

**1.1.3(B) Minutes of the Boards of Studies/ Academic Council meetings  
with approval for the courses mentioned in 1.1.3 (A)**

**Department of Electronics & Communications Engineering**

**INDEX**

<b>S.No.</b>	<b>Description of the Document</b>	<b>Page No</b>
1	AR21 Curriculum	1
2	AR23 Curriculum	8
3	18 <sup>th</sup> Academic Council Meeting Minutes	14
4	20 <sup>th</sup> Academic Council Meeting Minutes	19

## Department of Electronics and Communication Engineering

Minimum Credits to be earned: 160 (for Regular Students)

127 (for Lateral Entry Students)

First Semester			POs	Contact Hours				
No	Course Code	Course		L	T	P	C	
1	21HSX01	Communicative English	9,10,12	2	-	-	2	
2	21MAX01	Engineering Mathematics I	1,2,3,12	3	-	-	3	
3	21PYX01 21CYX01	Engineering Physics / Engineering Chemistry	1,2,12 / 1,6,7,12	3/3	-	-	3/3	
4	21BEX01 21BEX06	Basics of Engineering / IT Workshop	1,3,6,7,9,11,12/1,12	3/-	-	-/3	3/1.5	
5	21BEX02	Problem Solving and Programming Skills	1,,2,3,12	3	-	-	3	
6	21BEX03	Problem Solving and Programming Skills Lab	2,3,4,12	-	-	3	1.5	
7	21BEX04/ 21BEX05	Engineering Drawing / Engineering Workshop	1,5,10,12/1,9,10,12	-	-	3/3	1.5/1.5	
8	21PYX02/ 21CYX02	Engineering Physics Lab /Engineering Chemistry Lab	4,9,11/1,3,6,7,12	-	-	3/3	1.5	
9	21HSX02/-	Communicative English Lab/-	9,10,12	-	-	3/-	1.5/-	
				Total	14/11	0	12/12	20/17
Second Semester								
1		Language Elective	10,12	2	-	-	2	
2	21MAX02	Engineering Mathematics II	1,2,3,12	3	-	-	3	
3	21CYX01/ 21PYX01	Engineering Chemistry /Engineering Physics	1,3,6,7,12/4,9,11	3/3	-	-	3/3	
4	21BEX01/ 21BEX06	Basics of Engineering/ IT Workshop	1,3,6,7,9,11,12/1,12	-/3	-	3/-	1.5/3	
5	21BEX07	Python Programming	1,2,3,12	3	-	-	3	
6	21BEX08	Python Programming Lab	2,3,4,5,12	-	-	3	1.5	
7	21BEX05/ 21BEX04	Engineering Workshop / Engineering Drawing	1,9,10,12/1,5,10,12	-	-	3/3	1.5/1.5	
8	21CYX02/ 21PYX02	Engineering Chemistry Lab/Engineering Physics Lab	1,3,6,7,12/4,9,11	-	-	3/3	1.5/1.5	
9	-/21HSX02	-/Communicative English Lab	9,10,12	-	-	-/3	-/1.5	
				Total	11/14	0	12/12	17/20
Third Semester								
1	21MA301	Complex Variables	1,2,3,PS02	3	-	-	3	
2	21EC301	Electronic Devices and Circuits	1,2,3,PS01	3	-	-	3	
3	21EC302	Linear Circuit Analysis	1,2,4,5,PS01	3	-	2	4	
4	21EC303	Logic Circuit Design	1,2,3,PS01	3	-	-	3	
5	21EC304	Random Variables and Stochastic Processes	1,2, 3,PS02	3	-	-	3	
6	21EC305	Signals & Systems	1,2,4,5,PS02	3	-	2	4	

7	21EC306	Electronic Devices and Circuits Lab	1, 2, 4, PSO1	-	-	3	1.5
8	21EC307	Logic Circuit Design Lab	1, 2, 4, 5, PSO1	-	-	3	1.5
9	21ESX01	Employability Skills I	1,2,5,8,10,12	-	-	2	-
10	21HSX11	CC & EC Activities I	6,7,9,10	-	-	1	-

**Total** **18** **0** **13** **23**

**Fourth Semester**

1	21CSE01	Object Oriented Programming	1,2,3,5	3	-	-	3
2	21EC401	Analog and Digital Communications	1,2,3,PSO2	3	-	-	3
3	21EC402	Analog Electronic Circuits	1, 2, 4,5, PSO1	3	-	2	4
4	21EC403	Electromagnetic Fields and Waves	1,2,3,PSO2	3	-	-	3
5	21EC404	Linear Control Systems	1, 2, PSO1, PSO2	3	-	-	3
6	21CSE02	Object Oriented Programming Lab	1,2,4,5	-	-	3	1.5
7	21EC405	Analog and Digital Communications Lab	1, 2, 4,5, PSO2	-	-	3	1.5
8	21ESX01	Employability Skills I	1,2,5,8,10,12	-	-	2	2
9	21HSX11	CC & EC Activities I	6,7,9,10	-	-	1	1

**Total** **15** **0** **11** **22**

**Fifth Semester**

1	21EC501	Linear and Digital IC Applications	1,2,3, PSO1	3	-	-	3
2	21EC502	Microprocessors and Microcontrollers	1, 2, 3, 4, 5, PSO1	3	-	2	4
3	21EC503	VLSI Design	1, 2,3, 4, 5, PSO1	3	-	2	4
4	21EC504	Antennas and Microwave Engineering	1,2,3, PSO2	3	-	-	3
5		Elective I (Professional Elective)		3	-	-	3
6		Elective II (Open Elective I)		3	-	-	3
7	21EC505	Linear IC Applications Lab	1,2,3, 4, PSO1	-	-	3	1.5
8	21TPX01	Term Paper	1,4,9,10,12,PSO1,PSO2	-	-	3	1.5
9	21ESX02	Employability Skills II	1,2,5,8,10,12	-	-	2	-
10	21HSX12	CC & EC Activities II	6,7,9,10	-	-	1	-
11	21SIX01	Summer Internship I	1,2,8,10,12	-	-	-	1

**Total** **18** **0** **13** **24**

**Sixth Semester**

1	21HSX10	Engineering Economics and Project Management	1,10,11,12	3	-	-	3
2	21EC601	Cellular and Mobile Communications	1,2,3, PSO2	3	-	-	3
3	21EC602	Digital Signal Processing	1,2,3,PSO2	3	-	-	3
4		Elective III (Professional Elective )		3	-	2	4
5		Elective IV (Open Elective II)		3	-	-	3
6	21EC603	Digital Signal Processing Lab	1,2,4,5, PSO2	-	-	3	1.5
7	21MPX01	Mini Project	ALL	-	-	3	1.5
8	21ESX02	Employability Skills II	1,2,5,8,10,12	-	-	2	2
9	21HSX12	CC & EC Activities II	6,7,9,10	-	-	1	1
10	21ATX01	Environmental Studies	1,6,7,12	-	-	-	-
11	21ATX02	Human Values and Professional Ethics	-----	-	-	-	-

**Comment [E1]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E2]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E3]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E4]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E5]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E6]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E7]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E8]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E9]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E10]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E11]:** Approved in 18<sup>th</sup> Academic Council Meeting

12	21ATX---	Audit Course	-----	-	-	-	-
				<b>Total</b>	<b>15</b>	<b>0</b>	<b>11</b>
<b>Seventh Semester</b>							
1	21PWX01	Project Work	ALL	-	-	16	8
2		Elective V (Professional Elective)		3	-	-	3
3		Elective VI (Professional Elective)		3	-	-	3
4		Elective VII (Open Elective III)		3	-	-	3
5	21SIX02	Summer Internship II	1,2,8,10,12	-	-	-	1
				<b>Total</b>	<b>9</b>	<b>0</b>	<b>16</b>
<b>Eighth Semester</b>							
1	21FIX01	Full Semester Internship (FSI)	1,2,5,8,9,10, PSO1, PSO2	-	-	-	8
2		Elective VIII (Professional Elective )		-	-	-	3
3		Elective IX (Open Elective IV)		-	-	-	3
				<b>Total</b>	<b>0</b>	<b>0</b>	<b>-</b>
							<b>14</b>

**Comment [E12]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E13]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E14]:** Approved in 18<sup>th</sup> Academic Council Meeting

## List of Electives

Language Electives			POs	Contact Hours			
No.	Course Code	Course		L	T	P	C
1	21HSX03	Advanced Communicative English	9,10,12	2	-	-	2
2	21HSX04	Communicative German	10,12	2	-	-	2
3	21HSX05	Communicative French	10,12	2	-	-	2
4	21HSX06	Communicative Japanese	10,12	2	-	-	2
5	21HSX07	Communicative Spanish	10,12	2	-	-	2
6	21HSX08	Communicative Korean	10,12	2	-	-	2
7	21HSX09	Communicative Hindi	10,12	2	-	-	2
Elective I							
Career Path I, II, III and Other Core Electives							
1	21ECC11	RTL Coding Techniques (Chip Design Career Path)	1, 2, 3, PSO1	3	-	-	3
2	21ECC21	Data Acquisition System (Embedded System Design Career Path)	1, 2, 3, PSO1	3	-	-	3
3	21ECC31	Information Theory and Coding Techniques (Communication and Signal Processing)	1, 2, 3, PSO2	3	-	-	3
4	21IT304	Database Management Systems	1, 2, 3	3	-	-	3
5	21CS303	Data Structures	1, 2	3	-	-	3
6	21CS403	Computer Organization and Architecture	1, 2	3	-	-	3
Elective III							
Career Path I, II, III and Other Core Electives							
1	21ECC12	ASIC Verification using system Verilog (Chip Design Career Path)	1, 2, 3, 4, 5, PSO1	3	-	2	4
2	21ECC22	Embedded System Design and IoT (Embedded System Design Career Path)	1, 2, 3, 4, 5, PSO1	3	-	2	4
3	21ECC32	Image processing (Communication and Signal Processing)	1, 2, 4, 5, PSO2	3	-	2	4
4	21EC004	Virtual Instrumentation	1, 2, 4, 5, PSO2	3	-	2	4
5	21EC005	Cryptography and Network Security	1, 3, 4, 5, PSO1	3	-	2	4
6	21CS503	Computer Networks	1, 2, 4, 5, PSO1, PSO2	3	-	2	4
Elective V							
Career Path I, II, III and Other Core Electives							
1	21ECC13	Analog and mixed signal VLSI design (Chip Design Career Path)	1, 2, 3, PSO1	3	-	-	3
2	21ECC23	Real Time Operating Systems (Embedded System Design Career Path)	1, 2, 3, PSO1	3	-	-	3
3	21ECC33	Multimedia communications (Communication and Signal Processing)	1, 2, 3, PSO2	3	-	-	3
4	21EC006	Wireless Sensor Networks	1, 2, PSO1, PSO2	3	-	-	3
5	21IT403	Operating Systems	1, 12	3	-	-	3
6	21CS603	Software Engineering	4, 5, 8, 11, PSO1	3	-	-	3
Elective VI							
1	21EC007	Design for testability	1, 2, 3, PSO1	3	-	-	3
2	21EC008	Biomedical Signal Processing	1, 2, 3, PSO2	3	-	-	3
3	21EC009	UHF and EHF communication systems	1, 2, 3, PSO2	3	-	-	3

**Comment [E15]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E16]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E17]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E18]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E19]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E20]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E21]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E22]:** Approved in 18<sup>th</sup> Academic Council Meeting

**Comment [E23]:** Approved in 18<sup>th</sup> Academic Council Meeting

4	21EC010	Neural Networks and Deep Learning	1, 2, PS01, PS02	3	-	-	3
<b>Elective VIII (Professional Elective )</b>							
1	21EC012	Real-Time Systems Design and Analysis	1, 2, 3,PS01	-	-	-	3
2	21EC013	Image Processing for Engineering Applications	1, 2, 3,PS02	-	-	-	3
3	21EC014	Computer Architecture	1, 2,3, PS01	-	-	-	3
<b>Open Electives</b>							
1	21CE001	Disaster Management	2,7	3	-	-	3
2	21EE001	Electrical Installation, Safety and Auditing	2,3,6,8	3	-	-	3
3	21ME001	Fundamentals of Optimization Techniques	1,2,3,5	3	-	-	3
4	21EC001	Sensors for Engineering Applications	1,2,6,7	3	-	-	3
5	21CS001	Fundamentals of Artificial Intelligence	1,2,3	3	-	-	3
6	21CH001	Energy Conversion and Storage Devices	1,3,6,7	3	-	-	3
7	21IT001	Fundamentals of Multimedia	3,5,7	3	-	-	3
8	21BS001	Nano Materials and Technology	1,12	3	-	-	3
9	21DS001	Fundamentals of Data Science	1,2	3	-	-	3
10	21CE002	Air Pollution and Environmental Impact Assessment	6,7,12	3	-	-	3
11	21EE002	Renewable Energy Sources	2,7	3	-	-	3
12	21ME002	Principles of Entrepreneurship	1,5,8,11	3	-	-	3
13	21EC002	Electronics for Agriculture	1,2,6,7	3	-	-	3
14	21CS002	Fundamentals of Machine Learning	2,5	3	-	-	3
15	21CH002	Industrial Safety and Hazard Management	1,2,3,6,8	3	-	-	3
16	21IT002	Fundamentals of Cloud Computing	2,6,7,8,12	3	-	-	3
17	21BS002	Advanced Numerical Techniques	1,2	3	-	-	3
18	21BS003	Functional Materials and Applications	1,7	3	-	-	3
19	21CE003	Solid Waste Management	3,7,12	3	-	-	3
20	21EE003	Fundamentals of Electrical Vehicle Technology	2,3,12	3	-	-	3
21	21ME003	Industrial Engineering and Management	1,11	3	-	-	3
22	21EC003	Interfacing and Programming with Arduino	1,2,3,6	3	-	-	3
21	21CS003	Data Science for Engineering Applications	2,3,4	3	-	-	3
24	21CH003	Industrial Ecology for Sustainable Development	2,6,7	3	-	-	3
25	21IT003	Fundamentals of Mobile Computing	1,7	3	-	-	3
26	21BS004	Advanced Materials of Renewable Energy	1,7	3	-	-	3
27	21BS005	Applied Linear Algebra for Engineers	1,12	3	-	-	3
28	21CE019	Green Buildings	1,7,12	3	-	-	3
29	21EE017	Sustainable Energy	2,3,12	3	-	-	3
30	21ME019	Total Quality Management	1,11	3	-	-	3
31	21EC011	Communication Technologies	1,2,3,6	3	-	-	3
32	21CS020	Applications of Artificial Intelligence	2,3,6,7	3	-	-	3
33	21CH016	Green Technologies	2,6,7	3	-	-	3
34	21IT015	Human Computer Interaction	1,7	3	-	-	3
35	21BS006	Handling of Industrial waste and waste water	1,7	3	-	-	3
36	21OE001	Robotics and Automation	5,6,7	3	-	-	3
37	21OE002	Introduction to IoT	1,2	3	-	-	3
38	21OE003	Fundamentals of Image processing	1,2,3,6	3	-	-	3
39	21OE004	Fundamentals of Data Acquisition systems	1,2	3	-	-	3
40	21OE005	Airport Operations Management	2,4,11,12	3	-	-	3
41	21OE006	Fundamentals of Embedded Systems	1,2	3	-	-	3

42	21OE007	Remote Sensing and GIS	1,2,5,7,10	3	-	-	3
43	21OE008	Big Data Analytics	1,7	3	-	-	3
44	21OE009	Fundamentals of Cyber Security	3,6,8	3	-	-	3
45	21OE010	Smart Cities	7,12	3	-	-	3
46	21OE011	Nano Materials and Thin Film Technology	1,12				
47	21CSMC1	Cloud computing	2,3	3	-	-	3
48	21CSMC2	Ethical Hacking	1,2,3	3	-	-	3
49	21CSMC3	Fundamentals of Web Development	2,3,5	4	-	-	4
50	21OE012	Business Intelligence & Analytics	2,3,5	3	-	-	3
51	21OE013	Introduction To Industry 4.0 And Industrial IoT	2,3	3	-	-	3
52	21OE014	Natural Language Processing	2,3	3	-	-	3

#### Audit Course

1	21AT001	Communication Etiquette in Workplaces	-	-	-	-	-
2	21AT002	Contemporary India: Economy, Policy and Society	-	-	-	-	-
3	21AT003	Design The Thinking	-	-	-	-	-
4	21AT004	Ethics and Integrity	-	-	-	-	-
5	21AT005	Indian Heritage and Culture	-	-	-	-	-
6	21AT006	Intellectual Property Rights and Patents	-	-	-	-	-
7	21AT007	Introduction to Journalism	-	-	-	-	-
8	21AT008	Mass Media Communication	-	-	-	-	-
9	21AT009	Science, Technology and Development	-	-	-	-	-
10	21AT010	Social Responsibility	-	-	-	-	-
11	21AT011	The Art of Photography and Film Making	-	-	-	-	-
12	21AT012	Gender Equality for Sustainability	-	-	-	-	-
13	21AT013	Women in Leadership	-	-	-	-	-
14	21AT014	Introduction to Research Methodology	-	-	-	-	-
15	21AT015	Climate Change and Circular Economy	-	-	-	-	-

#### B. Tech. (Honors)

##### Domain I VLSI Circuit Design and Verification

01	21ECH11	System on Chip Design	1,2,PS01	4	-	-	4
02	21ECH12	CMOS Logic Circuit Design	1, 2, 3, PS01	4	-	-	4
03	21ECH13	Low Power VLSI Design	1, 2, 3, PS01	4	-	-	4
04	21ECH14	VLSI Fabrication Technology	1,2,3, PS01	4	-	-	4

##### Domain II Robotics and Automation

01	21ECH21	Advanced Controllers	1, 2, 3, PS01	4	-	-	4
02	21ECH22	Robots and Control	1, 2, 3, PS01	4	-	-	4
03	21ECH23	Industrial Automation	1, 2, PS01, PS02	4	-	-	4
04	21ECH24	Distributed Embedded systems	1, 2, 3, PS01	4	-	-	4

##### Domain III Cognitive Radio Networks

01	21ECH31	Optical Communications	1, 2, PS02	4	-	-	4
02	21ECH32	MIMO Wireless Communications	1,2,3, PS02	4	-	-	4
03	21ECH33	Software Defined Radio	1, 2,PS02	4	-	-	4
04	21ECH34	Wireless and Mobile Networks	1, 2, PS01	4	-	-	4

##### Domain IV Multimedia Signal Processing

01	21ECH41	Optimization Techniques	1, 2,PS01, PS02	4	-	-	4
02	21ECH42	Audio Signal Processing	1,2,3,PS02	4	-	-	4
03	21ECH43	Statistical Signal Processing	1,2,3,PS02	4	-	-	4
04	21ECH44	Computer Vision	1,2,PS02	4	-	-	4

#### B. Tech. (Minors)

##### Electronics and Communications Engineering

01	21ECM01	Electronic Devices and Linear ICs		4	-	-	4
02	21ECM02	Fundamentals of Digital Signal Processing		4	-	-	4
03	21ECM03	Fundamentals of VLSI Design		4	-	-	4
04	21ECM04	Digital Design with Verilog		4	-	-	4
05	21ECM05	Principles of Communications		4	-	-	4

## Department of Electronics and Communication Engineering

Minimum Credits to be earned: 160 (for Regular Students)

1<sup>st</sup> SEMESTER

Pattern-I - A to H Sections				Pattern-II - I to P Sections			
S. No.	Course Code	Course Name	Credits	S. No.	Course Code	Course Name	Credits
1	23PYX01	Engineering Physics	3	1	23CYX01 23CYX02	Chemistry (EEE, ECE, CSE, AIML, AIDS, IT) Engineering Chemistry (CE, ME)	3
2	23MAX01	Linear Algebra& Calculus	3	2	23MAX01	Linear Algebra& Calculus	3
3	23BEX01	Basic Electrical and Electronics Engineering	3	3	23BEX02	Basic Civil & Mechanical Engineering	3
4	23BEX03	Introduction to Programming	3	4	23BEX03	Introduction to Programming	3
5	23BEX04	Engineering Graphics	3	5	23HSX01	Communicative English	2
6	23PYX02	Engineering Physics Lab	1	6	23CYX03 23CYX04	Chemistry Lab (EEE, ECE, CSE, AIML, AIDS, IT) Engineering Chemistry Lab (CE, ME)	1
7	23BEX05	Electrical & Electronics Engineering Workshop	1.5	7	23BEX06	Engineering Workshop	1.5
8	23BEX07	Computer Programming Lab	1.5	8	23BEX07	Computer Programming Lab	1.5
9	23BEX08	IT Workshop	1	9	23HSX02	Communicative English Lab	1
				10	23HSX11	ECA (Yoga / Sports)	0.5
				11	23HSX12	CCA (NSS/NCC/Community Service)	0.5
		<b>Total</b>	<b>20</b>			<b>Total</b>	<b>20</b>

2<sup>nd</sup> SEMESTER

Pattern-I - A to H Sections				Pattern-II - I to P Sections			
S. No.	Course Code	Course Name	Credits	S. No.	Course Code	Course Name	Credits
1	23CYX01 23CYX02	Chemistry (EEE, ECE, CSE, AIML, AIDS, IT) Engineering Chemistry (CE, ME)	3	1	23PYX01	Engineering Physics	3
2	23MAX02	DIFFERENTIAL EQUATIONS AND VECTOR CALCULUS	3	2	23MAX02	DIFFERENTIAL EQUATIONS AND VECTOR CALCULUS	3
3	23BEX02	Basic Civil & Mechanical Engineering	3	3	23BEX01	Basic Electrical and Electronics Engineering	3
4	23ME201 23CS201 23EE201 23EC201 (Branch Specific Theory)	Engineering Mechanics (Civil, Mech); Data Structures (CSE, CSE-AI&DS, CSE-AI&ML, IT); Electrical Circuit Analysis-1 (EEE); Network Analysis (ECE);	3	4	23ME201 23CS201 23EE201 23EC201 (Branch Specific Theory)	Engineering Mechanics (Civil, Mech); Data Structures (CSE, CSE-AI&DS, CSE-AI&ML, IT); Electrical Circuit Analysis-1 (EEE); Network Analysis (ECE);	3
5	23HSX01	Communicative English	2	5	23BEX04	Engineering Graphics	3
6	23CYX03 23CYX04	Chemistry Lab (EEE, ECE, CSE, AIML, AIDS, IT) Engineering Chemistry Lab (CE, ME)	1	6	23PYX02	Engineering Physics Lab	1
7	23BEX06	Engineering Workshop	1.5	7	23BEX05	Electrical & Electronics Engineering Workshop	1.5
8	23CE201 23CS202 23EE202 23EC202 23ME202 (Branch Specific Lab)	Engineering Mechanics and Building Practices Lab (Civil); Data Structures Lab (CSE, CSE-AI&DS, CSE-AI&ML, IT); Electrical Circuits Lab (EEE); Network Analysis Lab (ECE); Engineering Mechanics Lab (Mech);	1.5	8	23CE201 23CS202 23EE202 23EC202 23ME202 (Branch Specific Lab)	Engineering Mechanics and Building Practices Lab (Civil); Data Structures Lab (CSE, CSE-AI&DS, CSE-AI&ML, IT); Electrical Circuits Lab (EEE); Network Analysis Lab (ECE); Engineering Mechanics Lab (Mech);	1.5
9	23HSX02	Communicative English Lab	1	9	23BEX08	IT Workshop	1
10	23HSX11	ECA (Yoga / Sports)	0.5				
11	23HSX12	CCA (NSS/NCC/Community Service)	0.5				
		<b>Total</b>	<b>20</b>			<b>Total</b>	<b>20</b>

No	Course Code	Course	POs	Contact Hours			
				L	T	P	C
<b>Third Semester</b>							
1	23MA301	Complex Variables	1, 2, 3, PSO2	3	-	-	3
2	23EC301	Electronic Devices and Circuits	1,2,3,PSO1	3	-	-	3
3	23EC302	Python Programming	1,2, 4,5	3	-	2	4
4	23EC303	Logic Circuit Design	1,2, 3,PSO1	3	-	-	3
5	23EC304	Random Variables and Stochastic Processes	1,2,3, PSO2	3	-	-	3
6	23EC305	Signals & Systems	1,2,4,5, PSO2	3	-	2	4
7	23EC306	Electronic Devices and Circuits Lab	1, 2, 4, PSO1	-	-	3	1.5
8	23EC307	Logic Circuit Design Lab	1, 2, 4, 5, PSO1	-	-	3	1.5
9	23ESX01	Employability Skills I	1,2,5,8,10,12	-	-	2	--
		Audit course					--
				<b>Total</b>	<b>18</b>	<b>0</b>	<b>13</b>
							<b>23</b>
<b>Fourth Semester</b>							
1	23CSE01	Object Oriented Programming	1,2, 3,5	3	-	-	3
2	23EC401	Analog and Digital Communications	1,2, 3,PSO2	3	-	-	3
3	23EC402	Analog Electronic Circuits	1, 2, 4,5, PSO1	3	-	2	4
4	23EC403	Electromagnetic Waves & Transmission Lines	1,2,3, PSO2	3	-	-	3
5	23EC404	Linear Control Systems	1, 2, PSO1, PSO2	3	-	-	3
6	23CSE02	Object Oriented Programming Lab	1,2,4,5	-	-	3	1.5
7	23EC405	Analog and Digital Communications Lab	1, 2, 4,5, PSO2	-	-	3	1.5
8	23ESX01	Employability Skills I	1,2,5,8,10,12	-	-	2	2
				<b>Total</b>	<b>15</b>	<b>0</b>	<b>10</b>
							<b>21</b>
<b>Fifth Semester</b>							
1	23EC501	Linear and Digital IC Applications	1,2, 3,PSO1	3	-	-	3
2	23EC502	Microprocessors and Microcontrollers	1, 2, 3, 4, 5, PSO1	3	-	2	4
3	23EC503	VLSI Design	1, 2, 3, 4, 5, PSO1	3	-	2	4
4	23EC504	Antennas and Microwave Engineering	1,2, 3,PSO2	3	-	-	3
5		Elective I (Professional Elective )		3	-	-	3
6		Elective II (Open Elective I)		3	-	-	3
7	23EC505	Linear IC Applications Lab	1,2,3, 4, PSO1	-	-	3	1.5
8	23TPX01	Term Paper	1,4,9,10,12,PSO1,PSO2	-	-	3	1.5
9	23ESX02	Employability Skills II	1,2,5,8,10,12	-	-	2	--
10	23SIX01	Summer Internship I	1,2,8,10,12	-	-	-	1
				<b>Total</b>	<b>18</b>	<b>0</b>	<b>13</b>
							<b>24</b>
<b>Sixth Semester</b>							
1	23HSX10	Engineering Economics and Project Management	1,10,11,12	3	-	-	3
2	23EC601	Cellular and Mobile Communications	1,2, 3,PSO2	3	-	-	3
3	23EC602	Digital Signal Processing	1,2, 3,PSO2	3	-	-	3

4		Elective III (Professional Elective )		3	-	2	4
5		Elective IV (Open Elective II)		3	-	-	3
6	23EC603	Digital Signal Processing Lab	1,2,4,5, PSO2	-	-	3	1.5
7	23 MPX01	Mini Project	ALL	-	-	3	1.5
8	23ESX02	Employability Skills II	1,2,5,8,10,12	-	-	2	2
9	23ATX01	Environmental Studies	1,6,7,12	-	-	-	-
10	23ATX02	Human Values and Professional Ethics	-----	-	-	-	-
11	23ATX---	Audit Course	-----	-	-	-	-
				<b>Total</b>	<b>15</b>	<b>0</b>	<b>11</b>
							<b>21</b>
<b>Seventh Semester</b>							
1	23PWX01	Project Work	ALL	-	-	16	8
2		Elective V (Professional Elective)		3	-	-	3
3		Elective VI (Professional Elective)		3	-	-	3
4		Elective VII (Open Elective III)		3	-	-	3
5	23SIX02	Summer Internship II	1,2,8,10,12	-	-	-	1
				<b>Total</b>	<b>9</b>	<b>0</b>	<b>16</b>
							<b>18</b>
<b>Eighth Semester</b>							
1	23FIX01	Full Semester Internship (FSI)	1,2,5,8,9,10,PSO1, PSO2	-	-	-	8
2		Elective VIII (Professional Elective )		-	-	-	3
3		Elective IX (Open Elective IV)		-	-	-	2
				<b>Total</b>	<b>0</b>	<b>0</b>	<b>-</b>
							<b>13</b>

**List of Electives**

<b>Language Electives</b>			<b>POs</b>	<b>Contact Hours</b>				
<b>No.</b>	<b>Course Code</b>	<b>Course</b>		<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	
1	23HSX03	Advanced Communicative English	10,12	2	-	-	2	
2	23HSX04	Communicative German		2	-	-	2	
3	23HSX05	Communicative French		2	-	-	2	
4	23HSX06	Communicative Japanese		2	-	-	2	
5	23HSX07	Communicative Spanish		2	-	-	2	
6	23HSX08	Communicative Korean		2	-	-	2	
7	23HSX09	Communicative Hindi		2	-	-	2	
<b>Elective I</b>								
<b>Career Path I, II, III and Other Core Electives</b>								
1	23ECC11	RTL Coding Techniques (Chip Design Career Path)	1, 2, 3, PSO1	3	-	-	3	
2	23ECC21	IoT Architecture and Protocols (Embedded System Design Career Path)	1, 2, 3,6,7,8,PSO1,PSO <sub>2</sub>	3	-	-	3	
3	23ECC31	Coding Theory and Techniques Techniques (Advanced Communications)	1, 2, 3,PSO2	3	-	-	3	
4	23IT304	Database Management Systems	1, 2, 3,PSO <sub>2</sub>	3	-	-	3	
5	23CS303	Data Structures	1, 2,PSO <sub>12</sub>	3	-	-	3	
6	23CS403	Computer Organization and Architecture	1,2, PSO <sub>12</sub> ,PSO <sub>1</sub>	3	-	-	3	
		MOOCs		-	-	-	3	
<b>Elective III</b>								
<b>Career Path I, II, III and Other Core Electives</b>								
1	23ECC12	System Verilog for Verification (Chip Design Career Path)	1, 2, 3,4,5, PSO1	3	-	2	4	
2	23ECC22	Embedded System Design and ARM Processor (Embedded System Design Career Path)	1, 2, 3, 4, 5, PSO1	3	-	2	4	
3	23ECC32	Principles of MIMO-OFDM Communications (Advanced Communications)	1, 2,4,5, PSO2	3	-	2	4	
4	23EC004	Virtual Instrumentation	1, 2, 4, 5, PSO2	3	-	2	4	
5	23EC005	Cryptography and Network Security	1, 3, 4, 5, PSO1	3	-	2	4	
6	23CS503	Computer Networks	1,2,4,5,PSO1,PSO2	3	-	2	4	
		MOOCs		-	-	-	3	
<b>Elective V</b>								
<b>Career Path I, II, III and Other Core Electives</b>								
1	23ECC13	VLSI Physical Design with Timing Analysis (Chip Design Career Path)	1, 2, 3, PSO1	3	-	-	3	
2	23ECC23	Real Time Operating Systems (Embedded System Design Career Path)	1,2, 3,PSO1	3	-	-	3	
3	23ECC33	5G Communications (Advanced Communications)	1, 2, 3,7,PSO2	3	-	-	3	
4	23EC006	Wireless Sensor Networks	1, 2, PSO1, PSO2	3	-	-	3	
5	23IT403	Operating Systems	1, 12	3	-	-	3	
6	23CS603	Software Engineering	4, 5, 8, 11, PSO1	3	-	-	3	
		MOOCs		-	-	-	3	
<b>Elective VI</b>								

1	23EC007	Design for testability	1, 2, 3, PSO1	3	-	-	3
2	23EC008	Biomedical Signal Processing	1, 2, 3, PSO2	3	-	-	3
3	23EC009	Digital Image Processing	1, 2, 3, PSO2	3	-	-	3
4	23EC010	Neural Networks and Deep Learning	1, 2, PSO1, PSO2	3	-	-	3
		MOOCs		-	-	-	3
<b>Elective VIII (Professional Elective )</b>							
1	23EC012	Real-Time Systems Design and Analysis	1, 2, 3, PSO1	-	-	-	3
2	23EC013	UHF and EHF communication systems	1, 2, 3, PSO2	-	-	-	3
3	23EC014	Computer Architecture	1, 2, 3, PSO1	-	-	-	3
<b>Audit Course</b>							
1	23AT001	Communication Etiquette in Workplaces		-	-	-	-
2	23AT002	Contemporary India: Economy, Policy and Society		-	-	-	-
3	23AT003	Design The Thinking		-	-	-	-
4	23AT004	Ethics and Integrity		-	-	-	-
5	23AT005	Indian Heritage and Culture		-	-	-	-
6	23AT006	Intellectual Property Rights and Patents		-	-	-	-
7	23AT007	Introduction to Journalism		-	-	-	-
8	23AT008	Mass Media Communication		-	-	-	-
9	23AT009	Science, Technology and Development		-	-	-	-
10	23AT010	Social Responsibility		-	-	-	-
11	23AT011	The Art of Photography and Film Making		-	-	-	-
12	23AT012	Gender Equality for Sustainability		-	-	-	-
13	23AT013	Women in Leadership		-	-	-	-
14	23AT014	Introduction to Research Methodology		-	-	-	-
15	23AT015	Climate Change and Circular Economy		-	-	-	-
<b>B. Tech. (Honors)</b>							
<b>Domain I VLSI Circuit Design and Verification</b>							
01	23ECH11	System on Chip Design	1,2,3,PSO1	4	-	-	4
02	23ECH12	CMOS Logic Circuit Design	1, 2, 3, PSO1	4	-	-	4
03	23ECH13	Low Power VLSI Design	1, 2, 3, PSO1	4	-	-	4
04	23ECH14	VLSI Fabrication Technology	1,2,3, PSO1	4	-	-	4
<b>Domain II Robotics and Automation</b>							
01	23ECH21	Advanced Controllers	1, 2, 3, PSO1	4	-	-	4
02	23ECH22	Robots and Control	1, 2, 3, PSO1	4	-	-	4
03	23ECH23	Industrial Automation	1, 2, PSO1, PSO2	4	-	-	4
04	23ECH24	Distributed Embedded systems	1, 2, 3, PSO1	4	-	-	4
<b>B. Tech. (Minors)</b>							
<b>VLSI Design</b>							
01	23ECM01	Fundamentals of VLSI design		4	-	-	4
02	23ECM02	Digital Design with Verilog		4	-	-	4
03	23ECM03	Verification Using System Verilog		4	-	-	4
04	23ECM04	VLSI Design Flow: RTL to GDS		4	-	-	4

## MINUTES OF THE 18<sup>th</sup> ACADEMIC COUNCIL MEETING

Media : Zoom (Online Meeting)  
 Date : 13.07.2022 (Wednesday)  
 Time : 03:00 PM – 05:00 PM

### MEMBERS PRESENT

Dr. C. L. V. R. S. V. Prasad	- Chairman (Principal)
Dr. KVSG Murali Krishna	- Member
Dr. B. Bala Krishna	- Member
Dr. R.Rajeswara Rao	- Member
Dr. A.Venugopal	- Member
Dr. K. V. L. Subramaniam	- Member
Dr. P. Mallikarjuna Rao	- Member
Dr. P. K. Jain	- Member
Chair Person (BoS : Civil Engg.)	- Member
Chair Person (BoS : EEE)	- Member
Chair Person (BoS : Mech Engg.)	- Member
Chair Person (BoS : ECE)	- Member
Chair Person (BoS : CSE)	- Member
Chair Person (BoS : Chem Engg.)	- Member
Chair Person (BoS : IT)	- Member
Chair Person (BoS : BS&H)	- Member
Dr.S.N.Dash(CDC-Head)	- Member
Dr.G.Sasi Kumar(Asso.Dean-Student Affairs)	- Member
Dr.P.S.Venkata Narayana(Asso.Dean-R&D)	- Member
Dr.T.Prabhakar (Controller of Examinations)	- Member
Dr. L.Govinda Rao(IQAC Coordinator)	- Member
Dr. M.V.Nageswara Rao(Asso.Dean-Academics)	- Member Secretary

### GRANT OF LEAVE OF ABSENCE

Mr. V. Paradesi Naidu - Member

Chairman welcomed all the members of the academic council and requested for the grant leave of absence for the above referred members. **(Item #1)**

Subsequently, the Chairman presented the action taken report for the 17<sup>th</sup> academic council meeting and received the confirmation for the minutes of 17<sup>th</sup> academic council meeting held on 11<sup>th</sup> Sep 2021 from all the esteemed members. **(Item #2&3)**.



Chairman presented the details of the overall Operations and performance of the Institution (Academic-Operations, Ranking, Achievements, Placements and Research) **(Item #4)**.

Academic council members appreciated the efforts and initiatives taken up by the institute for the overall development and the ranking achieved. Congratulated the students who achieved credential in curricular and co-curricular activities.

#### **ITEM No.: 5**

**Ratification of Semester end result for regular and supplementary examination for the academic year 2020-21(II, IV, VI semesters) and 2021-22 (I, III, VI, VII, VIII semesters) held during September 2021 to July 2022 for Students in B. Tech. Programs.**

Chairman presented the results declared for the regular and supplementary examinations pertaining to semesters mentioned above for the students admitted during the different academic years under Academic Regulation AR16, AR19, AR20 and AR 21 and requested for the ratification of the results which were declared by the College academic committee in the presence of the JNTUK representative.

The members after the detailed review, ratified the results of all the regular and supply examinations declared by the college academic committee as per the **Annexure I**.

#### **ITEM No.: 6**

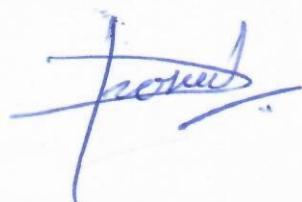
**Ratification of results of 2<sup>nd</sup> phase semester end exams for all the COVID-19 infected students during 2021-22.**

Chairman presented the list of students infected with COVID-19 and could not appear for the 7<sup>th</sup> semester examinations. These students were permitted to appear in the 2<sup>nd</sup> phase as per the university directions considering it as a first attempt.

The members after the detailed review, ratified the Class and CGPA declared by the college academic committee as per the **Annexure II**.

#### **ITEM No.: 7**

**Ratification of the PC eligibility list of the students admitted during the Academic Year 2018-19 and earlier batches who have successfully acquired the graduation requirements for the award of B. Tech. Degree as per the respective academic regulations at the time of admission.**



Chairman presented the (semester-wise & branch-wise) results of the 2018 admitted batch for all the semesters' i.e from 1<sup>st</sup> to 8<sup>th</sup> semesters under Academic Regulation AR16 and who have acquired the graduation requirements and eligible for the issue of Provisional certificate. Further, details of the students who have acquired graduation requirements and eligible for the issue of PCs pertaining to the batches admitted earlier to 2018 are presented.

The members reviewed the results (1<sup>st</sup> semester to 8<sup>th</sup> semester) of 2018 admitted batch students and approved the PC eligibility list of the student who will be getting graduated by July 2022 as per the academic regulations AR16. Apart from this, the PC eligible students from the earlier admitted students who have acquired graduation requirements were also approved as per the **Annexure III**.

#### **ITEM No.: 8**

**Ratification of the AR21 regulations for UG and PG programs that are approved by circulation wide the circulars dated 15-11-2021, 30-12-2021 & 30-03-2022 (In compliance with the JNTUK common guidelines)**

Chairman presented the Academic Regulations 2021 (AR21) and Curriculum recommended by the respective BoS and which are in line with JNTUK common guidelines majorly in the context of incorporating the changes relate to the marks division between internal and External marks (30+70), Absolute grading in the place of Hybrid grading and Award of Class of degree (Division/Class) for UG and PG programs.

The members after deliberation ratified the Academic Regulations 2021 (AR21), Curriculum for UG and PG programs as per **Annexure IV &V**.

#### **ITEM NO.:9**

**Approval of course structure, 3<sup>rd</sup> & 4<sup>th</sup> semesters syllabus for the new programs B.Tech CSE(AIML) and B.Tech CSE(AIDS) as per Academic Regulations 2021.**

Chairman presented the recommendations of the Board of Studies CSE(AIDS) and CSE (AIML) with regard to the course structure and detailed Syllabi for 3<sup>rd</sup> and 4<sup>th</sup> semesters as per AR21 for the B. Tech. (Regular), B. Tech. (Honors) and B. Tech (Minor) Programs for the ratification of Academic Council

Members after deliberation ratified the syllabi for the 3<sup>rd</sup> and 4<sup>th</sup> semesters as per the **Annexure VI & VII**.



**ITEM NO.:10****Ratification of the syllabus for the 7<sup>th</sup> and 8<sup>th</sup> semesters as per AR19 and AR20 academic regulations**

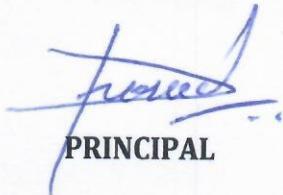
Chairman presented the recommendations of all the seven Board of Studies with regard to the detailed Syllabi for 7<sup>th</sup> and 8<sup>th</sup> semesters under the Academic Regulation AR 19 and AR 20 for the B. Tech. (Regular), B. Tech. (Honors) and B. Tech (Minor) Programs for the ratification of Academic Council

Members after deliberation ratified the syllabi for the 7<sup>th</sup> and 8<sup>th</sup> semesters as per the **Annexure VIII to XIV**

**ITEM NO.:11****Ratification for readmitted students under transitory Regulations**

As per the transitory regulations, with regard to the students re-admitted under, AR19/AR20 moving from AR16/AR19, Board of Studies of the respective departments discussed the issues case to case and recommended the substitute courses balancing the credit requirements. The details of the students are presented by the chairman before the council for formal ratification

Members ratified the recommendations of the respective BoS as per the **Annexure XV**

  
**PRINCIPAL**

**Encl. (a) Annexure A (b) Annexure B (c) Annexure C (d) Annexure D**

**Copy to:**

- All Members of the Academic Council
- Autonomous Coordinator (Institute Level)
- Assoc.Dean(Academics)
- Controller of Examinations (CoE)
- File

## **MINUTES OF THE 18<sup>th</sup> ACADEMIC COUNCIL MEETING**

### **Annexure IV:**

[http://www.gmrit.org/Autonomy\\_Regulations\\_UGPrograms\\_2021.pdf](http://www.gmrit.org/Autonomy_Regulations_UGPrograms_2021.pdf)

### **Annexure V:**

[http://www.gmrit.org/Autonomy\\_Regulations\\_PGPrograms\\_2021.pdf](http://www.gmrit.org/Autonomy_Regulations_PGPrograms_2021.pdf)

### **Annexure VI:**

[http://www.gmrit.org/resources/CSE-AI&DS\\_Course\\_Structure.pdf](http://www.gmrit.org/resources/CSE-AI&DS_Course_Structure.pdf)

### **Annexure VII:**

[http://www.gmrit.org/resources/CSE-AI&ML\\_Course\\_structure.pdf](http://www.gmrit.org/resources/CSE-AI&ML_Course_structure.pdf)

### **Annexure VIII: CIVIL Engineering**

[http://www.gmrit.org/resources/B.Tech\\_Civil\\_Syllabus\\_AR19.pdf](http://www.gmrit.org/resources/B.Tech_Civil_Syllabus_AR19.pdf)

[http://www.gmrit.org/resources/B.Tech\\_Civil\\_Syllabus\\_AR20.pdf](http://www.gmrit.org/resources/B.Tech_Civil_Syllabus_AR20.pdf)

### **Annexure IX: CHEMIAL Engineering**

[http://www.gmrit.org/resources/B.Tech\\_Chem\\_Syllabus\\_AR20.pdf](http://www.gmrit.org/resources/B.Tech_Chem_Syllabus_AR20.pdf)

[http://www.gmrit.org/resources/B.Tech\\_Chem\\_Syllabus\\_AR19.pdf](http://www.gmrit.org/resources/B.Tech_Chem_Syllabus_AR19.pdf)

### **Annexure X: Computer Science Engineering**

[http://www.gmrit.org/resources/B.Tech\\_CSE\\_Syllabus\\_AR20.pdf](http://www.gmrit.org/resources/B.Tech_CSE_Syllabus_AR20.pdf)

[http://www.gmrit.org/resources/B.Tech\\_CSE\\_Syllabus\\_AR19.pdf](http://www.gmrit.org/resources/B.Tech_CSE_Syllabus_AR19.pdf)

### **Annexure XI: Information Technology**

[http://www.gmrit.org/resources/B.Tech\\_IT\\_Syllabus\\_AR20.pdf](http://www.gmrit.org/resources/B.Tech_IT_Syllabus_AR20.pdf)

[http://www.gmrit.org/resources/B.Tech\\_IT\\_Syllabus\\_AR19.pdf](http://www.gmrit.org/resources/B.Tech_IT_Syllabus_AR19.pdf)

### **Annexure XII: Electronics and Communication Engineering**

[http://www.gmrit.org/resources/B.Tech\\_ECE\\_Syllabus\\_AR20.pdf](http://www.gmrit.org/resources/B.Tech_ECE_Syllabus_AR20.pdf)

[http://www.gmrit.org/resources/B.Tech\\_ECE\\_Syllabus\\_AR19.pdf](http://www.gmrit.org/resources/B.Tech_ECE_Syllabus_AR19.pdf)

### **Annexure XIII: Electrical and Electronics Engineering**

[http://www.gmrit.org/resources/B.Tech\\_EEE\\_Syllabus\\_AR20.pdf](http://www.gmrit.org/resources/B.Tech_EEE_Syllabus_AR20.pdf)

[http://www.gmrit.org/resources/B.Tech\\_EEE\\_Syllabus\\_AR19.pdf](http://www.gmrit.org/resources/B.Tech_EEE_Syllabus_AR19.pdf)

### **Annexure XIV: Electrical and Electronics Engineering**

[http://www.gmrit.org/resources/B.Tech\\_Mech\\_Syllabus\\_AR20.pdf](http://www.gmrit.org/resources/B.Tech_Mech_Syllabus_AR20.pdf)

[http://www.gmrit.org/resources/B.Tech\\_Mech\\_Syllabus\\_AR19.pdf](http://www.gmrit.org/resources/B.Tech_Mech_Syllabus_AR19.pdf)



## MINUTES OF THE 20<sup>th</sup> ACADEMIC COUNCIL MEETING

Media : Zoom (Online Meeting)  
 Date : 15.06.2024 (Saturday)  
 Time : 03:00 PM – 05:00 PM

### MEMBERS PRESENT

Dr. C. L. V. R. S. V. Prasad	- Chairman (Principal)
Dr. D. Rajya Lakshmi	- Member
Mr.B.Chandra Bhushana Rao	- Member
Dr. G. Jayasuma	- Member
Dr. A. Venu Gopal	- Member
Dr. P. Mallikarjuna Rao	- Member
Dr. P. K. Jain	- Member
Chair Person (BoS : Civil Engg.)	- Member
Chair Person (BoS : EEE)	- Member
Chair Person (BoS : Chem & Mech Engg.)	- Member
Chair Person (BoS : ECE)	- Member
Chair Person (BoS : CSE)	- Member
Chair Person (BoS : IT)	- Member
Chair Person (BoS : BS&H)	- Member
Chair Person (BoS : AIML,AIDS)	- Member
Dr.S.N.Dash(CDC-Head)	- Member
Dr.V.Rambabu (Asso.Dean-Student Affairs)	- Member
Dr. K.Ravindranadh (Asso.Dean-R&D)	- Member
Dr.T.Prabhakar (Controller of Examinations)	- Member
Dr.P.N.L.Pavani (Head -IQAC)	- Member
Dr. M.V.Nageswara Rao(Asso.Dean-Academics)	- Member Secretary

### GRANT OF LEAVE OF ABSENCE

Dr. K. V. L. Subramaniam	- Member
Mr. V. Paradesi Naidu	- Member

Chairman welcomed all the members of the academic council and requested for the grant leave of absence for the above referred members. **(Item #1)**.

Member Secretary presented the action taken report for the 19<sup>th</sup> academic council meeting and received the confirmation for the minutes of 19<sup>th</sup> academic council meeting held on 06<sup>th</sup> June 2023 from all the esteemed members.

Also presented the action taken report for the approvals taken by circulation on 20.11.2023 and received the confirmation from all the esteemed members. **(Item #2 &3).**

Member Secretary presented the details of the overall Operations and performance of the Institution (Academic-Operations, Ranking, Achievements, Placements and Research) **(Item #4).**

Academic council members appreciated the efforts and initiatives taken up by the institute for the overall development and the ranking achieved. Congratulated the students who achieved credential in curricular and co-curricular activities.

#### **ITEM No.: 5**

**Ratification of Semester end result for regular and supplementary examination for the academic year 2023-24 (II, IV, VI, VIII semesters) and 2023-24 (I, III, V, VII semesters) held during June 2023 to June 2024 for Students in B. Tech. and M.Tech Programs.**

Member Secretary presented the results declared for the regular and supplementary examinations pertaining to semesters mentioned above for the students admitted during the different academic years under Academic Regulation AR16, AR19, AR20, AR21 and AR 23 and requested for the ratification of the results which were declared by the College academic committee in the presence of the JNTUGV representative.

- The members, after the detailed review, ratified the results of all the regular and supply examinations declared by the college academic committee as per the **Annexure I.**

#### **ITEM No.: 6**

**Ratification of the PC eligibility list of the UG students admitted during the Academic Year 2020-21 & earlier batches who have successfully acquired the graduation requirements for the award of B. Tech. Degree with Honours , B.Tech. Degree with Minors in Computer Science and Engineering , and B.Tech. Degree as per the respective academic regulations at the time of admission.**

**Ratification of the PC eligibility list of the PG students admitted during the Academic Year 2021-2022 who have successfully acquired the graduation requirements for the award of M.Tech. Degree as per the respective academic regulations at the time of admission.**

Member Secretary presented the (semester-wise & branch-wise) UG results of the 2020 admitted batch for all the semesters i.e from 1<sup>st</sup> to 8<sup>th</sup> semesters under Academic Regulation AR20 and who have acquired the graduation requirements and eligible for the issue of Provisional certificate.

Further, details of the students who have acquired graduation requirements and eligible for the issue of PCs pertaining to the batches admitted earlier to 2020 are presented.

The members reviewed the results (1<sup>st</sup> semester to 8<sup>th</sup> semester) of 2020 admitted batch students and approved the PC eligibility list of the student who will be graduating by June 2024 as per the academic regulations AR20. Apart from this, the PC eligible students from the earlier admitted students who have acquired graduation requirements were also approved as per the **Annexure II**.

Member Secretary also presented the (semester-wise & Specialisation-wise) results PG students admitted in the academic year 2021-22 for all the semesters' i.e from 1<sup>st</sup> to 4<sup>th</sup> semesters and who have fulfilled the M.Tech requirements and eligible for the issue of Provisional certificate.

The members reviewed the results (1<sup>st</sup> semester to 4<sup>th</sup> semester) of 2021 admitted batch PG students and approved the PC eligibility list of the students who will be graduating by June 2024 as per the **Annexure II**.

#### **ITEM NO.:7**

#### **Ratification of the syllabus for the 7<sup>th</sup> & 8<sup>th</sup> semesters of CSE-AIML & CSE-AIDS as per AR21 academic regulations**

HOD-CSE presented the recommendations of the Board of Studies (meeting held on 16<sup>th</sup> March 2024) of CSE-(Artificial Intelligence and Machine Learning) and CSE-(Artificial Intelligence and Data Science) regarding the detailed Syllabi for 7<sup>th</sup> & 8<sup>th</sup> semesters for AR21 regulations B. Tech. (Regular), B. Tech. (Honors) and B. Tech (Minor) Programs requesting for the ratification from the members of Academic Council

Members after deliberation ratified the syllabi for the 7<sup>th</sup> and 8<sup>th</sup> semesters as per the **Annexure III**.

#### **ITEM NO.:08**

#### **Approval of the AR-23 Academic Regulations for 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> semesters.**

The member secretary presented the detailed course structure and syllabus from III to VIII semesters of AR23 regulations. The syllabus and course structure of I and II semesters are in line with the common guidelines suggested by JNTUGV.

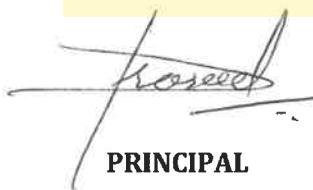
However, keeping in view the following points related the JNTUGV suggested course structure:

1. More academic load during 7<sup>th</sup> semester (21 credits)
2. Mandated FSI during 8<sup>th</sup> semester for all the students
3. No clear separation of credits for project work and FSI in 8<sup>th</sup> semester
4. Suggested FSI through online/virtual mode

All the respective BoS have recommended implementing the course structure of III to VIII semesters of AR21 which was Approved and ratified by AC during the meeting dated 13<sup>th</sup> July 2022 with the following changes to have credit balance.

- CC&EC activities which were available from III to VI semesters are removed as CC&EC activities were already pursued in the I and II semesters.
- One credit is reduced in the Open Elective of VIII semester
- Minor modifications in the syllabus in a few courses.

Members deliberated and ratified the course structure and syllabus for AR23 regulations as recommended by the respective BoS for all the eight UG programs. Details are attached in **Annexure-IV**



**PRINCIPAL**



**Encl. Annexure I to IV**

**Copy to:**

- All Members of the Academic Council
- Assoc.Dean(Academics)
- Controller of Examinations (CoE)
- File

**PC Eligibility for  
B.Tech Degree with Minors in Computer Science and Engineering**

S.No	Department	Registered	Eligible for B.Tech Degree with Minors in Computer Science and Engineering
1	Civil Engineering	13	9
2	Electrical and Electronics Engineering	10	10
3	Mechanical Engineering	9	9
4	Electronics and Communication Engineering	30	26
5	Chemical Engineering	3	2
Total		65	56

**PC Eligibility - PG Students 2021 Admitted Batch**

S.No.	Admitted Batch	PC Eligible Students	Eligibility Academic Year
1	2021 Admitted Batch	08	2023-24

**Annexure - III**

**Syllabus for 7<sup>th</sup> & 8<sup>th</sup> semesters of CSE-AIML & CSE-AIDS**

[https://gmrit.edu.in/PDFs/curriculum/B.Tech\\_AIDS\\_Syllabus\\_AR21.pdf](https://gmrit.edu.in/PDFs/curriculum/B.Tech_AIDS_Syllabus_AR21.pdf)

[https://gmrit.edu.in/PDFs/curriculum/B.Tech\\_AIML\\_Syllabus\\_AR21.pdf](https://gmrit.edu.in/PDFs/curriculum/B.Tech_AIML_Syllabus_AR21.pdf)

**Annexure - III**

**Academic Regulations (AR-23) for 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> semesters**

[https://gmrit.edu.in/PDFs/curriculum/B.Tech\\_AIDS\\_Syllabus\\_AR23.pdf](https://gmrit.edu.in/PDFs/curriculum/B.Tech_AIDS_Syllabus_AR23.pdf)

[https://gmrit.edu.in/PDFs/curriculum/B.Tech\\_AIML\\_Syllabus\\_AR23.pdf](https://gmrit.edu.in/PDFs/curriculum/B.Tech_AIML_Syllabus_AR23.pdf)

[https://gmrit.edu.in/PDFs/curriculum/B.Tech\\_Civil\\_Syllabus\\_AR23.pdf](https://gmrit.edu.in/PDFs/curriculum/B.Tech_Civil_Syllabus_AR23.pdf)

[https://gmrit.edu.in/PDFs/curriculum/B.Tech\\_EEE\\_Syllabus\\_AR23.pdf](https://gmrit.edu.in/PDFs/curriculum/B.Tech_EEE_Syllabus_AR23.pdf)

[https://gmrit.edu.in/PDFs/curriculum/B.Tech\\_CSE\\_Syllabus\\_AR23.pdf](https://gmrit.edu.in/PDFs/curriculum/B.Tech_CSE_Syllabus_AR23.pdf)

[https://gmrit.edu.in/PDFs/curriculum/B.Tech\\_ECE\\_Syllabus\\_AR23.pdf](https://gmrit.edu.in/PDFs/curriculum/B.Tech_ECE_Syllabus_AR23.pdf)

[https://gmrit.edu.in/PDFs/curriculum/B.Tech\\_Mech\\_Syllabus\\_AR23.pdf](https://gmrit.edu.in/PDFs/curriculum/B.Tech_Mech_Syllabus_AR23.pdf)

[https://gmrit.edu.in/PDFs/curriculum/B.Tech\\_IT\\_Syllabus\\_AR23.pdf](https://gmrit.edu.in/PDFs/curriculum/B.Tech_IT_Syllabus_AR23.pdf)