. COLLEGE OF ENGINEERING, TIRUCHENGODE – 637 215 (Autonomous)

Academic Year :2018-2019

Department of Information Technology Organizes

WORKSHOP ON OUTCOME BASED EDUCATION (OBE), COURSE OUTCOME(CO) AND PROGRAM OUTCOME(PO) CALCULATION

Dated: 01.03.2019

KSRCEIQW5.5.3/91/2018-19/ADM#214

K.S.R.COLLEGE OF ENGINEERING: TIRUCHENGODE - 637 215 (Autonomous)

Date: 28-02-2018

Time: 12.30 p.m.

CIRCULAR

Classification	ROUTINE	4	District of the last
ORIGINATOR:P	RINCIPAL	CIRCULATED TO: All Departments	The second second

Sub.: Workshop - Reg.

There will be a workshop on "Outcome Based Education (OBE), Course Outcome (CO) and Programme Outcome (PO) Calculations" on 01-03-2019 (Friday), at 12.15 p.m. in the MCA Seminar Hall. Therefore, All the HoD's and all Faculty members are advised to attend the workshop and learn about OBE.

PRINCIPAL

Circulated to:

1. All HoDs for circulation among their faculty.

EVIDENCE OF COMPLETION

Number of persons not received / seen: - Signature of Originator with Date and time.

COLLEGE STATE OF THE STATE OF T

KSR KALVI NA (TIRUCHEVSODE)

K.S.R. COLLEGE OF ENGINEERING (Autonomous)

INVITATION

We cordially Invite you all to the One day workshop

On

"Outcome Based Education (OBE)

رچ

Course Outcome (CO) and Programme Outcome (PO)
Calculations"

Chief Guest

Dr. T.G. SAMBANTHAM PROFESSOR/CSE

NATIONAL INSTITUTE OF TECHNICAL TEACHER'S TRAINING AND RESEARCH (NITTTR) CHENNAI



ASR COLLEGE OF ENG THIN



AGENDA

Vonuo : MCA Conference Hall

Dato : 01-03-2019 (Friday)

Time : 12.15 p.m.

Prayer Song : K.S.R. Campus Choir

Welcome Address : Dr. G. Singaravel

Hand, Department of I.T.

Principal Address : Dr. P. Senthilkumar Principal - KSRCE

Prosidential Address : Lion Dr. K.S. Rangasamy, MJF

Founder-Chairman

K.S.R. Educational Institutions

Felicitation Address : Mr. R. Srinivasan, B.B.M., M.I.S.T.E.

Vice-Chairman

K.S.R. Educational Institutions

Special Address : Dr. T.G. SAMBANTHAM

Professor/CSE

National Institute Of Technical Teacher's

Training and Research (NITTTR)

Chennal.

Vote of Thanks : Dr. R.V.M. Rangarajan

IQAC co-ordinator

National Anthom : K.S.R. Campus Choir



PRINCIPAL

KSR COLLEGE OF ENGINEERING

KSR KALVI NAGAS

GRUCHENGOGE-ENGINE

K.S.R. COLLEGE OF ENGINEERING, TIRUCHENGODE – 637215 OUTCOME BASED EDUCATION (OSE)

Procedure for CO, PO, PSO, PEO, DM, DV, IM & IV Attainment

A. CO ATTAINMENT

- Step 1: Course outcomes (COs) are written for each course of the curriculum in relationship with the Program Outcomes (POs).
- Step 2: CO-PO mapping is done for each CO; Correlation 3,2,1 is used in mapping,
 Where 1: Slight (Low); 2: Moderate (Medium); 3: Substantial (High) if there is no
 correlation, put "-"
- Step 3: Question wise marks are taken for Cycle Tests (CT), Internal Assessment Tests (IA) and Model Examination for CO attainment calculation.
 - Step 4: For the assessment of CO1 of a course the following marks are considered:
 - (a). CO1; A-1:25;(b). IA-1:30; (c). Model: 20; Total = 75
 - (b). CO2; A-2: 25; (b). IA-1: 20; (c). Model: 20; Total = 65
 - (c). CO3; A-3: 25; (b). IA-2: 30; (c). Model: 20; Total = 75
 - (d). CO4; A-4: 25; (b). IA-2: 20; (c). Model: 20; Total = 65
 - (e). CO5; A-5: 25; (b). Model: 20; Total = 45
 - Step 5: The student CO attainment in CIE (Cumulative Internal Examinations) is measured as follows.
 - a. Attainment will be marked as Y, if he/she secured marks ≥50%.
 - b. Attainment will be marked as N, if he/she secured marks < 50%.
 - Step 6: The CO will be considered as attained if the number of Y is $\geq 75\%$ for a given strength of students.
 - Step 7: The % obtained in step 6 is considered as direct assessment value.
 - Step 8: The final attainment of particular CO is calculated by considering 90% weightage to direct assessment and 10% weightage to course end survey.
 - Step 9: The step1 to step 8 are followed for finding the attainment of other CO's of a particular course.



Step 10: The following procedure is adopted for finding the CO assessment of Semester End Examinations (SEE)

CO No.	C	01	C	02	C	03	C	04	1 0	05
Marks	4	16	4	16	4	16	4	16	4	16
	marks									
Q.No.	1,2	11	3,4	12	5,6	13	7.8	14	9,10	15
Total		•		-					3/20	
Marks	2	U	2	0	2	0	2	D	20	0

Note: Question No. 1-10 are 2 mark questions.

The student CO attainment in SEE (Semester End Examinations) is measured as follows.

- a. Attainment will be marked as Y, if he/she secured marks ≥50%.
- b. Attainment will be marked as N, if he/she secured marks < 50%.

Step 11: Final CO attainment is calculated based on 50% weightage to CIE and SEE respectively.

Step 12: These CO attainment calculations are to be calculated from 2014 - 2015enrolledBatch.

TIRUCHI NOQON OF STATE OF 2

K.S.R. COLLEGE OF ENGINEERING K.S.R. KALVI NAGARI TIRUCHENGODE-637 215

K.S.R. COLLEGE OF ENGINEERING, TIRUCHENGODE – 637 215 (Autonomous)

Department of Information Technology

Report of Outcome based Education (OBE), Course Outcome(Co) and Program outcome(Po) calculation

1	Name of the Event (Seminar/Workshop/Conference/FDP/ Any other)	Workshop
2	Name of the Organizer	IT Department
3	Date of Event	01.03.2019
4	Venue of the Event	MCA seminar hall
5	Title of the Event	Outcome based Education (OBE),course Outcome(CO) and program outcome(PO) calculation
6	Name of the Coordinators	Dr.G.Singaravel Dr. K. NithyaKalyani Dr.K.Balamurugam Dr.S.Periyasamy
7	Total Participants	125
8	Resources Person with contact details	T.G. Sambantham, NITTTR, Chennai
9	Outcome of the Event	 There are four levels of outcome such as Course Outcome (CO), Program Outcome (PO), Program Specific Outcome (PSO) and Program Educational Objective (PEO). Course Outcomes are the statements that declare what students should be able to do at the end of a course.

CO-ORDINATOR 1/3/2019

HOD Dr. G. Sill Balav...
Professor & Head
Department of Information Technology
K S R. College of Engineering (Autonomous)
Tiruchengode - 637 215

PRINCIPAL

KSR COLLEGE OF ENGINEERIN

TORUCHENGODE-637 215

K.S.R. COLLEGE OF ENGINEERING, TIRUCHENGODE – 637 215 (Autonomous)

Department of Information Technology

REPORT ON RESOURCE PERSON

Since 1995, till Sept. 2018, Dr T. Gnana Sambanthan was a Professor & head of the Computer Science and Engineering Dept., of NITTTR, a centrally funded Institution of the Ministry of Education, Govt. of India, in Chennai. He has done his B.E., M.E., and Ph.Ds in Civil engineering, in full time at a stretch, without a gap. He holds an M.E with distinction from Indian Institute of Science, Bangalore and a Ph.D from IIT Madras as a CSIR Sr. Research Fellow. He has obtained a blend of Industrial, Research and Teaching/Training experiences of several years from India and abroad in s/w development. He also had a two years stint with the state council for Science & Technology coordinating Industry-Institute-Interaction cell. As a Software professional, he had developed over 1,50,000 lines of coding on UNIX platform in India and abroad. In 1998, he was sponsored under World Bank to the Huddersfield University, UK, on "Curriculum Development in Computer Science Discipline". In 2000, he was nominated to Manila, Philippines on "Computer Applications in Technical Education & Training" under Colombo Plan. In 2017 he was nominated to Dhaka, Bangladesh on TVET, CPSC programme on OBE. He has worked in Riyadh, Saudi Arabia for 7 years as a s/w engineer, apart from visiting a few other countries. He has published and presented over 100 papers in National & International Journals, Conferences & Seminars in India and in abroad and also authored two editions of a book on computer graphics. He has visited over 1000 Technical Institutions, on various Committees such as AICTE etc., in over 1S states of India. He has been rendering popular lectures to students on 'UNIX/LINUX OS', based on his Industrial experience and to teachers on 'Instructional System Design for OBE through CDIO' based on his training and research experiences, in over 100 Higher educational and Management Institutions in India. He was the chairman in implementing IT curriculum in Technician Institute of Portblair, Andamans. He has won several awards and distinctions from various organizations, including the Jawaharlal Nehru Memorial Award from the University of Madras. He has already produced 13 Ph.Ds under the Madras University and currently guiding 6 Ph.Ds, in Engineering Education, apart from associating himself in Doctoral committees and adjudications of dozen Universities for over 100 candidates in the past 10 years. His areas of interest are concept extractions, Learning Grids and Computer Science Education, Instructional Designs, OBE-CDIO and e_Learning.

G- 13/2019 CO-ORDINATOR

Professor of Aead Department of Information Technolog, K.S.R. College of Engineering (Autonomous) Tiruchengode - 637 215 Namakkal (Dt), Tamilnadu, India.

PRINCIPAL K.S.R. COLLEGE OF ENGINEER IN K.S.R. KALVI NA BAR.

PRINCIPAL

WHITENGODE ATT THE

K.S.R. COLLEGE OF ENGINEERING, TIRUCHENGODE – 637 215 (Autonomous)

Department of Information Technology

REPORT OF THE EVENT

One day workshop on Outcome based Education (OBE), Course Outcome(CO) and Program Outcome(PO) calculation was conducted by Information Technology on 01.03.2019. The program was presided by Dr. Lion K.S.Rangasamy, Founder and Chairman, and Mr. R.Srinivasan, Secretary, K.S.R.Educational Institutions. Dr.P.Senthilkumar, Principal offered presidential. T.G. Sambantham, NITTTR, Chennai. Delivered inaugural address and presented a plenary lecture. The topic includes characteristics of good learning outcomes, guidelines of student learning outcomes, practical approaches for student learning outcomes. A group of 41 members was participated in this seminar.

CO-ORDINATOR

Dr. Hobing Arabel
Professor & Head
Department of Information Technology
K.S.R. College of Engineering (Autonomous)
Tiruchengode - 637 215
Namakkal (Ot), Tamilnadu, Indik,

PRINCIPAL

PRINCIPAL
K.S.R. COLLEGE OF ENGINEER
K.S.R. KALVI NAGAR,
TIRUCHENGODE-637 215



K.S.R.COLLEGE OF ENGINEERING: TIRUCHENGODE - 637 215

(Autonomous)

Dato: 01-03-2019

WORKSHOP

	No. of the fearth.	Designation	Department	Signature
S.No.	Name of the faculty		1	A.)-
1.	A. Kiruthiga	1-109	physica	
2.	1			
3.				
4.			9	
5.				
€.				
ā-				
0				
9.				
10.				
# # # # # # # # # # # # # # # # # # #				
12				
13.				
# # #				
15.	Dr. M. SOMU	Professor	CSE	M. EM.
15.	Dr. P. Canalcardin	ASP	our	P. Luci
17.	S. Sounderangen	AP	Hulo	D. De
15.	M. Sted Thauthyrin	1-12	1-1-10	11.80 T
19.	S. Inthiyas	Ap	Auto	All
20.	B. ZATIWHAR	XP.	JUE	The first
21.	c. Gogalan	AP	AUE	G.Com
22	VI. Juszacthan	A:P	Buto	H. GrotTrus-
23.	DT.M. SWAKOMAR	ASP	Auto	1 Chalanser
24.	S. Neslamegan	Ар	Awto	Sm
25.	DK TJAYANAL INA	AP	Physica	-1,
26.	Dr. S. SUTHA	Ар	MCA	-641-5
27.	Dr. T. Snesukumel	AP	Mechanical	Burn
	91-7 to 1/ht	Prot	•	C CX
	i france	1.00	Physics	

PRINCIPAL

K.S.R. COLLEGE OF ENGINEERING

K.S.R. KALVI NAGAR,

TIRUCHENGODE-637 215

K.S.R.COLLEGE OF ENGINEERING: TIRUCHENGODE - 637 215 (Autonomous)

Date: 01-03-2019

WORKSHOP

S.No.	/ Name of the faculty	Designation	Department	Signature
29.	-K5 Perind	Ap	Mech	(Avec
130,-	Z.C. MACTRALAN	- Ap	Hech	J.H.J.L
31.	A.M. Feas	ASP	Mark	A-Chood
32.	M. JOTHIMANI	AP	EC.E	150_
33.	K. SIvo Subranani	AP	MBA	0719
34.	S. TOMMICSCLUM	^? [~]	McA	I Tames
_35.	C. KARTHIKEYAN	Drief	EEE	CFE
35.	P SIVAKUMAR	AP	ECE	PSmippini
37.	S. VINOTH KUMAR	Ap	MEA	3.24
33.	Dr. La Consultation	Dest	boulouse	MAM
39.	K. Manogar	AP	mech.	(g. cum
40.	S.P. Grewshum	AP	MECH	Emos-
21.	P Jagadzeff	Αŗ	mich	A Man
42.	M. Cirisheran	AP	Moch	The _
43.		Ap	Mech	H. J. Pl
44.	S. JEYAPRAKASAM	Asp	nech	Car
45.	c. Thirumalai Belvan	AP	CSE	11-5473119
46.	Dr.C. 24000	ASP	UF	Cont
47.	T. BHASICAR	AP	maths	ove
48.	· V. VENNILA	AP	CSE	Viranih
49.	R. LOTHA	A-P	Maths	Quete.
50.	Anguraj s	A-P	27	3-334 xt 1
51.	& Vakelin G18	27	cut	1-X2-
52.	Dr. & Conest Suma	A9	८१६ .	& Cars 15
53.	F. PRAVEENA	AP	MATHS	K G
54.	P. PAVITHER	AP	PHYSICS	्र किर्म <u>वि</u>
55,	ומס לישול ליהו או או או או	0-57	17	
56.	8.9ganya	AP	L JT	880 m
	0 0	700		1

K.S.R. COLLEGE OF ENGINEERING K.S.R. KALVI NAGAR, OTBUCHENGOPE 637 215

K.S.R.COLLEGE OF ENGINEERING: TIRUCHENGODE - 637 215 KSRCE/QM/5.5.3/01/2012-1 9/ADMN/2014 (Autonomous)

Date: 01-03-2019

WORKSHOP

S.No	. Name of the faculty	Designation	T 5	
57.	V-senlighterer		Department	Signature
58.	G. CONNELVON	AP	(SE	C7
59.	R. Brownthlamour.	AP.	CIV	
60.	i- il a la	AP	Mech	D. 25 300.
61.	F. 11 BUNDA	<u>Ar</u>	FFE	Hyan
62.	C.S. Munigapandian	AP	Maty.	G.s. Ge.
53.	Dr. V. RAVS	Paof.	EEE	Y. Romi
53. 64.	A.P. Kalidas	AP	Auto	Buch
65.	K, SELVAKUMAR	AP	CiviL	(Kho Mont
66.	P. MIHENDEND	AP	FCE	Puetr
*,	K. KARUPPANA SAMY	Ap	ECE	
67.	R. SATHEESKUMAR	AP	ELE	HH.
63.	L.S. Vadice	AP	CSE	6 1
69.	Dr.M.ROJASEKAR	A-P	CHEMISTRY	B
70.	Dr. M. TOMILVOTORY	ASP	CHEHISTAY	11)
71.	M. DINAKARAN	AP	AUTO	J. Me
72.	S. Ve minugo	AP	ECE	The state of the s
73.	R. Mahandran	AP	FCE	8.9
74.	K.P. Uvcuajan	AP	ECE	
75.	3. prichockmon	A-p		
76.	Dr. C Pajan		ECF	Singulari.
77.	M. VETTRIVEL	4.16	Heroj	- 4
78.		- AP	ITIKSET	diani -
79.	B. CURESH	AP	CIVIL	· half
80.	E. Baby Anillia	ASP.	CSE	di-tho.
81.	N.S. Nithun	AS P	CSE	N.Stitly
	Dr.M. Vifa ya kumar	Parlessor	McA	
82.	Dr. R. POORNIMA	AP	ECE.	Room
83.	R-mohankumar	AP	MCA	1
84.	Dr. & Penyalamy	Apren)	ÎŢ	Julymy
	1	Trans.		

K.S.R. KALVI NA

KSRCE/QM/5.5.3/01/2018-1 9/ADMN/2014

more than

K.S.R.COLLEGE OF ENGINEERING: TIRUCHENGODE - 637 215 (Autonomous)

Dato: 01-03-2019

WORKSHOP

S.No.	Name at the fearth.	The second secon		
85.	Name of the faculty	Dosignation	Dopartment	Signaturo
86.	Dr. K. Balawayn	BIC		Chr. plan
Miller HARRIS CO.	Sinkudiak		TT	Tally
87.	Tenziunzosoni M	→AP	MECH.	Capillos .
88.	TK-SKIRAMON	DY	MECHANICO	PW.OPPMANING
89.	R. MAHOR HOMOR	10	Meell	Dun "
90.	D Nilhyanandan	10	inchinical	فسنه المدين
91.	RAMORRIGHTON	f) p	Makenatics	Many.
92.	P. Rasagopal		Most	P. 12-11
93.	S. Rnangningmy		- NECHNINICAL	Start
94.	J. SIGNESH	AP	1-1801	Colit
95.	P. Manurelle Pram	Pr	Nech	(91
93.	M. ANBALAKAN	AP	MECH	11: (0000000)
97	K. Venkarchwaran	Asr.	Mach	Kan-
93.	Dr. P. DI+1 RAVINONON	Port	Meca	0
99.	R. Es waramoury.	ASP	FCF	Ratio 0
100.	J. THIYAGARAJAN	AP	EBE	J 1 Rug
101.	K. M. Knah	ላዮ	M ECHANICAL	RM. Rylm
02.	S. MANOHARAN	AP	ECE	ch (Var
03.	B. Sigala	<u> </u>	phyxes	B. PL
04.	A Laika J	AP	markp	xx-
05. T	Jr. A. Malipswari	NSP	EFF	g.moe
	B. Yevannol	AP.	PEE	Res_
07.	R. RAMESIT	DP	Math	F-1
08.	Venkorisan. S	ASP	Maths	واريار
09.	9.5 หลุงเงชติงคอเงเง	1)Sp	Maths	1.94
10.	ร-อาการตายกา	AP		8 1
1	T. SUNDARI	DEADE	chemistry	or 1
12.	R. HECNAKIII	AND		OSB COLLEGE OF ENGINE
	is standard to the standard to	The state of the s	Eng. lish	KSR KALVI NAGAR,

KSRCE/QM/5.5.3/01/2018-19/ADMN/2014 K.S.R.COLLEGE OF ENGINEERING: TIRUCHENGODE - 637 215 (Autonomous)

WORKSHOP

Date: 01-03-2019

S.No.	Name of the faculty	Designation	Dopartment	
113	S. HEMOREWA	A Commence of the commence of	a promote and complete and an appropriate property and a second pr	Stg Caturo Flasson
114.	Kayonuna	VID.	LNGLISH	Control Contro
115.	S. Microling	Anna Contraction of the Contract	Strategie Care Care Care Care Care Care Care Car	AU VIID
116.	k Samula	M L	A second second	K. D. Coicka
117.	M.K Nicelluin	A STATE OF THE PROPERTY OF THE	and the desir many control and printing the control and	Additional characters of many plantages participate a compared to the second of the se
118.	P. Vainhi	The same care a second care and a consideration	accinicane society (inconsequences	12.00
119	PRATUSERAL	an anatomic of the prof.) and the second of	Mars	W. San
90	Da. N. s. chapthi	0.113	MEA	NSXL-17 C
121.	A. Tomes Encharist	1 / C	(93)	76
122.	B. Songe	rha	Civil	May-
123.	Brut tolk time	191	citie	M. Chil
124	G. Gouila	do	and	Q Charme
125.	R. Venas-ey	1302	Chemin	· Comme
125.	Dr. V. Paralli	Bry & Hand	Civil	Cerdhi &
127.	Dr. M. Chirasantiako	DISH & Head	nech	NEC CARE
123.	Dr. C. Garon Stanker	(2)	E06	Camp
129.	Dr. P. Anillin	Por 12 100	MCI	Danie alter
129. 130.	P-kastlich		cav	Carrelle 1
131.	Dr. Rr. 11. Ranganjan	ing prate	1/1/2	Procy
132.	Schararaganesh	2/6	manufacture and the top and	7000
133.	i-Elargo	70	CIVII	Children
134.	S.DINESHKUMAR	PIP .	CIVIL	11,11,11
135.	M BENEAUSE		CINC	The second second
136.	V.C. Public		6113	103-
137.	Hrs. H. Uma males user?	A farm	Coult'in	the first of the second
138.	M-SUEUNAU	V.	232	HILLAL
139.	D	management & and a statement of the stat	- detection of the first territories and the second territories of	ho
140.				and the second contract of the second contrac
	601	LIGA	- militakin spillininki kultusessiininki kapus spiristiminki.	PRINCIPAL

K.S.R. COLLEGE OF ENGINEERING K.S.R. KALVI NAGAR, XIRUCHENGODE-837 215: