



**ELECTRICAL AND
ELECTRONICS
ENGINEERING**

5/21/22, 11:31 AM

Mail - SRKR Principal - Outlook

S.R.K.R. Engineering College-Board of Studies Meeting on 15.07.2020 at 10 AM-Online Mode-Reg.

SRKR Principal <principal@srkrec.ac.in>

Fri 7/10/2020 2:26 PM

To: Dr. Venkat Reddy Kota <kvr.jntu@gmail.com>

Cc: Pedakota Kantarao <dr.pkantarao@gmail.com>

1 attachments (447 KB)

Agenda.pdf

To
Dr. K. Venkata Reddy
Associate Professor of EEE
UCEK, JNTU Kakinada
Kakinada-533 003.

Dear Sir,

Sub: S.R.K.R. Engineering College-Board of Studies Meeting-Reg.

We take the privilege in inviting you for the Board of Studies Meeting of Department of Electrical and Electronics Engineering, SRKR Engineering College as a University Nominee. It is proposed to discuss about Schemes for B.Tech (R19) 2nd, 3rd & 4th Years; Syllabus for B.Tech (R19) 2nd Year and Scheme & Syllabus for B.Tech (R17) 4th Year.

In this regard, you are requested to attend the online meeting scheduled on 15.07.2020 at 10.00 AM. The online meeting link will be provided to you shortly.

Kindly accept our invitation and make it convenient to attend the Board of Studies meeting. We are enclosing the Agenda of the Meeting.

Thanking you,

Yours Sincerely,
Dr. M. Jagapathi Raju
PRINCIPAL
S.R.K.R. Engineering College
China Amiram, Bhimavaram,
West Godavari District
Andhra Pradesh-534204
Landline: 08816-223332
Mobile No. : 9848773515, 9848381818
Email: principal@srkrec.ac.in
principalsrkrec@gmail.com

Note: Presently, our Institute is under COVID-19 Containment Zone. So, we are unable to send the hard copy of Board of Studies Meeting Invitation Letter. Kindly accept this mail as the invitation letter.



M. Jagapathi Raju
PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204

M. Jagapathi Raju

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204

S.R.K.R. Engineering College-Board of Studies Meeting on 15.07.2020 at 10 AM-Online Mode-Reg.

SRKR Principal <principal@srkrec.ac.in>

Fri 7/10/2020 2:29 PM

To: mdreddy999@rediffmail.com <mdreddy999@rediffmail.com>

Cc: Pedakota Kantarao <dr.pkantarao@gmail.com>

To

Dr. M. Damodara Reddy
Professor, Department of EEE
College of Engineering
Sri Venkateswara University
Tirupati-517502.

Dear Sir,

Sub: S.R.K.R. Engineering College-Board of Studies Meeting-Reg.

We take the privilege in inviting you for the Board of Studies Meeting of Department of Electrical and Electronics Engineering, SRKR Engineering College as an External Expert Member. It is proposed to discuss about Schemes for B.Tech (R19) 2nd, 3rd & 4th Years; Syllabus for B.Tech (R19) 2nd Year and Scheme & Syllabus for B.Tech (R17) 4th Year.

In this regard, you are requested to attend the online meeting scheduled on 15.07.2020 at 10.00 AM. The online meeting link will be provided to you shortly.

Kindly accept our invitation and make it convenient to attend the Board of Studies meeting. We are enclosing the Agenda of the Meeting.

Thanking you,

Yours Sincerely,

Dr. M. Jagapathi Raju

PRINCIPAL

S.R.K.R. Engineering College

China Amiram, Bhimavaram,

West Godavari District

Andhra Pradesh-534204

Landline: 08816-223332

Mobile No. : 9848773515, 9848381818

Email: principal@srkrec.ac.in

principalsrkrec@gmail.com

Note: Presently, our Institute is under COVID-19 Containment Zone. So, we are unable to send the hard copy of Board of Studies Meeting Invitation Letter. Kindly accept this mail as the invitation letter.



PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204

M. Jagapathi Raju

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

S.R.K.R. Engineering College-Board of Studies Meeting on 15.07.2020 at 10 AM-Online Mode-Reg.

SRKR Principal <principal@srkrec.ac.in>

Fri 7/10/2020 2:32 PM

To: chbr.elec@gmail.com <chbr.elec@gmail.com>

Cc: Pedakota Kantarao <dr.pkantarao@gmail.com>

To
Dr. Ch.V.V.S. Bhaskara Reddy
Professor
Department of Electrical Engineering
College of Engineering, Andhra University
Visakhapatnam - 530003.

Dear Sir,

Sub: S.R.K.R. Engineering College-Board of Studies Meeting-Reg.

We take the privilege in inviting you for the Board of Studies Meeting of Department of Electrical and Electronics Engineering, SRKR Engineering College as an External Expert Member. It is proposed to discuss about Schemes for B.Tech (R19) 2nd, 3rd & 4th Years; Syllabus for B.Tech (R19) 2nd Year and Scheme & Syllabus for B.Tech (R17) 4th Year.

In this regard, you are requested to attend the online meeting scheduled on 15.07.2020 at 10.00 AM. The online meeting link will be provided to you shortly.

Kindly accept our invitation and make it convenient to attend the Board of Studies meeting. We are enclosing the Agenda of the Meeting.

Thanking you,

Yours Sincerely,
Dr. M. Jagapathi Raju
PRINCIPAL
S.R.K.R. Engineering College
China Amiram, Bhimavaram,
West Godavari District
Andhra Pradesh-534204
Landline: 08816-223332
Mobile No. : 9848773515, 9848381818
Email: principal@srkrec.ac.in
principalsrkrec@gmail.com

Note: Presently, our Institute is under COVID-19 Containment Zone. So, we are unable to send the hard copy of Board of Studies Meeting Invitation Letter. Kindly accept this mail as the invitation letter.



Handwritten signature in black ink above the stamp.
PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204

Handwritten signature in green ink: H. Jagapathi. Raju

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204

S.R.K.R. Engineering College-Board of Studies Meeting on 15.07.2020 at 10 AM-Online Mode-Reg.

SRKR Principal <principal@srkrec.ac.in>

Fri 7/10/2020 2:26 PM

To: Dr. Venkat Reddy Kota <kvrjntu@gmail.com>

Cc: Pedakota Kantarao <dr.pkantarao@gmail.com>

1 attachments (447 KB)

Agenda.pdf;

To

Dr. K. Venkata Reddy
Associate Professor of EEE
UCEK, JNTU Kakinada
Kakinada-533 003.

Dear Sir,

Sub: S.R.K.R. Engineering College-Board of Studies Meeting-Reg.

We take the privilege in inviting you for the Board of Studies Meeting of Department of Electrical and Electronics Engineering, SRKR Engineering College as a University Nominee. It is proposed to discuss about Schemes for B.Tech (R19) 2nd, 3rd & 4th Years; Syllabus for B.Tech (R19) 2nd Year and Scheme & Syllabus for B.Tech (R17) 4th Year.

In this regard, you are requested to attend the online meeting scheduled on 15.07.2020 at 10.00 AM. The online meeting link will be provided to you shortly.

Kindly accept our invitation and make it convenient to attend the Board of Studies meeting. We are enclosing the Agenda of the Meeting.

Thanking you,

Yours Sincerely,

Dr. M. Jagapathi Raju

PRINCIPAL

S.R.K.R. Engineering College

China Amiram, Bhimavaram,

West Godavari District

Andhra Pradesh-534204

Landline: 08816-223332

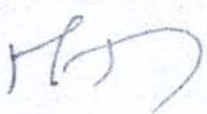
Mobile No. : 9848773515, 9848381818

Email: principal@srkrec.ac.in

principalsrkrec@gmail.com

Note: Presently, our Institute is under COVID-19 Containment Zone. So, we are unable to send the hard copy of Board of Studies Meeting Invitation Letter. Kindly accept this mail as invitation letter.




PRINCIPAL
S.R.K.R. Engg. College
BHYAVARAM-534 204.

S.R.K.R. Engineering College-Board of Studies Meeting on 15.07.2020 at 10 AM-Online Mode-Reg.

SRKR Principal <principal@srkrec.ac.in>

Fri 7/10/2020 2:29 PM

To: mdreddy999@rediffmail.com <mdreddy999@rediffmail.com>

Cc: Pedakota Kantarao <dr.pkantarao@gmail.com>

To

Dr. M. Damodara Reddy
Professor, Department of EEE
College of Engineering
Sri Venkateswara University
Tirupati-517502.

Dear Sir,

Sub: S.R.K.R. Engineering College-Board of Studies Meeting-Reg.

We take the privilege in inviting you for the Board of Studies Meeting of Department of Electrical and Electronics Engineering, SRKR Engineering College as an External Expert Member. It is proposed to discuss about Schemes for B.Tech (R19) 2nd, 3rd & 4th Years; Syllabus for B.Tech (R19) 2nd Year and Scheme & Syllabus for B.Tech (R17) 4th Year.

In this regard, you are requested to attend the online meeting scheduled on 15.07.2020 at 10.00 AM. The online meeting link will be provided to you shortly.

Kindly accept our invitation and make it convenient to attend the Board of Studies meeting. We are enclosing the Agenda of the Meeting.

Thanking you,

Yours Sincerely,

Dr. M. Jagapathi Raju

PRINCIPAL

S.R.K.R. Engineering College

China Amiram, Bhimavaram,

West Godavari District

Andhra Pradesh-534204

Landline: 08816-223332

Mobile No. : 9848773515, 9848381818

Email: principal@srkrec.ac.in

principalsrkrec@gmail.com

Note: Presently, our Institute is under COVID-19 Containment Zone. So, we are unable to send the hard copy of Board of Studies Meeting Invitation Letter. Kindly accept this mail as the invitation letter.



(Handwritten Signature)
PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204

S.R.K.R. Engineering College-Board of Studies Meeting on 15.07.2020 at 10 AM-Online Mode-Reg.

SRKR Principal <principal@srkrec.ac.in>

Fri 7/10/2020 2:32 PM

To: chbr.elec@gmail.com <chbr.elec@gmail.com>

Cc: Pedakota Kantarao <dr.pkantarao@gmail.com>

To

Dr. Ch.V.V.S. Bhaskara Reddy

Professor

Department of Electrical Engineering

College of Engineering, Andhra University

Visakhapatnam - 530003.

Dear Sir,

Sub: S.R.K.R. Engineering College-Board of Studies Meeting-Reg.

We take the privilege in inviting you for the Board of Studies Meeting of Department of Electrical and Electronics Engineering, SRKR Engineering College as an External Expert Member. It is proposed to discuss about Schemes for B.Tech (R19) 2nd, 3rd & 4th Years; Syllabus for B.Tech (R19) 2nd Year and Scheme & Syllabus for B.Tech (R17) 4th Year.

In this regard, you are requested to attend the online meeting scheduled on 15.07.2020 at 10.00 AM. The online meeting link will be provided to you shortly.

Kindly accept our invitation and make it convenient to attend the Board of Studies meeting. We are enclosing the Agenda of the Meeting.

Thanking you,

Yours Sincerely,

Dr. M. Jagapathi Raju

PRINCIPAL

S.R.K.R. Engineering College

China Amiram, Bhimavaram,

West Godavari District

Andhra Pradesh-534204


Landline: 08816-223332

Mobile No. : 9848773515, 9848381818

Email: principal@srkrec.ac.in

principalsrkrec@gmail.com

Note: Presently, our Institute is under COVID-19 Containment Zone. So, we are unable to send the hard copy of Board of Studies Meeting Invitation Letter. Kindly accept this mail as the invitation letter.


PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204



S.R.K.R. Engineering College-Board of Studies Meeting on 15.07.2020 at 10 AM-Online Mode-Reg.

SRKR Principal <principal@srkrec.ac.in>

Fri 7/10/2020 2:34 PM

To: sankarp@nitandhra.ac.in <sankarp@nitandhra.ac.in>

Cc: Pedakota Kantarao <dr.pkantarao@gmail.com>

To

Dr. P. Sankar

Assistant Professor

Dept. of Electrical Engineering

National Institute of Technology AP

Andhra Pradesh.

Dear Sir,

Sub: S.R.K.R. Engineering College-Board of Studies Meeting-Reg.

We take the privilege in inviting you for the Board of Studies Meeting of Department of Electrical and Electronics Engineering, SRKR Engineering College as an External Expert Member. It is proposed to discuss about Schemes for B.Tech (R19) 2nd, 3rd & 4th Years; Syllabus for B.Tech (R19) 2nd Year and Scheme & Syllabus for B.Tech (R17) 4th Year.

In this regard, you are requested to attend the online meeting scheduled on 15.07.2020 at 10.00 AM. The online meeting link will be provided to you shortly.

Kindly accept our invitation and make it convenient to attend the Board of Studies meeting. We are enclosing the Agenda of the Meeting.

Thanking you,

Yours Sincerely,

Dr. M. Jagapathi Raju

PRINCIPAL

S.R.K.R. Engineering College

China Amiram, Bhimavaram,

West Godavari District

Andhra Pradesh-534204

Landline: 08816-223332

Mobile No. : 9848773515, 9848381818

Email: principal@srkrec.ac.in

principalsrkrec@gmail.com

Note: Presently, our Institute is under COVID-19 Containment Zone. So, we are unable to send the hard copy of Board of Studies Meeting Invitation Letter. Kindly accept this mail as the invitation letter.



J.P.R.
PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204



**SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE(A)
CHINNA AMIRAM :: BHIMAVARAM-534204
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

Dt:13-07-2020

CIRCULAR

This is to inform you that the Department of Electrical And Electronics Engineering will hold a meeting on 15-07-20 at 10.00A.M by online mode and the meeting link will be provided. In this connection, all the members of Board of studies are requested to attend the same.

Agenda:

- 1) To discuss and finalize schemes for B.Tech (R19) 2nd, 3rd & 4th years .
- 2) To discuss and finalize syllabus for B.Tech (R19) 2nd year.
- 3) To discuss and finalize Scheme and syllabus for B.Tech (R17) 4th year.
- 4) Any other items for discussion with permission of the chair.

C.C to

- 1.The members of Board of Studies
- 2.Office file




Head of the Department

Head of EEE Department
S.R.K.R. Engg. College
BHIMAVARAM-534 204.



**PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.**



SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (AUTONOMOUS)
(Affiliated to JNTUK, Kakinada), (Recognised by AICTE, New Delhi)
Accredited by NAAC with 'A' Grade
Recognised as Scientific and Industrial Research Organisation
CHINNA AMIRAM (P.O):: BHIMAVARAM :: W.G.DL, A.P., INDIA :: PIN: 534 204
Date:15-07-2020

Members of Board of Studies

S.NO	category	NAME	DESIGNATION	SIGNATURE
1	Chairman	Dr. P Kanta Rao	Prof & Head SRKREC	<i>P. Kanta Rao</i>
2	JNTUK Nominee	Dr.K.Venkata Reddy	Associate Professor,UCEK,JNTUK	not present
3	Expert from other university	Dr.M.Damodar Reddy	Professor Department of Electrical Engineering S.V.University,Tirupati	not present
4	Expert from other university	Dr.Ch.V.V.S Bhaskara Reddy	Professor, Department of Electrical Engineering,AU,Visakapatnam	Not present
5	Expert from other university	Dr.P Sankar	Assistant Professor,Department of Electrical Engineering NIT Andhra Pradesh	Not present
6	Industry expert	Dr. Ch.Chandra Shekhar	Project Manager, Hyundai Mobis Ind,Ltd,Hyderabad	not present
7	Industry expert	Dr. P. Prabhakar Rao	Engineering Supervisor,Caterpillar India Pvt Ltd	not present
8	Expert from Research organization	Dr.G.K. Vishwanadha Raju	Lead Engineer,G.E, Bengaluru	not present
9	Faculty of each specialization	Dr.B.R.K.Varma	Professor, SRKREC	<i>B.R.K. Varma</i>
10		Sri N. Srinivasu	Professor, SRKREC	<i>N. Srinivasu</i>
11		Dr.M.Sai Veerraju	Professor, SRKREC	<i>M. Sai Veerraju</i>
12		Sri.D.J.V Prasad	Associate Professor, SRKREC	<i>D.J.V. Prasad</i>

Agenda:

1. To discuss about Schemes for B.Tech (R19) 2nd, 3rd & 4th Years
2. To discuss about Syllabus for B.Tech (R19) 2nd Year
3. To discuss about Scheme and Syllabus for B.Tech (R17) 4th Year
4. Any other item with the permission of Chair.

H. Nagapalle Reddy

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

Minutes of Meeting

A BOS meeting was held on 15-07-2020 for the B.Tech 2nd year (R19) & B.Tech 4th year (R17) Courses for EEE Department under JNTUK.

Minutes of Meeting

1. Finalized the Schemes for B.Tech (R19) 2nd, 3rd & 4th Years.
2. Suggested to change the contact hours of computers subjects to two theory and two practical classes per week.
3. Suggested to add the course IOT and its Application in 3rd year. And suggest to maintain uniform number of subjects to all electives.
4. Discussed about syllabus for B.Tech (R19) 2nd year.
5. Suggested to change Course outcomes for some of the subjects in B.Tech (R19) 2nd year.
6. Suggested to add some basic topic to machines-1 subject and change the order of units as Dc machines comes first instead of transformers.
7. Feedback from stockholders (students, alumni & parents) was discussed while framing the course curriculum and syllabus.
8. Discussed about Scheme and Syllabus for B.Tech (R17) 4th Year.
9. Suggested to remove DBMS course from Elective-1, instead of that add any advanced subject.
10. Suggested to change the titles of units in Electric drive courses and interchange the unit 3 and unit 4 in Electric Vehicles course.
11. Suggested to change the contents in FACTS, Power Station Practice and HVDC Transmission and asked to revise the syllabus.
12. Suggested to change the order of experiments in Power Electronics Lab based on the contents. And suggested to add fault analysis to power systems simulation lab.
13. Suggested to add some basic experiments to Power system Protection lab instead of equivalent circuit of Three phase transformer.
14. Discussed about syllabus of Networks Subject for B.Tech(R19) ECE 2nd year and suggested to add some basic concepts to unit 1 like basic elements and basic theorems.



H. Jagapathi Reddy

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

[Signature]
Chairman BOS
Head of EEE Department
S.R.K.R. Engg. College
BHIMAVARAM -534 204
15/7/2020

RESOLUTIONS FOR THE MEETING DATED 15-07-2020

1) Finalised the schemes for B.Tech (R19) 2nd, 3rd and 4th Years.

SCHEME OF INSTRUCTION & EXAMINATION
(Regulation R19)
II/IV B.TECH
I SEMESTER
(With effect from 2019-2020 Admitted Batch onwards)

Subject Code	Name of the Subject	Category	Cr	L	T	P	Internal Marks	External Marks	Total Marks
B19 EC 2101	Electronic Devices and Circuits	ES	3	3	--	--	25	75	100
B19 BS2102	Mathematics-IV	BS	3	3	--	--	25	75	100
B19 EI 2101	Electrical Measurements and Instrumentation	PC	3	3	--	--	25	75	100
B19 EE 2102	Network Analysis and Synthesis	PC	3	3	--	--	25	75	100
B19 EE 2103	Electro Magnetic Field Theory	PC	3	3	--	--	25	75	100
B19 CS 2104	Data Structures	ES	3	3	--	--	25	75	100
B19 EE 2104	Networks Lab	PC	1.5	--	--	3	20	30	50
B19 EC 2105	Electronic Devices and Circuits Lab (with Simulation)	ES	1.5	--	--	3	20	30	50
B19 MC 2102	Essence of Indian Traditional Knowledge	MC	0	3	--	--	--	--	--
TOTAL			21	21	0	0	190	510	700

SCHEME OF INSTRUCTION & EXAMINATION
(Regulation R19)
II/IV B.TECH
I-SEMESTER
(With effect from 2019-2020 Admitted Batch onwards)

Subject Code	Name of the Subject	Category	Cr	L	T	P	Internal Marks	External Marks	Total Marks
B19 EE 3101	Electrical Machines-II	PC	3	3	--	--	25	75	100
B19 EE 3102	Control Systems	PC	3	3	--	--	25	75	100
B19 EE 3103	Power Electronics	PC	3	3	--	--	25	75	100
B19 EE 3104	Electrical Power Generation, Transmission & Distribution	PC	3	3	--	--	25	75	100
B19 EE 3105	Micro Processors and Micro Controllers	PC	3	3	--	--	25	75	100
# PE-I	Professional Elective-I	PE	3	3	--	--	25	75	100
B19 EE 3110	Electrical Machines-I Lab	PC	1.5	--	--	3	20	30	50
B19 EE 3111	Microprocessor & Microcontroller Lab	PC	1.5	--	--	3	20	30	50
B19 MC 3101	Employability skills-I	MC	--	3	--	--	--	--	--
B19 MC 3102	Basic Coding	MC	--	--	--	3	--	--	--
TOTAL			21	21	--	9	190	510	700

SCHEME OF INSTRUCTION & EXAMINATION
(Regulation R19)
II/IV B.TECH
II SEMESTER
(With effect from 2019-2020 Admitted Batch onwards)

Subject Code	Name of the Subject	Category	Cr	L	T	P	Internal Marks	External Marks	Total Marks
B19 EE 2201	Electrical Machines - I	PC	3	3	--	--	25	75	100
B19 EE 2202	Digital Electronics and Logic Design	PC	3	3	--	--	25	75	100
B19 EE 2203	Signals and Systems	PC	3	3	--	--	25	75	100
B19 ME 2207	Prime Movers and Pumps	ES	3	3	--	--	25	75	100
B19 CS 2209	OOP's through JAVA	ES	3	3	--	--	25	75	100
B19 HS 2201	Management and Organizational Behaviour	HS	3	3	--	--	25	75	100
B19 EE 2204	Electrical Measurements and Instrumentation Lab	PC	1.5	--	--	3	20	30	50
B19 ME 2208	Thermal Prime movers Lab	ES	1.5	--	--	3	20	30	50
B19 MC 2202	Professional Ethics and Human Values	MC	0	3	--	--	--	--	--
TOTAL			21	21	0	0	190	510	700

SCHEME OF INSTRUCTION & EXAMINATION
(Regulation R19)
II/IV B.TECH
II-SEMESTER
(With effect from 2019-2020 Admitted Batch onwards)

Subject Code	Name of the Subject	Category	Cr	L	T	P	Internal Marks	External Marks	Total Marks
B19 EE 3201	Power System Analysis and Stability	PC	3	3	--	--	25	75	100
B19 EE 3202	Internet of Things and its applications in Electrical Engineering	PC	3	3	--	--	25	75	100
# PE-II	Professional Elective-II	PE	3	3	--	--	25	75	100
# PE-III	Professional Elective-III	PE	3	3	--	--	25	75	100
# OE-I	Open Elective-I	OE	3	3	--	--	25	75	100
B19 EE 3211	Electrical Machines - II Lab	PC	1.5	--	--	3	20	30	50
B19 EE 3212	Control Systems Lab	PC	1.5	--	--	3	20	30	50
B19 EE 3213	Power Electronics Lab	PC	1.5	--	--	3	20	30	50
B19 MC 3201	Employability skills-II	MC	0	3	--	--	--	--	--
B19 MC 3203	Advanced Coding	MC	--	--	--	3	--	--	--
TOTAL			19.5	18	--	12	185	465	650

2) Suggested to change the contact hours of computers subjects to 2 theory and 2 practical classes per week.

3) Suggested to add the course IOT and its applications in 3rd Year and suggested to maintain uniform number of subjects to all electives.

H. Nagappa Reddy

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

Subject Code	Name of the Subject	Category	Cr	L	T	P	Internal Marks	External Marks	Total Marks
B19 EE 3201	Power System Analysis and Stability	PC	3	3	--	--	25	75	100
B19 EE 3202	Internet of Things and its applications in Electrical Engineering	PC	3	3	--	--	25	75	100
# PE-II	Professional Elective-II	PE	3	3	--	--	25	75	100
# PE-III	Professional Elective-III	PE	3	3	--	--	25	75	100
# OE-I	Open Elective-I	OE	3	3	--	--	25	75	100
B19 EE 3211	Electrical Machines - II Lab	PC	1.5	--	--	3	20	30	50
B19 EE 3212	Control Systems Lab	PC	1.5	--	--	3	20	30	50
B19 EE 3213	Power Electronics Lab	PC	1.5	--	--	3	20	30	50
B19 MC 3201	Employability skills-II	MC	0	3	--	--	--	--	--
B19 MC 3203	Advanced Coding	MC	--	--	--	3	--	--	--
TOTAL			19.5	18	--	12	185	465	650

#PE-II	Course Code	Course
	B19 EE 3203	Advanced Control Systems
	B19 EE 3204	Digital Control systems
	B19 EE 3205	Special Electrical Machines
	B19 EE 3206	MOOCs-II
#PE-III	B19 EE 3207	Power Electronic Drives
	B19 EE 3208	Advanced power electronics Circuits
	B19 EE 3209	Switched Mode Power Supplies
	B19 EE 3210	MOOCs-III

#OE-I	Course Code	Course
	Student has to study one Open Elective offered by CE or CSE or ECE or IT or ME or EM&I	

- 4) Discussed about syllabus for B.Tech(R19) 2nd Year.
- 5) Suggested to change course outcomes for some of the subjects in B.Tech(R19) 2nd Year.
- 6) Suggested to add some basic topic to Machines-I subject and change the order of the units as DC Machines comes first instead of transformers.

SYLLABUS	
UNIT-I (10 Hrs)	Electromechanical energy conversion: Basic principles of energy, force and torque in singly and multiply excited systems. Construction and working principle of DC machines and methods of excitation.
UNIT-II (10 Hrs)	D.C. Machines D.C generators-emf equation, armature reaction, commutation. Compensating winding, characteristics of various types of generators, applications. D.C. motors- torque equation, D.C. shunt, series and compound motors- characteristics & applications
UNIT-III (10 Hrs)	Starting & Speed control Starting methods and speed control of D.C. shunt and series motors testing of D.C motors - direct and regenerative methods to test D.C. machines. Swinburne's test, field's test and separation of losses.
UNIT-IV (10 Hrs)	Transformers: Principle, construction and operation of single-phase transformers, phasor diagram, equivalent circuit, voltage regulation, losses and efficiency. Testing- open & short circuit tests, Sumpner's test. Autotransformers- construction, principle, applications and comparison with two winding transformer.

- 7) Feedback from stakeholders (students, Alumni and parents) was discussed while framing the course curriculum and syllabus.

H. Nagappa. Reddy

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-954 204.

8) Discussed about scheme and syllabus for B.Tech(R17) 4th Year

SCHEME OF INSTRUCTION & EXAMINATION										SCHEME OF INSTRUCTION & EXAMINATION									
Regulation R17										Regulation R17									
IV th B.TECH										IV th B.TECH									
(With effect from 2017-2018 Admitted Batch onwards)										(With effect from 2017-2018 Admitted Batch onwards)									
ELECTRICAL AND ELECTRONICS ENGINEERING										ELECTRICAL AND ELECTRONICS ENGINEERING									
Accredited by NBA										Accredited by NBA									
I SEMESTER										II SEMESTER									
Code No	Name of the Subject	Credits	Less Hrs	Theory Hrs	Lab Hrs	Contact Hrs/Week	Internal Marks	External Marks	Total Marks	Code No	Name of the Subject	Cr.	Less Hrs	Theory Hrs	Lab Hrs	Contact Hrs/Week	Int. Marks	Ext. Marks	Total Marks
EET EE 401	Electric Drives	3	3	3	-	4	30	70	100	EET EE 402	Electrical Machines Design	3	3	3	-	4	30	70	100
EET EE 402	Power System Operation & Control	3	3	3	-	4	30	70	100	EET EE 403	Electronics-II	3	3	3	-	4	30	70	100
EET EE 403	Electric Vehicles	3	3	3	-	4	30	70	100	EET EE 404	Power System Protection Lab	2	-	-	3	3	50	50	100
EEL E 404	Electrical-I	3	2	2	-	4	30	70	100	EET EE 405	Seminar	2	-	-	-	-	50	-	50
EEL E 405	Electronics-I	3	2	2	-	4	30	70	100	EET EE 406	Project Work	10	-	-	3	3	60	140	200
EET EE 406	Power Electronics Lab	2	-	-	3	3	50	50	100										
EET EE 407	Power System Simulation Lab	2	-	-	3	3	50	50	100										
	Total	20	15	15	6	24	250	650	900	Total	20	6	2	6	14	250	250	250	500

EEL E 404	Operations Research
EET EE 408	Facile AC Transmission Systems
EET EE 409	Integration of Distributed Generation
EET EE 410	High Voltage Engineering
EET EE 411	Electric Power Quality
EET EE 412	Energy Management & Auditing

EET EE 402	Electrical Distribution Systems
EET EE 403	Utilization of Electrical Energy & Traction
EET EE 404	HVDC Transmission

9) Suggested to remove DBMS course from elective-1, instead of that add any Advanced subject.

10) Suggested to change the title of units in electric drive courses and interchange the unit-3 and unit-4 in electrical vehicles course.

11) Suggested to change the contents in FACTS, Power station practice and HVDC Transmission and asked to revise the syllabus.

12) Suggested to change the order of experiments in power electronics lab based on the contents and suggested to add fault analysis to power system simulation lab.

List of experiments:

1. Study the Characteristics of SCR, IGBT and MOSFET
2. Design of Gate Drive Circuit for IGBT & MOSFET
3. Compare the R and RC triggering circuit for various firing angle.
4. Construct a Single Phase Semi Converter for R and RL Loads.
5. Control the Speed of DC Motor Using Single Phase Full Converter with and without Free Wheeling Diode.
6. Construct a Single Phase AC Voltage Controller for R and RL Loads.
7. Study of Single Phase Cycloconverter for different frequency divisions.
8. Study of Impulse Commutated Chopper for various duty cycles.
9. Construct a single phase dual converter with and without circulating current mode of operation.
10. Study of Three Phase Inverter with 120° and 180° Mode of operation.

Add on Experiments:

1. Obtain the Three Level AC voltage from DC input using NPC Inverter.
2. Obtain the Five Level AC voltage from DC input using Cascaded Multi Level Inverter.
3. Study of Three Phase Full Converter with R-Load
4. Study of Three Phase Semi Converter with R-Load
5. Study of Three Phase AC Voltage Controller with R-Load
6. Study of Three Phase Sinusoidal PWM Inverter.

13) Suggested to add some basic experiments to power system protection lab instead of equivalent circuit of 3-phase transformer.

H. Jagapathi Reddy

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-834 204.

List of experiments

1. Obtain positive, negative and zero sequence Impedances of a 3-phase transformer.
2. Obtain the sequence Impedance of alternator by fault analysis.
3. Obtain power angle characteristics of a salient pole synchronous machine by knowing direct and quadrature axis reactance.
4. Determine the dielectric strength of Insulating oil.
5. Obtain the equivalent circuit of a 3-winding transformer.
6. Obtain the ABCD parameters of transmission line.
7. To plot the IDMT characteristics of electromagnetic over current relay.
8. To plot the DMT and IDMT characteristics of static overvoltage and under voltage relays.
9. To test the operation of Differential relay for Protection of transformer.
10. To test the characteristics of Negative sequence current relay with phase reversal fault simulation.

14) Discussed about the syllabus of Networks subject for B.Tech(R19) ECE 2nd Year and suggested to add some basic concepts to unit-I like basic elements and Basic Theorems.

SYLLABUS

UNIT-I (9 Hrs)	Network Theorems: Review of Dc circuits, Superposition, Thevenin's, Norton's, Reciprocity, Max Power Transfer theorems.
UNIT-II (12 Hrs)	DC transients: Inductor, Capacitor, source free RL, RC and RLC response, Evaluation of Initial conditions, Application of unit-step function to RL, RC and RLC circuits, concepts of Natural, Forced and Complete response.
UNIT-III (10 Hrs)	Analysis of AC Networks: Review of ac circuits, Node and mesh analysis, Superposition, Thevenin's, Max Power Transfer theorems. Resonance: Series and parallel resonance, selectivity, band width and Quality factor, locus diagram.
UNIT-IV (10 Hrs)	Two-port Networks : Introduction, Z-parameters, Y-parameters, Transmission line parameters, h-parameters, Relationship between various parameters, series, parallel & cascade connection of two port networks.



[Signature]
Head of EEE Department
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

[Signature]

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (AUTONOMOUS)

Affiliated to JNTUK, Kakinada: Recognized by AICTE, New Delhi

Accredited by NAAC with 'A' Grade. Accredited by NBA (UG: Civil, CSE, ECE, EEE, IT & ME)

Recognised as Scientific and Industrial Research Organisation

CHINA AMIRAM (P.O):: BHIMAVARAM :: W.G.DL. A.P., INDIA :: PIN: 534 204

Dr. M. Jagapathi Raju

M.Tech (IT, KGP), Ph.D (A.U), FIE, MISTE

PRINCIPAL



Phones: 08816-223332 Ext. 201

Direct: 08816-222748

Mobile No.: 9848381818

Email: principal@srkrec.ac.in

principalsrkrec@gmail.com

Website: www.srkrec.ac.in

SRKREC/BOS/JBS/2020-21

Date: 25.11.2020

To

Dr. K. Venkata Reddy

Associate Professor of EEE

University College of Engineering Kakinada (UCEK)

JNTU Kakinada.

Dear Sir,

Sub: S.R.K.R. Engineering College-Joint Board of Studies Meeting-Invitation-Reg.

We take the privilege in inviting you for the Joint Board of Studies Meeting of SRKR Engineering College on 29.11.2020 (Sunday). It is proposed to discuss and finalize the course structure and syllabi of B. Tech. first year of all branches for the academic year 2020-2021.

In this regard, you are requested to attend the online meeting of the Joint Board of Studies on 29.11.2020 at 9.30 AM. The online meeting link will be provided to you shortly.

The Board of Studies meetings of the Departments concerned will be conducted at 11.00 AM on the same day (29.11.2020) in online mode.

Kindly accept our invitation and make it convenient to attend the meeting.

Yours Sincerely,

PRINCIPAL

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.



PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (AUTONOMOUS)

Affiliated to JNTUK, Kakinada; Recognized by AICTE, New Delhi
Accredited by NAAC with 'A' Grade. Accredited by NBA (UG: Civil, CSE, ECE, EEE, IT & ME)
Recognised as Scientific and Industrial Research Organisation
CHINA AMIRAM (P.O):: BHIMAVARAM :: W.G.De. A.P., INDIA :: PIN: 534 204

Dr. M. Jagapathi Raju
M.Tech (IIT, KGP), Ph.D (A.U), FIE, MISTE
PRINCIPAL



Phones: 08816-223332 Ext. 201
Direct: 08816-222748
Mobile No.: 9848381818
Email: principal@srkrec.ac.in
principalsrkrec@gmail.com
Website: www.srkrec.ac.in

SRKREC/BOS/JBS/2020-21

Date: 25.11.2020

To
Dr. M.Damodara Reddy
Professor, Department of EEE
College of Engineering
Sri Venkateswara University
Tirupati-517502.

Dear Sir,

Sub: S.R.K.R. Engineering College-Joint Board of Studies Meeting-Invitation-Reg.

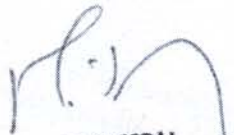
We take the privilege in inviting you for the Joint Board of Studies Meeting of SRKR Engineering College on 29.11.2020 (Sunday). It is proposed to discuss and finalize the course structure and syllabi of B. Tech. first year of all branches for the academic year 2020-2021.

In this regard, you are requested to attend the online meeting of the Joint Board of Studies on 29.11.2020 at 9.30 AM. The online meeting link will be provided to you shortly.

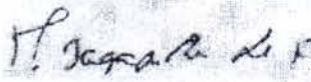
The Board of Studies meetings of the Departments concerned will be conducted at 11.00 AM on the same day (29.11.2020) in online mode.

Kindly accept our invitation and make it convenient to attend the meeting.

Yours Sincerely,


PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204




PRINCIPAL

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (AUTONOMOUS)

Affiliated to JNTUK, Kakinada; Recognized by AICTE, New Delhi

Accredited by NAAC with 'A' Grade. Accredited by NBA (UG: Civil, CSE, ECE, EEE, IT & ME)

Recognised as Scientific and Industrial Research Organisation

CHINA AMIRAM (P.O):: BHIMAVARAM :: W.G.Dt., A.P., INDIA :: PIN: 534 204

Dr. M. Jagapathi Raju
M.Tech (IIT. KGP), Ph.D (A.U), FIE, MISTE
PRINCIPAL



Phones: 08816-223332 Ext. 201
Direct: 08816-222748
Mobile No.: 9848381818
Email: principal@srkrec.ac.in
principalsrkrec@gmail.com
Website: www.srkrec.ac.in

SRKREC/BOS/JBS/2020-21

Date: 25.11.2020

To
Dr. Ch. V.V.S. Bhaskara Reddy
Professor
Dept of Electrical Engineering
College of Engineering, Andhra University
Visakhapatnam-530003.

Dear Sir,

Sub: S.R.K.R. Engineering College-Joint Board of Studies Meeting-Invitation-Reg.

We take the privilege in inviting you for the Joint Board of Studies Meeting of SRKR Engineering College on 29.11.2020 (Sunday). It is proposed to discuss and finalize the course structure and syllabi of B. Tech. first year of all branches for the academic year 2020-2021.

In this regard, you are requested to attend the online meeting of the Joint Board of Studies on 29.11.2020 at 9.30 AM. The online meeting link will be provided to you shortly.

The Board of Studies meetings of the Departments concerned will be conducted at 11.00 AM on the same day (29.11.2020) in online mode.

Kindly accept our invitation and make it convenient to attend the meeting.

Yours Sincerely,

PRINCIPAL

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.



SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (AUTONOMOUS)

Affiliated to JNTUK, Kakinada; Recognized by AICTE, New Delhi
Accredited by NAAC with 'A' Grade, Accredited by NBA (UG: Civil, CSE, ECE, EEE, IT & ME)
Recognised as Scientific and Industrial Research Organisation
CHINA AMIRAM (P.O):: BHIMAVARAM :: W.G.DL. A.P., INDIA :: PIN: 534 204

Dr. M. Jagapathi Raju
M.Tech (IIT, KGP), Ph.D (A.U), FIE, MISTE
PRINCIPAL



Phones: 08816-223332 Ext. 201
Direct: 08816-222748
Mobile No.: 9848381818
Email: principal@srkrec.ac.in
principalsrkrec@gmail.com
Website: www.srkrec.ac.in

SRKREC/BOS/JBS/2020-21

Date: 25.11.2020

To
Dr. P. Sankar
Assistant Professor
Dept. of Electrical Engineering
National Institute of Technology AP
Andhra Pradesh.

Dear Sir,

Sub: S.R.K.R. Engineering College-Joint Board of Studies Meeting-Invitation-Reg.

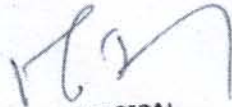
We take the privilege in inviting you for the Joint Board of Studies Meeting of SRKR Engineering College on 29.11.2020 (Sunday). It is proposed to discuss and finalize the course structure and syllabi of B. Tech. first year of all branches for the academic year 2020-2021.

In this regard, you are requested to attend the online meeting of the Joint Board of Studies on 29.11.2020 at 9.30 AM. The online meeting link will be provided to you shortly.


The Board of Studies meetings of the Departments concerned will be conducted at 11.00 AM on the same day (29.11.2020) in online mode.

Kindly accept our invitation and make it convenient to attend the meeting.

Yours Sincerely,


PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204




PRINCIPAL

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204



SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE(A)
CHINNA AMIRAM :: BHIMAVARAM 534204
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Dt:23.11.2020

CIRCULAR

This is to inform you that the Department of Electrical And Electronics Engineering will hold a meeting on 29-11-20 at 09.30A.M by online mode and the meeting link will be provided. In this connection, all the members of Board of studies are requested to attend the same.

Agenda:

- 1) To discuss and finalize schemes for B.Tech (R20) 1st, 2nd, 3rd & 4th years .
- 2) To discuss and finalize syllabus for B.Tech (R20) 1st year.
- 3) Any other items for discussion with permission of the chair.


Head of the Department

Head of EEE Department
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

C.C to

1.The members of Board of Studies

2.Office file





PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.



SAGI RAMA KRISHNAM RAJU ENGINEERING COLLEGE (AUTONOMOUS)
(Affiliated to JNTUK, Kakinada), (Recognised by AICTE, New Delhi)
Accredited by NAAC with 'A' Grade
Recognised as Scientific and Industrial Research Organisation
CHINNA AMIRAM (P.O):: BHIMAVARAM :: W.G.DI., A.P., INDIA :: PIN: 534 204
Date: 29-11-2020

Members of Board of Studies

S.NO	category	NAME	DESIGNATION	SIGNATURE
1	Chairman	Dr. P Kanta Rao	Prof & Head SRKREC	<i>P. Kanta Rao</i>
2	JNTUK Nominee	Dr.K.Venkata Reddy	Associate Professor, UCEK, JNTUK, Kakinada.	ON LINE
3	Expert from other university	Dr.M.Damodar Reddy	Professor, Department of Electrical Engineering S.V.University, Tirupati.	ON LINE
4	Expert from other university	Dr.Ch.V.V.S Bhaskara Reddy	Professor, Department of Electrical Engineering, Andhra University, Visakhapatnam.	ON LINE
5	Expert from other university	Dr.P Sankar	Assistant Professor, Department of Electrical Engineering, NIT Andhra Pradesh	ON LINE
6	Industry expert	Dr. Ch.Chandra Shekhar	Project Manager, Hyundai Mobis Ind,Ltd, Hyderabad	Not Present
7	Industry expert	Dr. P. Prabhakar Rao	Engineering Supervisor, Caterpillar India Pvt Ltd	Not Present
8	Expert from Research organization	Dr.G.K.Vishwanadha Raju	Lead Engineer, G.E, Bengaluru	Not Present
9	Faculty of each specialization	Dr.B.R.K.Varma	Professor, SRKREC	<i>B.R.K. Varma</i>
10		Sri N. Srinivasu	Professor, SRKREC	<i>N. Srinivasu</i>
11		Dr.M.Sai Veerraju	Professor, SRKREC	<i>M. Sai Veerraju</i>
12		Sri.D.J.V Prasad	Associate Professor, SRKREC	<i>D.J.V. Prasad</i>

Agenda:

1. To discuss about Scheme for B.Tech (R20) 1st, 2nd, 3rd & 4th Years
2. To discuss about Syllabus for B.Tech (R20) 1st Year
3. Any other item with the permission of Chair.

H. Nagapathi Reddy

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

Minutes of Meeting

A BOS meeting was held on 29-11-2020 for the B.Tech 1st Year (R20) curriculum and subjects for first Year courses.

Minutes of Meeting

1. Discussed and Finalized the Scheme for B. Tech (R20) 1st, 2nd, 3rd & 4th Years.
2. Suggested to change the representation for Professional Elective Courses.
3. Discussed and Suggested to change some syllabus contents in Introduction to Electrical Systems course for EEE.
4. Suggested to add sensors to the Basic Electrical and Electronics Engineering Course for Mechanical.
5. Suggested to add Servo motors, sensors and activators to Basic Electrical Engineering course in the place of BLDC motors for ECE.
6. Discussed and Finalized the syllabus of Principles of Electrical Engineering Course for CS&BS.
7. Discussed and Finalized the syllabus for Principles of Electrical & Electronics Engineering course for AI&DS.



P. Jagapathi Reddy
Chairman BOS 29/11/20
Head of EEE Department
S.R.K.R. Engg. College
BHIMAVARAM-534 204

P. Jagapathi Reddy

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

RESOLUTIONS FOR THE MEETING DATED 29-11-2020

1) Discussed and finalised the schemes for B.Tech(R20) 1st, 2nd Years.

Regulation: R20		I/IV - B.Tech. I - Semester							
ELECTRICAL & ELECTRONICS ENGINEERING									
SCHEME OF INSTRUCTION & EXAMINATION (With effect from 2020-21 admitted Batch onwards)									
Course Code	Course Name	Category	Cr	L	T	P	Int. Marks	Est. Marks	Total Marks
B20 HS 1101	English	HS	3	3	0	0	30	70	100
B20 BS 1101	Mathematics-I	BS	3	3	0	0	30	70	100
B20 BS 1102	Applied Physics	BS	3	3	0	0	30	70	100
B20 ME 1101	Engineering Drawing	ES	3	2	0	2	30	70	100
B20 EE 1101	Introduction to Electrical Systems	ES	3	3	0	0	30	70	100
B20 EE 1104	Basic Electrical Systems Lab	ES	1.5	0	0	3	15	35	50
B20 BS 1107	Applied Physics Lab	BS	1.5	0	0	3	15	35	50
B20 ME 1102	Workshop Practice	ES	1.5	0	0	3	15	35	50
TOTAL			19.5	14	0	11	195	455	650

Regulation: R20		II/IV - B.Tech. I - Semester							
ELECTRICAL & ELECTRONICS ENGINEERING									
SCHEME OF INSTRUCTION & EXAMINATION (With effect from 2020-21 admitted Batch onwards)									
Course Code	Course Name	Category	Cr	L	T	P	Int. Marks	Est. Marks	Total Marks
B20 BS 2101	Numerical Methods & Vector Calculus	BS	3	3	0	0	30	70	100
B20 EC 2101	Electronic Devices and Circuits	PC	3	3	0	0	30	70	100
B20 EE 2101	Network Analysis	PC	3	3	0	0	30	70	100
B20 EE 2102	Electromagnetic Field Theory	PC	3	3	0	0	30	70	100
B20 EE 2103	Electrical Machines-I	PC	3	3	0	0	30	70	100
B20 EE 2104	Networks Laboratory	PC	1.5	0	0	3	15	35	50
B20 EE 2105	MATLAB Simulation Laboratory	PC	1.5	0	0	3	15	35	50
B20 EC 2105	Electronic Devices and Circuits Lab With Simulation	PC	1.5	0	0	3	15	35	50
B20 EE 2106	Solar Energy Systems Laboratory	SOC	2	0	0	4	--	50	50
B20 MC 2102	Professional Ethics and Human values	MC	0	2	0	0	--	--	--
TOTAL			21.5	17	0	13	195	505	700

Regulation: R20		I/IV - B.Tech. II - Semester							
ELECTRICAL & ELECTRONICS ENGINEERING									
SCHEME OF INSTRUCTION & EXAMINATION (With effect from 2020-21 admitted Batch onwards)									
Course Code	Course Name	Category	Cr	L	T	P	Int. Marks	Est. Marks	Total Marks
B20 BS 1201	Mathematics-II	BS	3	3	0	0	30	70	100
B20 BS 1203	Applied Chemistry	BS	3	3	0	0	30	70	100
B20 CS 1201	Programming for Problem Solving Using C	ES	3	3	0	0	30	70	100
B20 CS 1204	Digital Computer Fundamentals	ES	3	3	0	0	30	70	100
B20 ME 1204	Prime Movers and Pumps	ES	3	3	0	0	30	70	100
B20 BS 1208	Applied Chemistry Lab	BS	1.5	0	0	3	15	35	50
B20 HS 1202	Communication Skills Lab	HS	1.5	0	0	3	15	35	50
B20 CS 1205	Programming for Problem Solving Using C Lab	ES	1.5	0	0	3	15	35	50
B20 MC 1201	Environmental Science	MC	0	2	0	0	--	--	--
B20 MC 1203	National Service Scheme (NSS)	MC	0	0	0	2	--	--	--
TOTAL			19.5	17	0	11	195	455	650

Regulation: R20		II/IV - B.Tech. II - Semester							
ELECTRICAL & ELECTRONICS ENGINEERING									
SCHEME OF INSTRUCTION & EXAMINATION (With effect from 2020-21 admitted Batch onwards)									
Course Code	Course Name	Category	Cr	L	T	P	Int. Marks	Est. Marks	Total Marks
B20 BS 2204	Complex Variables and Statistical Methods	BS	3	3	0	0	30	70	100
B20 EC 2201	Electronic Circuit Analysis and Design	PC	3	3	0	0	30	70	100
B20 EE 2201	Electrical Machines-II	PC	3	3	0	0	30	70	100
B20 EE 2202	Electrical Power Generation Transmission & Distribution	PC	3	3	0	0	30	70	100
B20 EE 2203	Electrical Measurements & Instrumentation	PC	3	3	0	0	30	70	100
B20 EC 2206	Electronic Circuit Analysis And Design Lab With Simulation	PC	1.5	0	0	3	15	35	50
B20 EE 2204	Electrical Measurements & Instrumentation Laboratory	PC	1.5	0	0	3	15	35	50
B20 EE 2205	Electrical Machines-I Laboratory	PC	1.5	0	0	3	15	35	50
B20 EE 2206	Smart Systems Laboratory	SOC	2	0	0	4	--	50	50
B20 MC 2201	English Proficiency	MC	0	2	0	0	--	--	--
TOTAL			21.5	17	0	13	195	505	700

H. Nagappa Reddy
PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

- 2) Suggested to change the representation for professional elective courses.
- 3) Discussed and suggested to change some syllabus contents in Introduction to Electrical systems Course in EEE
- 4) Suggested to add sensors to Basic Electrical and Electronics Engineering Course for mechanical.
- 5) Suggested to add servo motors, sensors and actuators to Basic Electrical Engineering course in place of BLDC motors for ECE.
- 6) Discussed and finalised the syllabus of Principles of Electrical Engineering Course for CSBS

SYLLABUS (Theory)

UNIT-I (10 Hrs)	Basic concepts of Electrical circuits: Concept of Potential difference, voltage, current, Fundamental linear passive and active elements to their functional current-voltage relation, voltage sources and current sources, ideal and practical sources, concept of dependent and independent sources, Kirchhoff's laws and applications to network solutions using mesh and nodal analysis. Concept of work, power and energy.
UNIT-II (10 Hrs)	DC Circuits: Current-voltage relations of the electric network by mathematical equations to analyze the network (Thevenin's theorem, Norton's Theorem, Maximum Power Transfer theorem), Superposition theorem. Simplifications of networks using series-parallel, Star/Delta transformation.
UNIT-III (10 Hrs)	AC Circuits: AC waveform definitions, form factor, peak factor, study of R-L, R-C, RLC series circuit, phasor representation in polar and rectangular form, concept of impedance, admittance, active, reactive, apparent and complex power, power factor. Introduction to 3 phase Balanced AC Circuits, voltage and current relations (Y- Δ connection)
UNIT-IV (10 Hrs)	Electrostatics and Electromagnetism: Electrostatic field, electric field strength, concept of permittivity in dielectrics, capacitors, capacitors in series and parallel, energy stored in capacitors, charging and discharging of capacitors. Magnetic field and Faraday's law, self and mutual inductance. Single phase transformer, principle of operation, EMF equation, voltageratio, current ratio, KVA rating, efficiency. Principle of batteries, types and applications.
UNIT-V (10 Hrs)	Measurements, Sensors and Safety: Introduction to measuring devices/sensors and transducers (Piezoelectric and thermo-couple) related to electrical signals, Elementary methods for the measurement of single-phase power. Electrical Wiring: Basic layout of the distribution system, necessity of earthing, types of earthing, Safety devices & system.

- 7) Discussed and finalised the syllabus of Principles of Electrical Engineering Course for AI&DS

SYLLABUS

UNIT-I (12Hrs)	Introduction to Electrical circuits: Introduction to electrical concepts. Types of network elements, Ohms Law, Kirchhoff's Laws, Series and parallel Circuits connection of resistances with DC excitation. Representation of sinusoidal waveforms - Peak, Average and RMS values - Phasor representation - real power - Reactive power - apparent power - power factor. Analysis of single-phase ac circuits consisting of RL - RC - RLC series circuits
UNIT-II (10Hrs)	D.C Machines: Faraday's Laws-Induced EMF - Principle of operation of DC Generator - EMF equation - Construction-Types of DC generator-DC motor types, Torque equation -Losses.
UNIT-III (8 Hrs)	Transformers and AC machines: Principle of operation of single-phase transformer - EMF equation - equivalent circuit - losses- Transformer efficiency. principle and operation of Induction Motor [Elementary treatment only].
UNIT-IV (12 Hrs)	Semiconductors and P-N junction diode: Types of semiconductors. Basic operation and V-I Characteristics of semiconductor diode, Operation of PN junction diode as rectifier, Avalanche breakdown and Zener breakdown phenomenon, Operation of Zener diode as regulator. Light Emitting Diode (LED).

H. Jagapathi Reddy

**PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.**

UNIT-V (8Hrs)	Bipolar Junction Transistor (BJT) and Field Effect Transistors (FET): Introduction, construction, basic operation of NPN and PNP transistors, Transistor circuit Configurations- CE, CB, and CC- Input and output Characteristics in various configurations, Transistor as an amplifier, Junction field Effect Transistors (JFET), JFET characteristics [Elementary treatment of FET only].
-------------------------	---




Head of EEE Department
S.R.K.R. Engg. College
BHIMAVARAM-534 204.

H. Jagapathi Reddy

PRINCIPAL
S.R.K.R. Engg. College
BHIMAVARAM-534 204.