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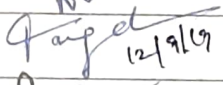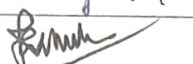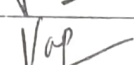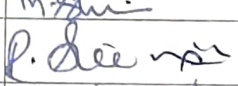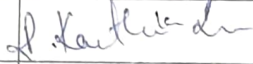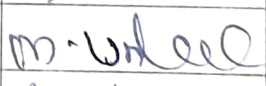
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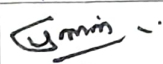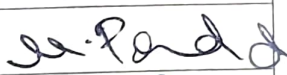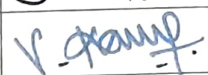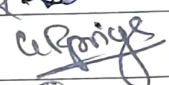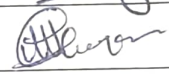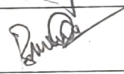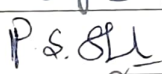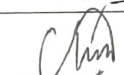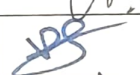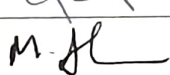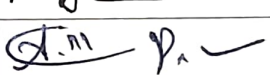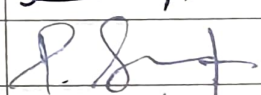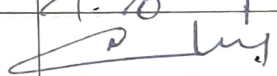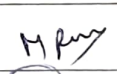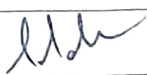
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

HELD ON 12.09.2019

The Meeting of the Board of studies in Department of Electronics and Communication Engineering was held on 12.09.2019 at 2.00 PM in ECE Seminar Hall at Sethu Institute of Technology, Pullor, Kariapatti

The following members were present

SL.NO.	Name	Designation	Status	Signature
1.	Mrs. Helina Rajini Suresh	Professor& HoD	Board Chairperson	
2.	Dr.A.Merline	Professor	Member	
3.	Dr. M.Sheik Dawood	Professor	Member	
4.	Dr.R.Tamilselvi	Professor	Member	
5.	Dr.K.A.Shahul Hameed	Professor	Member	
6.	Dr.P.Vasuki	Professor	Member	
7.	Dr. M.Annalakshmi	Associate Professor	Member	
8.	Mrs. R. Sivaranjani	Associate Professor	Member	
9.	Mrs. R.Karthika Devi	Associate Professor	Member	
10.	Mrs.N.R.Indira	Associate Professor	Member	
11.	Mrs.M.Ameena Banu	Associate Professor	Member	
12.	Dr.A.Yasodai	Associate Professor	Member	
13.	Dr.M.Parisa Beham	Associate Professor	Member	
14.	Dr.A.Muthukrishnan	Associate Professor	Member	
15.	Dr.S.Mohiadeen abdul khadar	Associate Professor	Member	
16.	Dr.A.Ahila	Associate Professor	Member	
17.	Mr.S.Ramesh kumar	Assistant Professor	Member	

SL.NO.	Name	Designation	Status	Signature
18.	Mrs.S.Amalorpava Mary Rajee	Assistant Professor	Member	
19.	Mr.R.Abdul Sikkandhar	Assistant Professor	Member	
20.	Mr.B.Muthu Pandian	Assistant Professor	Member	
21.	Mrs.P.Deepa	Assistant Professor	Member	
22.	Mr.D.John Pragasam	Assistant Professor	Member	
23.	Mrs.M.Pandimadevi	Assistant Professor	Member	
24.	Mr.V.Karthik	Assistant Professor	Member	
25.	Mrs.R.Devika	Assistant Professor	Member	
26.	Mrs. G.Ramu priya	Assistant Professor	Member	
27.	Ms.M.Charanya	Assistant Professor	Member	
28.	Mr.T.Venishkumar	Assistant Professor	Member	
29.	Mr.B.Michael Vinoline Rinoj	Assistant Professor	Member	
30.	Mrs.N.Kaniamudham	Assistant Professor	Member	
31.	Mr.V.M.Kothanda Thiliban	Assistant Professor	Member	
32.	Mrs.P.S.Sharan Shree	Assistant Professor	Member	
33.	Mr.N.Godwin Cyril	Assistant Professor	Member	
34.	Mr.V.Parthasarathy	Assistant Professor	Member	
35.	Dr.R.Karthick	Assistant Professor	Member	
36.	Mr.M.Arunkumar	Assistant Professor	Member	
37.	Mr.A.Manoj Prabaharan	Assistant Professor	Member	
38.	Mr.P.Selvaprasanth	Assistant Professor	Member	
39.	Mr.A.Nagaraj	Assistant Professor	Member	
40.	Ms.M.Fathu Nisha	Assistant Professor	Member	
41.	Mrs.N.Kayal Vizhi	Assistant Professor	Member	
42.	Mr.S.Selvakumar	Assistant Professor	Member	

SL.NO.	Name	Designation	Status	Signature
43.	Mrs.S.Suba Bala Sathiya	Assistant Professor	Member	S. Sala
44.	Mr.M.Silambarasan	Assistant Professor	Member	
45.	Dr.R.Rajesh Kanna	Assistant Professor	Member	12/9/19
46.	Dr.S.Rajaram	Professor/ECE, Thiyagarajar College of Engineering, Madurai	University Nominee	S.R. 12/9/19
47.	Dr. P. Sivakumar	Professor/ECE, Kalasalingam University, Krishnankoil	External Expert	12/9/19
48.	Dr.G.Indhumathi	Professor / MEPCO Schlenk Engineering College, Sivakasi	External Expert	12/9/19
49.	Mr.Sathyanath Premkumar	Director, Amogaa Product Private Limited, Madurai	Industrial Expert	
50.	P.G.Akila	Assistant Professor, PSNA college of Engineering, Dindigul	Alumni	P. G. Kla

The Chairman welcomed all the Board of Studies Members and the Board of Studies meeting proceeded as per the Agenda.

1.0 B.E. Electronics and Communication Engineering – 2019-2020 under Autonomous Regulation 2019:

1.1 To present the analysis of the Stakeholders' feedback regarding curriculum and syllabi

The analysis of Stakeholders' feedback regarding curriculum and syllabi was presented before the members and the same is approved by the members.

Alumni Feedback:

Stake Holder	Name	FeedBack	Remarks
Alumni (2013-17)	J.SenthilMurugan, Engineer Trainee, JasminInfotech	Suggested to include **IoT**	Included as program core course in R2019
Alumni (2013-17)	K.VeluPillai, Engineer Trainee, JasminInfotech	Suggested to include **Python**	Included as program core course in R2019
Alumni (2015-19)	DharaniBala M R Engineer Trainee, TCS	Suggested to include **Machine Learning**	Included as program core course in R2019

Student Feedback:

Stake Holder	Name	FeedBack	Remarks
Batch (2016-20)	V.Harrini	Suggested to include **IoT**	Included as program core course in R2019
Batch (2017-21)	J.Aafrinshaqthaj	Suggested to include **programming in C** in later semester	Included as program core course (3rd semester) in R2019
Batch (2016-20)	A.AbdulJabbar	Suggested to include **Python**	Included as program core course in R2019

IndustryFeedback:

S. No.	Name of the Resource Person	Member	Contribution	Details of Implementation
1	Mr.R.Sathyanath Managing Director, Amogaa products Private limited, Madurai	BoS	Suggested to include **Internet of Things**	Implemented in R2019
2	Mrs.BabiyolaGithanjali Scientist, DRDO, Bangalore	--	Suggested to include **Embedded Programming**	Included as program core in R2019

1.2 To consider and approve the improvements (addition or deletion of Courses/Topics) to be made in the syllabi under 2015 regulation

It is resolved to approve the improvements made in the syllabi of program elective **15UEC920 - ADVANCED TRENDS IN TELECOMMUNICATION** under 2015 regulation and with the inclusion of NB-IOT in 4th unit as suggested by Mr.SathyanathPremkumar

1.3 To present Mapping of Curriculum and syllabi with Programme Specific Criteria

Mapping of Curriculum and syllabi with Programme Specific Criteria was presented before the members and was approved by the BOS members.

1.4 R2019 UG Curriculum and syllabi of I year courses

R2019 UG Curriculum and syllabi of I year courses were presented before the members.It is resolved to approve the syllabi of following I Year Courses with the following modifications.

1. Engineering Fundamentals Lab

Dr.S.Rajaram suggested replacing specific microcontroller name such as node MCU/Arduino with generic name microcontroller.

2. Electronic Devices

No change

3. Introduction to Electronics and Communication Engineering

Dr.S.Rajaram suggested including RF and Antenna concepts and reducing the content ofElectronicmeasurement topics.

4. Electronic Devices Lab

Dr.S.Rajaram suggested including experiments using simulation software. The board chairman justified that simulation experiments have been included from 4th semester

onwards and the same was accepted and approved by the BOS members.

1.5 To present the classification of courses having focus on employability/ entrepreneurship/ skill development

The classification of courses having focus on **employability/ entrepreneurship/ skill development** was presented before the members

19UEC302	Digital Electronics and Design
19UEC303	Circuit Theory
19UEC305	Analog circuits
19UEC402	Electromagnetic Fields and TransmissionLines
19UEC403	Signals and Systems
19UEC404	Linear Integrated circuits
19UEC405	Analog and Digital Communication
19UEC501	Digital Signal Processing
19UEC502	Microprocessors, Microcontrollers and Applications
19UEC504	Antenna and Wave Propagation
19UEC601	Wireless Communication
19UEC602	VLSI Design
19UEC603	Internet of Things
19UGS433	Interpersonal Skills laboratory

1.6 List of New Courses under Regulation 2019

The following list of new courses under R2019 has been presented and approved by the BoS members.

19UEN201	Communication skills for professionals
19UGS210	Energy and Environmental science Lab
19UPH205	Electromagnetic theory
19UMA323	Numerical Analysis and Linear Algebra
19UGS210	Energy and Environmental Science lab
19UEC205	Introduction to Electronics and Communication Engineering
19UEC304	Basic Electrical and Instrumentation Engineering
19UEC305	Analog circuits
19UEC307	Seminar
19UGM332	Biology for Engineering Applications
19UEC405	Analog and Digital Communication
19UGS433	Interpersonal Skills laboratory

19UGM431	Gender Equality
19UEC507	Creative Thinking and Innovation
19UEC607	Product development Project
19UGM632	Indian Constitution
19UEC703	Image processing and Machine learning
19UEC707	Summer Internship
19UEC709	Image processing laboratory
19UEC901	Principles of Artificial Intelligence
19UEC902	Principles of Robotics
19UEC903	Biomedical Signal and Image Processing
19UEC905	5G Technology
19UEC906	ARM System Development
19UEC907	Real Time System Design
19UEC909	Image Analysis and Video Processing
19UEC911	IOT Architecture and protocols
19UEC914	AI in VLSI Design Automation
19UEC915	Embedded Systems in Medical Devices
19UEC920	Adaptive and Smart Antennas
19UEC921	Software Defined and Cognitive Radio
19UEC922	Biomedical Instrumentation
19UEC923	ASIC and FPGA Based Design
19UEC924	Cyber Physical System (Industry Designed)
19UEC925	Block Chain (Industry Designed)
19UEC926	Sensors for IOT
19UEC927	Smart sensor networks
19UEC928	Tele Medicine

1.7 To consider and approve for the list of examiners from other colleges who could be invited for conducting practical examination/Project Viva, Question Paper Setting, Paper evaluation, Exam invigilation duties

The list of External Examiners for practical examinations, theory examinations, question paper setting and Scrutiny members has been presented and the same has been approved by the members of the Board of Studies.

1.8 Percentage if change in the Curriculum and for each course in Regulation 2019

Changes made in each course in percentage have beenpresented and the same has been approved by the members of the Board of Studies.

S.No.	Name of the Course	Changes made in %
1.	Digital Electronics and Design	20%
2.	Electromagnetic Fields and Transmission Lines	40%
3.	Electronic Devices Lab	10%

4.	Linear Integrated circuits	20%
5.	Wireless Communication	20%
6.	Internet of Things	40%
7.	Optical and Microwave communication	60%
8.	Communication skills for professionals	100%
9.	Energy and Environmental science Lab	100%
10.	Electromagnetic theory	100%
11.	Numerical Analysis and Linear Algebra	100%
12.	Energy and Environmental Science lab	100%
13.	Introduction to Electronics and Communication Engineering	100%
14.	Basic Electrical and Instrumentation Engineering	100%
15.	Analog circuits	100%
16.	Seminar	100%
17.	Biology for Engineering Applications	100%
18.	Analog and Digital Communication	100%
19.	Interpersonal Skills laboratory	100%
20.	Gender Equality	100%
21.	Creative Thinking and Innovation	100%
22.	Product development Project	100%
23.	Indian Constitution	100%
24.	Image processing and Machine learning	100%
25.	Summer Internship	100%
26.	Image processing laboratory	100%
27.	Principles of Artificial Intelligence	100%
28.	Principles of Robotics	100%
29.	Biomedical Signal and Image Processing	100%
30.	5G Technology	100%
31.	ARM System Development	100%
32.	Real Time System Design	100%
33.	Image Analysis and Video Processing	100%
34.	IOT Architecture and protocols	100%
35.	AI in VLSI Design Automation	100%

36.	Embedded Systems in Medical Devices	100%
37.	Adaptive and Smart Antennas	100%
38.	Software Defined and Cognitive Radio	100%
39.	Biomedical Instrumentation	100%
40.	ASIC and FPGA Based Design	100%
41.	Cyber Physical System (Industry Designed)	100%
42.	Block Chain (Industry Designed)	100%
43.	Sensors for IOT	100%
44.	Smart sensor networks	100%
45.	Tele Medicine	100%

2.0 M.E. Communication Systems – 2019-20 under Autonomous Regulation R-2019:

2.1 R2019 PG Curriculum and syllabi

R2019 Curriculum and syllabi for M.E. Communication systemswere presented before the members and the members thoroughly discussedthe PG Curriculum and syllabi which are to be followed from the academic year 2019-20 under autonomous regulation 2019 and it is resolved to approve the same with the following modifications.

- The Industrial Expert Mr.SathyanathPremkumar suggested that in the lab course "Antennas and radiating system lab", the number of experiments can be increased to 10 experiments.

- The Industrial Expert Mr.SathyanathPremkumarsuggested including new emerging algorithms RNN,CNN in the program elective "Pattern Recognition".

- The Industrial Expert Mr.SathyanathPremkumar suggestedremoving unit 3 and including nanometer technology as unit 5in the program elective "Microelectronics and VLSI Technology" course.

- Dr. G.Indumathi enquired about the title of the program elective "Smart devices and mobile emerging technologies" and suggested to change the title as "Smart devices and "Emerging Mobile Technologies".

- Dr. G.Indumathisuggested adding more algorithms and updating unit 4 in the program core course"Advanced Communication Networks".

- Dr. G.Indumathi suggested to update unit 4in the program core course"Wireless and mobile communication".She also suggested to include the M2M concept.

- Dr.P.Sivakumarsuggested changingUnit 5 in the program elective"Communication Protocol Engineering".
- Dr.P.Sivakumarsuggested updating unit 1 in the program elective "Ubiquitous computing and pervasive computing".
- The Academic Expert, Dr.S.Rajaram suggested to update contents in unit 1 and add few new topics in unit 5 in the program elective "MIMO System".
- Dr.S.Rajaramenquired about the open elective course "IoT for Smart Applications" and suggested to change the title of unit 2 as"IoT to M2M"instead of"M2M to IoT".
- The following common audit courses for all PG programmes were presented before BOS members and recommended for approval.
  a) 19PGM801 – Pedagogy Studies
  b) 19PGM802 – English for Research Paper Writing

2.2 List of New Courses under Regulation 2019

The following new program electiveshave been introduced in regulation 2019:

19PCM103	Antennas and RadiatingSystemslab
19PCM104	Advanced Digital Signal ProcessingLab
19PGM701	Research Methodology and IPR
19PGM801	Pedagogy Studies
19PCM201	Advanced Communication Networks
19PCM202	Wireless and Mobile Communication
19PGM802	English for Research Paper Writing
19PCM203	Advanced Communication Networks Lab
19PCM204	Wireless and Mobile Communication Lab
19PCM205	Mini Project with seminar
19PCM504	RF Circuits and Microwave systems
19PCM513	Smart Devices and Emerging Mobile Technologies
19PCM507	Communication Protocol Engineering
19PCM508	Speech and Audio Signal Processing

2.3 Percentage if change in the Curriculum and for each course in Regulation 2019

Changes made in each course in percentage have beenpresented and the same has been approved by the members of the Board of Studies.

SEMESTER I

SL. No.	COURSE CODE	COURSE TITLE	Modified Percentage
THEORY			
1.	19PCM101	Adaptive Signal Processing	20
2.	19PCM102	Antennas and RadiatingSystems	20
PRACTICAL			
3.	19PCM103	Antennas and RadiatingSystemslab	100
4.	19PCM104	Advanced Digital Signal ProcessingLab	100

SEMESTER II

S.No	Course Code	Course Title	Modified Percentage
THEORY			
1.	19PCM201	Advanced Communication Networks	100
2.	19PCM202	Wireless and Mobile Communication	100
PRACTICAL			
3.	19PCM203	Advanced Communication Networks Lab	100
4.	19PCM204	Wireless and Mobile Communication Lab	100

Program Electives:

S.No	Course Code	Course Title	Modified Percentage
1.	19PCM501	Wireless Sensor Networks	20
2.	19PCM502	Optical Networks	5
3.	19PCM503	Cognitive Radio	5
4.	19PCM504	RF Circuitsand Microwavesystems	100
5.	19PCM505	Communication network security	10

6.	19PCM506	Satellite Communication	10
7.	19PCM507	Communication Protocol Engineering	10
8.	19PCM508	Speech and Audio Signal Processing	100
9.	19PCM509	MIMO System	100
10.	19PCM510	High performance communication networks	20
11.	19PCM511	Pattern Recognition	10
12.	19PCM512	Microelectronics and VLSI Technology	100
13.	19PCM513	Smart devices and emergingmobile technologies	100
14.	19PCM515	Ubiquitouscomputing and pervasivecomputing	100
15.	19PCM516	DSP Processor Architecture and Programming	10
16.	19PCM517	Mobile and social computing	100
17.	19PCM518	Data compression	5
18.	19PCM519	Medical Imaging Techniques	5

Open Elective:

S.No	Course Code	Course Title	Modified Percentage
1.		IoT for Smart Applications	100

2.4 To present the classification of courses having focus on employability/ entrepreneurship/ skill development

The classification of courses having focus on **employability/ entrepreneurship/ skill development** was presented before the members

	19PCM101	Adaptive Signal Processing
	19PCM506	Satellite Communication
	19PCM102	Antennas and Radiating Systems
	19PCM301	Project Work (Phase I)
	19PCM401	Project Work (Phase-II)
	19PCM205	Mini Project with seminar

The Board of studies of Electronics and Communication approves and recommends the syllabi of B.E.Electronics and Communication Engineeringand M.E.Communication systems to be followed from 2019-20batchunder autonomous regulations 2019 with the above modifications.

Chairman
Board of Studies
Electronics and Communication Engineering

Head Of The Department,
Electronics & Communication
Sethu Institute Of Technology,
Kariapatti-626115.