



# VAAGDEVI COLLEGE OF ENGINEERING

Autonomous

Bollikunta, Khila Warangal (Mandal), Warangal Urban-506 005 (T.S), www.vaagdevi.edu.in

## DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Minutes of the meeting of the Board of Studies held on: 14/11/2022

The following members were present:






Sl. No	Members Present	Designation	Signature
1.	Dr. M. Shashidhar Assoc. Prof & HOD., ECE Dept., VCE Warangal. <a href="mailto:sasi47004@gmail.com">sasi47004@gmail.com</a>	Chairman	
2.	Dr. Y. Raghavendra Rao, Head of the Department JNTU , Sulthanpur <a href="mailto:yraghavenderrao@gmail.com">yraghavenderrao@gmail.com</a>	JNTUH Nominee	
3.	Dr. S. Anuradha , Professor NIT, Warangal <a href="mailto:anuradha@nitw.ac.in">anuradha@nitw.ac.in</a>	Subject Expert	
4.	Prof. P. Prasad Rao, Principal, VEC Warangal <a href="mailto:principal.vec@gmail.com">principal.vec@gmail.com</a>	Subject Expert	
5.	Dr. V. Sudheer Raja, Assoc. Prof, ECE Dept, VCE, Warangal <a href="mailto:sudheerraja_v@vaagdevi.edu.in">sudheerraja_v@vaagdevi.edu.in</a>	Member	
6.	Dr. Hemant Kumar Gupta , Asst. Prof, ECE Dept, VCE, Warangal <a href="mailto:hk_gupta@vaagdevi.edu.in">hk_gupta@vaagdevi.edu.in</a>	Member	
7.	Mr. Bala Krishna Islavath, Scientist, R&D Laboratory center for Electromagnetic, Ministry of Electronics and Information Technology, Government of India <a href="mailto:islavath32@gmail.com">islavath32@gmail.com</a>	Alumni	
8.	Mr. P. Mahesh, Senior Silicon Design Engineer at AMD <a href="mailto:goud.mahesh058@live.com">goud.mahesh058@live.com</a>	Alumni	

**The following decisions are taken:**

1. The course structure of I-year of B.Tech (ECE) under R22 regulation are approved.
2. Syllabus of the following B.Tech I year courses under R22 regulation are finalized and approved.

Sl. No	Name of the course	Offered for
1.	Elements of Electronics and Communication Engineering	I Semester B.Tech ECE programme
2.	Electronic Devices and Circuits	II Semester B.Tech ECE,CSE,CSE(Data science), CSE(AI &ML) programmes
3.	Electronic Devices and Circuits Laboratory	II Semester B.Tech ECE programme

3. Course structure and syllabi of all the courses of M.Tech (VLSI System Design) I,II,III& IV semester under R22 regulation are finalized and approved.

- 1)  (Dr. Y. Rajhendra  
rco)
- 2)  (Dr. M. Shashidhar)
- 3) S. Anuradha (Dr. S. Anuradha)
- 4)  (Dr. P. Prasad)
- 5)  (Dr. V. Sudeesh Raja)
- 6)  (Dr. Hemant Gupta)



**VAAGDEVI COLLEGE OF ENGINEERING  
(AUTONOMOUS)  
B.TECH. ELECTRONICS & COMMUNICATION ENGINEERING**

**COURSE STRUCTURE**

(R22 Regulations applicable for the batches admitted from Academic Year 2022-23)

**I SEMESTER**


S.No.	Course Code	Title of the Course	L	T	P	Credits
1		Matrices and Calculus	3	1	0	4
2		Applied Physics	3	1	0	4
3		C Programming for Engineers	3	0	0	3
4		Engineering Workshop	0	1	3	2.5
5		English for Skill Enhancement	2	0	0	2
6		Elements of Electronics and Communication Engineering	0	0	2	1
7		Applied Physics Laboratory	0	0	3	1.5
8		English Language and Communication Skills Laboratory	0	0	2	1
9		C Programming for Engineers Laboratory	0	0	2	1
10		Environmental Science	3	0	0	0
11		Induction Programme				
<b>Total Credits</b>			<b>14</b>	<b>3</b>	<b>12</b>	<b>20</b>

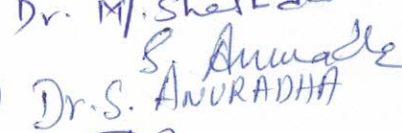
**II SEMESTER**


S.No.	Course Code	Title of the Course	L	T	P	Credits
1		Ordinary Differential Equations and Vector Calculus	3	1	0	4
2		Engineering Chemistry	3	1	0	4
3		Computer Aided Engineering Graphics	1	0	4	3
4		Basic Electrical Engineering	2	0	0	2
5		Electronic Devices and Circuits	2	0	0	2
6		Applied Python Programming Laboratory	0	1	2	2
7		Engineering Chemistry Laboratory	0	0	2	1
8		Basic Electrical Engineering Laboratory	0	0	2	1
9		Electronic Devices and Circuits Laboratory	0	0	2	1
<b>Total Credits</b>			<b>11</b>	<b>3</b>	<b>12</b>	<b>20</b>

(5) DR. V. SUDHEER RAJA

1)   
(Dr. Y. Rajavendra Rao)

2)   
Dr. M. Shesha Lakshmi

3)   
Dr. S. ANURADHA

4)   
(Dr. P. Prasad Rao)

5)   
(Dr. P. Prasad Rao)

**VAAGDEVI COLLEGE OF ENGINEERING**  
(AUTONOMOUS)  
**ELECTRONICS & COMMUNICATION ENGINEERING**  
**M.TECH VLSI SYSTEM DESIGN**  
**COURSE STRUCTURE**




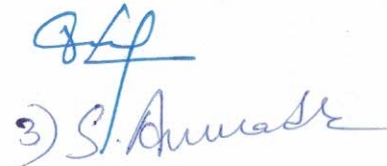
(R22 Regulations applicable for the batches admitted from Academic Year 2022-23)

**I YEAR I – SEMESTER**

S.No	Course Code	Course Title	L	T	P	Credits
		Digital System Design with FPGAs	3	0	0	3
		CMOS Analog IC Design	3	0	0	3
		<b>Professional Elective – I</b> 1. Pattern Recognition and Machine Learning 2. CMOS Mixed Signal Design 3. Memory Technologies	3	0	0	3
		<b>Professional Elective - II</b> 1. Communication Buses & Interfaces 2. ARM Microcontrollers 3. Embedded Real Time Operating System	3	0	0	3
		Digital System Design with FPGAs Lab	0	0	4	2
		CMOS Analog IC Design Lab	0	0	4	2
		Research Methodology & IPR	2	0	0	2
		Audit Course – I	2	0	0	0
		<b>Total Credits</b>	<b>16</b>	<b>0</b>	<b>8</b>	<b>18</b>

**I YEAR II – SEMESTER**

S.No	Course Code	Course Title	L	T	P	Credits
		VLSI Advanced Physical Design	3	0	0	3
		System Verilog Test Benches using UVM	3	0	0	3
		<b>Professional Elective - III</b> 1. IoT Architectures and System Design 2. SoC Design 3. Design for Testability	3	0	0	3
		<b>Professional Elective - IV</b> 1. Device Modeling 2. RF IC Design 3. Hardware and Software Co-Design	3	0	0	3
		VLSI Advanced Physical Design Lab	0	0	4	2
		System Verilog Test Benches using UVM Lab	0	0	4	2
		Mini Project with Seminar	0	0	4	2
		Audit Course- II	2	0	0	0
		<b>Total Credits</b>	<b>14</b>	<b>0</b>	<b>12</b>	<b>18</b>

4)   
 5)  (Dr. V. Sridhar Raju) Dr. Y. Rajkumara Rao  
 2)   
 3)  S. Anuradha

## II YEAR I – SEMESTER

S.No	Course Code	Course Title	L	T	P	Credits
		<b>Professional Elective - V</b>				
		1. Advanced Computer Architecture	3	0	0	3
		2. Nano materials & Nanotechnology				
		3. Hardware Security				
		Open Elective	3	0	0	3
		Dissertation Work Review – II	0	0	1 2	6
		<b>Total Credits</b>	<b>6</b>	<b>0</b>	<b>12</b>	<b>12</b>

## II YEAR II - SEMESTER


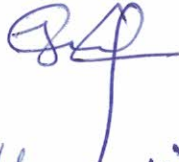


S.NO	Course Code	Course Title		T	P	Credits
		Dissertation Work Review - III	0	0	12	06
		Dissertation Viva-Voce	0	0	28	14
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>20</b>

### Open Electives:

1. Business Analytics
2. Industrial Safety
3. Operations Research
4. Cost Management of Engineering Projects
5. Composite Materials

### Audit Course I & II:

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by Yoga
8. Personality Development Through Life Enlightenment Skills

1)  2)   
3) S. Anuradha 4)   
5)  (Dr. V. Sudeher  
Raja) 6) 