



LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

Accredited by NAAC with B++ Grade, ISO 9001:2015 Certified Institution

Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada

L.B.Reddy Nagar, Mylavaram-521230, Krishna Dist, Andhra Pradesh, India

FRESHMAN ENGINEERING DEPARTMENT

ATTAINMENT OF COURSE OUTCOMES

Faculty Name	:	Dr. K.R. Kavitha	Designation	:	Associate Professor
Course Name	:	Transformation Techniques and Vector Calculus	Academic Year	:	2019-20
Course Code	:	17FE06	Semester	:	II-Sem
Program & Admitted Year	:	B.Tech. 2019	Branch	:	CE

COURSE OUTCOMES:

After the completion of the course, the student should be able to

17FE06.CO1	:	Apply the concepts of Laplace Transforms to solve ordinary differential equations.
17FE06.CO2	:	Apply Z - Transforms to solve difference equations.
17FE06.CO3	:	Discriminate among Cartesian, Polar and Spherical coordinates in multiple integrals and their respective applications to areas and volumes.
17FE06.CO4	:	Evaluate the directional derivative, divergence and angular velocity of a vector function.
17FE06.CO5	:	Apply Vector Integration for curves, surfaces and volumes and relationship among themselves.

1. Attainment of Course Outcomes through Mid Examinations:

		CIE Attainment		Question-CO Articulation Matrix				
		% Students Attempted	% Attainment	CO1	CO2	CO3	CO4	CO5
MID-I	Q1a	72	62.8	0.75				
	Q1b	67	52.5	1				
	Q1c	50	63.34	1				
	Q1d	42	60	1				
	Q2a	50	43.34		0.75			
	Q2b	55	36.37		1			
	Q2c	47	53.58		1			
	Q2d	40	41.67		1			
	Q3a	87	71.16	0.75				
	Q3b	78	48.94	1				
	Q3c	12	28.58		1			
	Q3d	8	80		1			
MID-II	Q1a	70	71.43			1		
	Q1b	67	80			1		
	Q1c	35	76.2			1		
	Q1d	35	85.72			0.75		
	Q2a	68	70.74				0.75	
	Q2b	65	69.24				1	
	Q2c	37	77.28				1	

Q2d	28	88.24				0.75		1
Q3a	87	26.93						
Q3b								1
Q3c	7	75						
Q3d								
MID Attainment			54.21	45.46	72.98	66.44	50.97	

2. Attainment of Course Outcomes through Assignments:

Assignment	Assignment No / COs	CO1 (%)	CO2 (%)	CO3 (%)	CO4 (%)	CO5(%)
	A1	83.34				
A2			96.67			
A3				98.34		
A4					96.67	
A5						93.34
Assignment Attainment		83.34	96.67	98.34	96.67	93.34

3. Attainment of Course Outcomes through Quiz Examinations:

Quiz	Quiz No / COs	CO1 (%)	CO2 (%)	CO3 (%)	CO4 (%)	CO5 (%)
	Q1	55.94	55.94			
Q2				57.63	57.63	57.63
Quiz Attainment		55.94	55.94	57.63	57.63	57.63

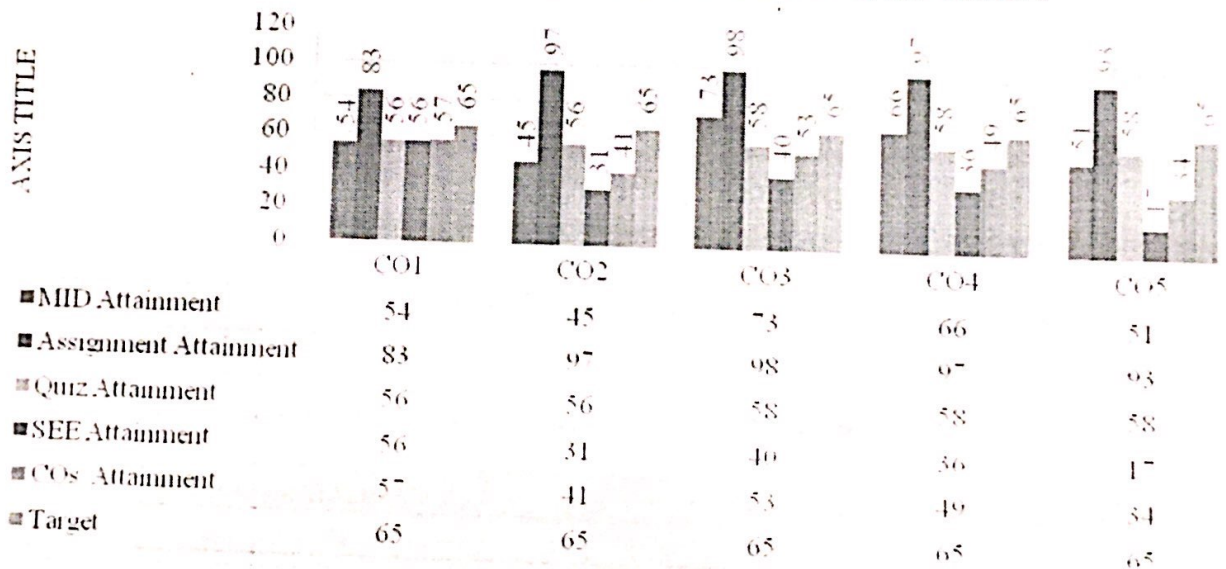
4. Attainment of Course Outcomes through Semester End Examinations (SEE):

SEE Attainment			Question-CO Articulation Matrix				
	% Students Attempted	%Attainment	CO1	CO2	CO3	CO4	CO5
Q1a	42	28	0.75				
Q1b	35	66.67	1				
Q2a	67	60	1				
Q2b	70	76.2	1				
Q3a	10	16.67		1			
Q3b	10	33.34		0.75			
Q4a	77	52.18		0.75			
Q4b	60	44.45		1			
Q5a	48	48.28			1		
Q5b	48	62.07			0.75		
Q6a	60	41.67			0.75		
Q6b	58	34.29			1		
Q7a	83	40				1	
Q7b	77	56.53				1	
Q8a	10	16.67				0.75	
Q8b	15	44.45				0.75	
Q9a	55	15.16					1
Q9b							
Q10a	25	13.34					1
Q10b	15	22.23					1
SEE Attainment			55.97	31.32	40.1	35.6	16.91

Note: The final attainments of COs are determined according to the given weightage.
Weightage for COs: 60% of Semester End Examinations + 25% of Mid Examinations +10% of Online Quiz Examination + 5% of Assignments

Course Name with code : DE&LA, 17FE04					
Final CO Attainment					
Assessment Tool/COs	CO1	CO2	CO3	CO4	CO5
MID Attainment (%)	54	45	73	66	51
Assignment Attainment (%)	83	97	98	97	93
Quiz Attainment (%)	56	56	58	58	58
SEE Attainment (%)	56	31	40	36	17
Final COs Attainment (%)	57	41	53	49	34
Target (%)	65	65	65	65	65

A.Y. 2019-20 CE 17FE06 TTVC CO ATTAINMENT



K.R. Kavitha
Course Instructors

Dr. K.R. Kavitha

[Signature]
Course Coordinator

Dr. A. Rami Reddy
K. Shamsi Rami

[Signature]
Module Coordinator

Dr. A. Rami Reddy

[Signature]
HOD

Dr. A. Rami Reddy



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FRESHMAN CIVIL ENGINEERING DEPARTMENT

Analysis of examination results/COs

Program: I B.Tech., Sem. II, CE

A.Y.: 2019-20

Course: 17FE06 Transformation Techniques and Vector Calculus

COURSE EDUCATIONAL OBJECTIVES (CEOs): In this course the students are introduced to Integral transformations which include Laplace Transforms and Z - Transforms. They will also learn Multiple Integrals in different coordinate systems and Vector Calculus.

COURSE OUTCOMES (COs)

After completion of the course, the student will be able to

CO1	Apply the concepts of Laplace Transforms to solve ordinary differential equations.
CO2	Apply Z - Transforms to solve difference equations.
CO3	Discriminate among Cartesian, Polar and Spherical coordinates in multiple integrals and their respective applications to areas and volumes.
CO4	Evaluate the directional derivative, divergence and angular velocity of a vector function.
CO5	Apply Vector Integration for curves, surfaces and volumes and relationship among themselves.

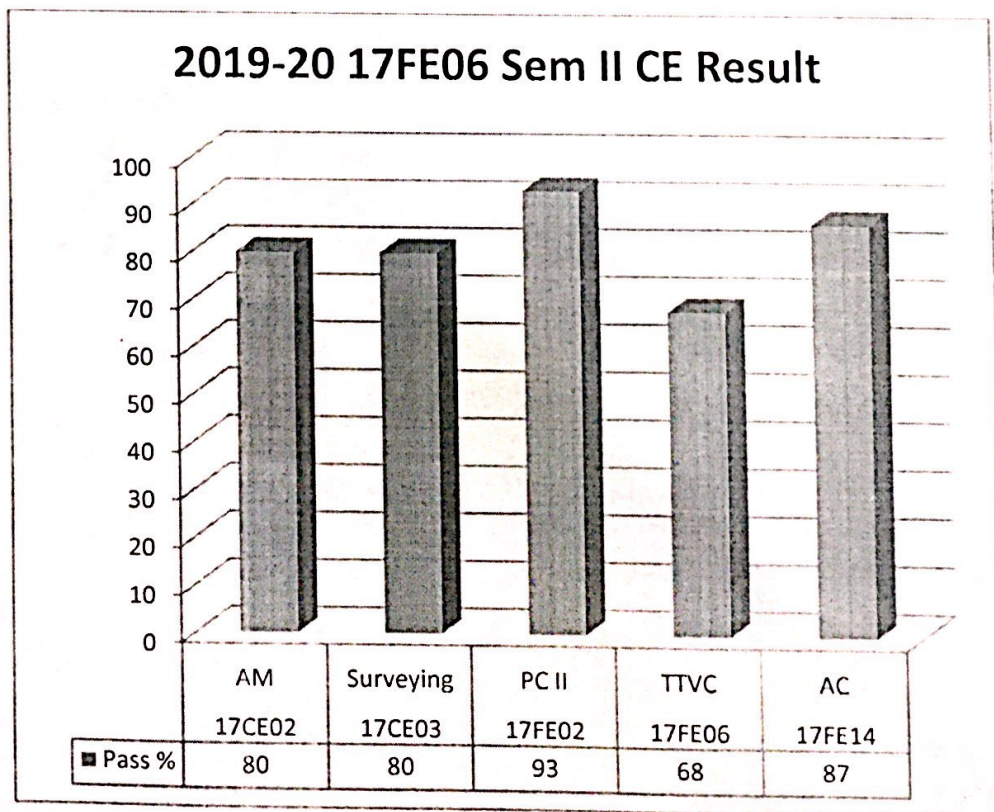


Fig. 1: Result Analysis of B.Tech. Sem II CE Course wise

2019-20 17FE06 Sem II CE TTVC Result in Grades

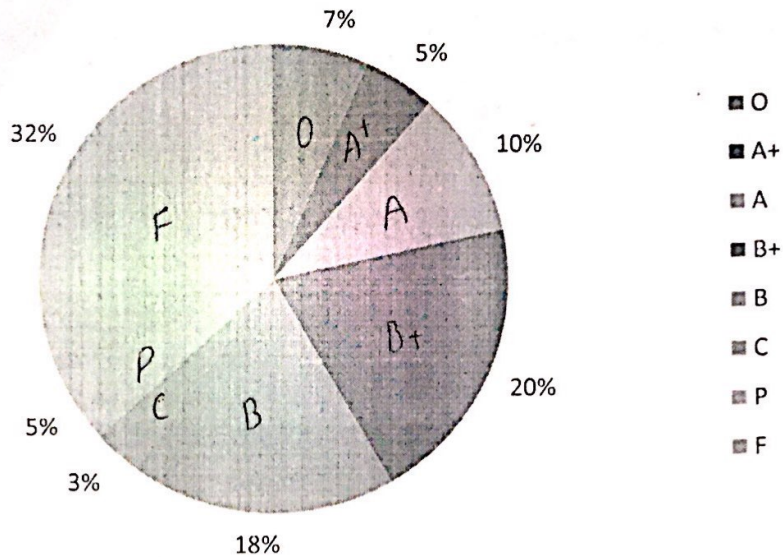


Fig. 2: Representation of grades through examinations

2019-20 17FE06 Sem II CE CO attainment

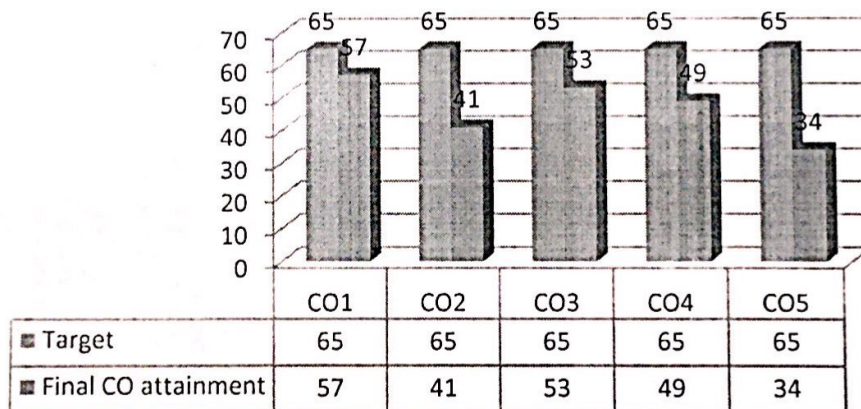


Fig. 3: Representation of COs through examinations

Action Suggested/Recommendations

1. Real examples should be given to create interest in the topic.
2. Students should be counselled and more questions to be given for practise
3. More number of assignment questions should be given in Vector related topics.
4. GATE related problems are to be discussed to involve the students more enthusiastically in the course

K.R. Kavitha

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Course Instructor	Course Coordinator	Module Coordinator	HOD
Dr. K.R. Kavitha	Dr. A. Rami Reddy	Dr. A. Rami Reddy	Dr. A. Rami Reddy

Dr. K. Jhansi Rami



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FRESHMAN ENGINEERING DEPARTMENT

CIRCULAR

04.01.2021

The Program Assessment Committee meeting of the department is convened on 06.01.2021 at 03:10 PM in English language lab. The members are requested to kindly make it convenient to attend the meeting.

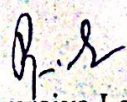
Agenda:

1. Result analysis of previous year Courses (after revaluation) –A.Y.2019-20.
2. CO Attainment of previous Semester subjects.
3. PO attainments and action taken reports for I year for R-17 Regulation in the A.Y.2019-20.









H.o.D.

Copy to: All the members of PAC

PAC Members:

1. Chairman – Dr. A. Rami Reddy 
2. Programme coordinator – Dr. B. Samrajya Lakshmi

Members

1. Dr. V. Parvathi 
2. Dr. S. Yusub 
3. Dr. K. R. Kavitha 
4. Dr. Shaheda Niloufer 
5. Dr. K. Jhansi Rani 
6. Dr. P. V. N. Kishore 
7. Dr. V. Pawel 
8. Dr. S. L. V. Rajesh Babu 



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FRESHMAN ENGINEERING DEPARTMENT

MINUTES OF PAC MEETING HELD ON 06-01-2021

The HoD welcomed the members of the PAC, and the meeting is declared open at 03:10 PM.

1. Result analysis of previous year Courses (after revaluation) –A.Y.2019-20

It is observed the average pass percentage of R17 students in the academic year 2019-20 in all the courses is greater than 85.

The pass percentage for TTVC subject in CE and EIE is less. To improve the result in the next academic year remedial classes are to be arranged to backlog students. The drop in result is due to lack of fundamentals and practice among students. Students may be asked to solve more problems in the classes. Identification of slow learners and fast learners is done through mid-semester analysis, and it is very much required.

Applied physics: Pass percentage of AP is observed to be less in EIE. The members of the PAC discussed the actions to be taken and they are forwarded to the DAC.

2. CO Attainment of previous Semester subjects.

The attainment of the even semester courses in the Academic Year 2019-20 is put forward for discussion. It is observed that the average CO attainments for few CO's has not been reached in the courses PC-II, TTVC. The recommendations/measures to be taken for the improvement in level of CO are provided and are accepted. These recommendations will be forwarded to the concerned faculty through module coordinators and the discussions are forwarded to DAC.


3. PO attainments and action taken reports for First year for R-17 Regulation.

Action taken reports were discussed at length in PAC. Some of PO values have reached the target. It is observed that the POs which are mapped with most of the theory courses have reached the target. The attainments values of some of the POs are less which are mapped with laboratory courses. Some recommendations for further improvement of the program were made.









The discussions are forwarded to DAC members.

The HoD thanked all the members on their active participation and the meeting is closed at 4:10 PM.

PAC Members:

1. Chairman – Dr. A. Rami Reddy 
2. Programme coordinator – Dr. B. Santrajya Lakshmi

Members

1. Dr. V. Parvathi 
2. Dr. S. Yusub 
3. Dr. K. R. Kavitha 
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FRESHMAN ENGINEERING DEPARTMENT


A.Y. 2019-20 SEM II CO ATTAINMENTS in %

CODE	COURSE CODE	COURSE	COURSE OUTCOMES	TARGET %	2019-20 AVERAGE % ATTAINMENT	ASE %	CIVIL %	MECH %	CSE %	IT %	EIE %	EEE %	ECE %
17FE02	17FE02.1	Professional Communication II	Use appropriate vocabulary to interpret data thoroughly and to write reports effectively.	65	59	64	56	55	62	59	50	65	64
	17FE02.2		Face any situation with confidence and voice opinions/decisions assertively.	65	77	81	69	71	68	82	64	91	87
	17FE02.3		Use English Language effectively in spoken and written forms.	65	61	70	46	57	66	65	52	74	61
	17FE02.4		Work effectively in teams for better result.	65	62	64	55	52	66	67	37	85	70
	17FE02.5		Communicate effectively using verbal and non-verbal dimensions aptly.	65	62	63	58	55	65	66	48	72	67
17FE06	17FE06.1	Transformation Techniques and Vector Calculus	Apply the concepts of Laplace Transforms to solve ordinary differential equations.	60	65	67	57	54	75	71	60	59	73
	17FE06.2		Apply Z - Transforms to solve difference equations	60	59	64	46	46	75	67	56	53	66
	17FE06.3		Discriminate among Cartesian, Polar and Spherical coordinates in multiple integrals and their respective applications to areas and volumes	60	58	55	53	52	72	67	50	50	67
	17FE06.4		Evaluate the directional derivative, divergence and angular velocity of a	60	61	63	54	47	75	68	56	54	70

CODE	COURSE CODE	COURSE	COURSE OUTCOMES	TARGET	2019-20 AVERAGE ATTAINMENT	ASE	CIVIL	MECH	CSE	IT	EIE	EEE	ECE	
			vector function.											
	17FE06.5		Apply Vector Integration for curves, surfaces and volumes and relationship among themselves.	60	42	30	28	30	58	48	33	41	66	
17FE12	17FE12.1	Applied Physics	Define the nature of Interference and Diffraction.	60	73				77	69	78		70	
	17FE12.2		Describe the polarization and LASER, types of lasers and their applications.	60	72				74	67	69		73	
	17FE12.3		Estimate the electrical conductivity in metals.	60	73				77	70	70			74
	17FE12.4		Design the circuits of semiconductor diodes, LED, Photodiode, Solar cell.	60	71				74	73	71			71
	17FE12.5		Classify the different types of polarisations in dielectric materials.	60	68				70	68	67			68
17FE14	17FE14.1	Applied Chemistry	Identify the troubles due to hardness of water and its maintenance in Industrial applications.	60	64	68	62	63					61	
	17FE14.2		Analyze issues related to conventional fuels and apply the concepts of advanced fuels like bio, nuclear and rocket fuels in energy production.	60	63	58	66	61					67	
	17FE14.3		Analyse different types of electrodes and batteries for technological applications.	60	61	60	60	65						60
	17FE14.4		Apply principles of corrosion for design and effective maintenance of	60	56	52	61	51						61

CODE	COURSE CODE	COURSE	COURSE OUTCOMES	TARGET	2019-20 AVERAGE ATTAINMENT	ASE	CIVIL	MECH	CSE	IT	EIE	EEE	ECE
			various equipments.										
	17FE14.5		Identify the important applications of engineering materials like plastics, rubbers and lubricants.	60	61	54	67	60				64	
17FE60	17FE60.1	English Communication Skills Lab	Articulate English with good pronunciation.	80	89				90	92	84		89
	17FE60.2		Manage skilfully through group discussions.	80	89				90	92	84		89
	17FE60.3		Communicate with the people effectively.	80	89				90	92	84		89
	17FE60.4		Collect and interpret data aptly.	80	89				90	92	84		89
17FE62	17FE62.1	Applied Physics Lab	Analyze the wave characteristics of light.	70	66				73	74	51		67
	17FE62.2		Estimate the wave length and width of the slit with lazer light source.	70	71				74	75	71		65
	17FE62.3		Analyze the characteristics of semi conductor Diodes.	70	69				72	70	63		70
	17FE62.4		Determine the energy band gap and the Dielectric constant of a material.	70	68				72	75	59		66
17FE64	17FE64.1	Applied Chemistry Lab	Estimate various parameters of water which decide the quality based on the procedures given.	60	75	75	75	75					76
	17FE64.2		Distinguish different types of titrations in quantitative analysis and acquire practical knowledge to prepare	60	75	76	75	75					75

CODE	COURSE CODE	COURSE	COURSE OUTCOMES	TARGET	2019-20 AVERAGE ATTAINMENT	ASE	CIVIL	MECH	CSE	IT	EIE	EEE	ECE
			polymers.										
	17FE64.3		Improve skills in report writing, individual and team work with ethical values.	60	92	94	97	87				89	



Head of the Department