



# PRESIDENCY UNIVERSITY

Private University Estd, in Karnataka State by Act No. 41 of 2013

REF. No. PU/SoE/ECE/BoS-09/2018-19/CIR02

Date: 12<sup>th</sup> April 2019

## 9<sup>th</sup> BOS MEETING NOTICE

The 9<sup>th</sup> Board of Studies (BoS) meeting of Department of Electronics and Communication Engineering is scheduled on Saturday, 4<sup>th</sup> May 2019 at 10.00 AM in the university campus. You are hereby requested to attend the meeting.

### Agenda:

ECE.9.1 Review and Approval of Minutes of 8<sup>th</sup> BoS.

ECE.9.2 Approval of the ATR of the previous MOM

ECE.9.3 Review and Approval of Modifications in the B.Tech Program Regulations and Curriculum for the existing 2018-22, 2017-21 and 2016-20 batches.

**ECE.9.4 Approval of B.Tech. Program Regulations and Curriculum for 2019-2023 Batch of "Electronics and Communication Engineering".**

ECE.9.5 Approval of Program Regulations and Curriculum (First Year) for new B.Tech. "Electronics and Computer Engineering"

ECE.9.6 Approval of Program Regulations and Curriculum for new M.Tech. Program in "Embedded System & VLSI" for 2019-2021 Batch.

ECE.9.7 Deliberation and Approval of changes in the list of Discipline and Open Electives introduced by the parent department and other departments for core credit balance.

ECE.9.8 Deliberation and Approval of list of MOOC course like NPTEL/ SWAYAM etc.

ECE.9.9 Approval of External Examiners list.

ECE.9.10 Any other matter with the permission from the Chair.

Chairperson

BoS committee ECE

### Copy to:

- Pro-Chancellor, PU
- Registrar, PU
- Dean (SoE), PU
- Vice Chancellor, PU
- Pro-Vice Chancellor, PU
- Dean Academics, PU

Special Invitee: Dr C Kalaiarasan

Special Invitee: Dr N Mchala

- Members of the Committee as in the table below:

1	Dr. Shilpa Mehta	7	Ms. Diksha Singh
2	Dr. Rajiv Ranjan Singh	8	Dr. Adithya C.R
3	Dr. Sreenivasappa B-V	9	Mr. G Tirumala Vasu
4	Dr. Sivakumar S	10	Dr. Bheemsain Rao

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5	Mr. Sunil Kumar Dasari	11	Dr .B.V Uma
6	Mrs. Renuka Bhagwat	12	Mr. H.R. Varadarajan

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## SCHOOL OF ENGINEERING

### Department of Electronics and Communication Engineering

Ref. No.: PU/SOE/ECE/BOS-09/2018-19/MOM-01

Date: 4<sup>th</sup> May, 2019

### Minutes of the 9<sup>th</sup> Meeting of Board of Studies (Electronics and Communication Engineering – BOS – ECE)

The 9<sup>th</sup> meeting of the Board of Studies of the Electronics and Communication Engineering was held on 04-05-2019 at 10.00 am in MG09, Presidency University.



The following members were present:

Sl. No	Name	Designation	Status
1.	Dr. Shilpa Mehta	Professor, SoE, Presidency University	Chairperson, Ex-Officio
2.	Dr. Rajiv Ranjan Singh	Professor, SoE, Presidency University	Member
3.	Dr. Sreenivasappa B V	Associate Professor, Presidency University	Member
4.	Dr. Sivakumar S	Associate Professor, Presidency University	Member
5.	Mr. Sunil Kumar Dasari	Assistant Professor, Presidency University	Internal Member, (Nominated by VC Within the Department)
6.	Mrs. Renuka Bhagwat	Assistant Professor, Presidency University	Internal Member, (Nominated by VC Within the Department)
7.	Dr. Bheemsain Rao	Director -Strategic planning, SLT Ltd. Bengaluru	External Member, (Academic)
8.	Dr C Kalaiarasan	Associate Dean - SoE	Special Invitee

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9.	Dr. N. Mehala	Associate Professor	Special Invitee
10.	Mr. G Tirumala Vasu	Assistant Professor, Presidency University	Member Secretary

The following members were given leave of absence:

Sl. No	Name	Designation	Status
1.	Dr .B.V Uma	Professor & Head of ECE Department RVCE, Bengaluru	External Member, (Academic)
2.	Mr. H.R. Varadarajan	Sr. Executive – HR, Nokia–Siemens, Bengaluru	External Member (Industry)
3.	Ms. Diksha Singh	Assistant Professor, Presidency University	Internal Member, (Nominated by VC from sister Department)
4.	Dr. Adithya C.R	Assistant Professor, Presidency University	Internal Member, (Nominated by VC from sister Department)

The Chairperson extended a warm welcome to the members, particularly to the external members, and called the meeting to order. The chairperson has informed that the modifications in the existing Program Regulations and Curriculum will be incorporated for all batches.

### **Agenda ECE 9.1: Review and Approval of Minutes of 8th BoS.**

The minutes of the 8<sup>th</sup> meeting of the Board of Studies of Electronics and Communication Engineering held on 12<sup>th</sup> January 2019 was placed before the members and the same was confirmed.

### **Agenda ECE.9.2: Action Taken Report.**

The Action taken report on the previous minutes was presented by the Chairperson. The same was noted and taken on record. The key actions taken are listed in Annexure 9.2

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## Agenda ECE 9.3: Review and Approval of Modifications in the B.Tech Program Regulations and Curriculum for the existing 2018-22, 2017-21 and 2016-20 batches.

9.3.1 The following changes are applicable to the 2016-20 Batch PRC:

Open Elective 2 and Discipline Elective 4 are shifted from 8<sup>th</sup> semester to 7<sup>th</sup> Semester. This is to enable the students to be completely dedicated to IP, UP, Placement Training work (15 credits) in the 8<sup>th</sup> semester.

9.3.2 The following changes are applicable to 2018-22 and 2017-21 Batches PRC Documents:-

S.No	Old PRC Course Code	Old PRC Course Title	Old PRC Semester	Old Credits	New PRC Course Code	New PRC Course Title	New PRC Semester	New Credits
1	OPE 4XX	Open Elective - II	8 <sup>th</sup>	3	OPE 4XX	Open Elective - II	6 <sup>th</sup>	3
2	ECE 3XX	Discipline Elective - IV	8 <sup>th</sup>	3	ECE 3XX	Discipline Elective - IV	5 <sup>th</sup>	3
3	ECE 221	Data Communication & Networking	6 <sup>th</sup>	4	ECE 221	Data Communication & Networking	7 <sup>th</sup>	4
4	ECE 218	Micro-controller Applications	6 <sup>th</sup>	3	ECE 218	Micro-controller Applications	7 <sup>th</sup>	3
5	ECE 263	Microcontroller Applications Lab	6 <sup>th</sup>	1	ECE 263	Microcontroller Applications Lab	7 <sup>th</sup>	1
6	ECE 215	VLSI Design	7 <sup>th</sup>	4	ECE 215	VLSI Design	6 <sup>th</sup>	4
7	ECE 262	VLSI Design Lab	7 <sup>th</sup>	1	ECE 262	VLSI Design Lab	6 <sup>th</sup>	1
8	ECE 265	Engineering Applications With LabVIEW	5 <sup>th</sup>	1	ECE 265	Electronic System Simulation Lab	5 <sup>th</sup>	1

## Agenda ECE 9.4: Approval of B.Tech. Program Regulations and Curriculum for 2019-2023 Batch of "Electronics and Communication Engineering".

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**Resolution:** The PRC Document of ECE for 2019-2023 was approved.

**Agenda ECE 9.5: Approval of Program Regulations and Curriculum (First Year) for new B.Tech. "Electronics and Computer Engineering"**

**Resolution:** The PRC Document of the new ECM Branch was approved implementing the structure that was approved in the 8<sup>th</sup> BOS Meeting.

**Agenda ECE 9.6: Approval of Program Regulations and Curriculum for new M.Tech. Program in "Embedded System and VLSI" for 2019-2021 Batch**

**Resolution:** The PRC Document of the M.Tech Embedded System and VLSI Branch was approved implementing the structure that was approved in the 8<sup>th</sup> BOS Meeting with slight changes, as indicated in annexure ECE.9.6

**Agenda ECE 9.7: Deliberation and Approval of changes in the list of Discipline and Open Electives introduced by the parent department and other departments.**

9.7.1 The following new discipline electives are being added to ECE PRC:

ECE 317	Network Security
ECE 318	Wireless Adhoc Networks
ECE 319	Photonics
ECE 320	Probabilistic systems analysis
ECE 321	Optoelectronic Materials

Some Open Electives are being added from other departments. ECE department has proposed addition of the following open elective:

ECE 409	Computational Intelligence and Machine Learning
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The course Descriptions are included in Annexure ECE.9.7

**Agenda ECE 9.8: Deliberation and Approval of the list of MOOC courses like NPTEL/ SWAYAM/ Coursera etc.**

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We allow our students to register for online courses for achieving required credits through NPTEL/SWAYAM etc. with a provision for credit transfer, as approved in the 8<sup>th</sup> BOS Meeting. Approval for the same was taken in the 8<sup>th</sup> BoS. Further, the BOS members authorized the chairperson and subcommittee to modify the course list from time to time as per the availability on online portals.

**9.8.1 Resolution:** As per the list of electives offered by NPTEL Online for the upcoming learning term, the following list is approved for Discipline Electives under ECE

S.No	Course Id	Discipline	Course Name	SME Name
DE - NPTEL 1	noc19-ee33	Electrical Engineering	Mapping Signal Processing Algorithms to DSP Architectures	Prof. Nitin Chandrachoodan
DE - NPTEL 2	noc19-ee34	Electrical Engineering	Introduction to Computer Vision	Prof. Brejesh Lall
DE - NPTEL 3	noc19-ee40	Electrical Engineering	Fabrication Techniques for MEMs- based sensors: clinical Perspective	Prof. Hardik J Pandya Prof Chandramani Kishore Singh
DE - NPTEL 4	noc19-ee41	Electrical Engineering	Sensors and Actuators	Prof. Hardik J Pandya
DE - NPTEL 5	noc19-ee54	Electrical Engineering	Microelectronics: Devices To Circuits	Prof. Sudeb Dasgupta
DE - NPTEL 6	noc19-ee59	Electrical Engineering	Computational Electromagnetics	Prof. Uday Khankhoje

**9.8.2 Resolution:** As per the list of electives offered by NPTEL Online for the upcoming learning term, the following list is approved for Open Electives under ECE

S.No	Course Id	Discipline	Course Name	SME Name
OE - NPTEL 1	noc19-cs39	Computer Science	An Introduction To	Prof. Abhiram

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		and Engineering	Programming Through C++	Ranade
OE - NPTEL 2	noc19-cs41	Computer Science and Engineering	The Joy of Computing using Python	Prof. Sudarshan Iyengar
OE - NPTEL 3	noc19-cs54	Computer Science and Engineering	Deep Learning	Prof. Prabir Kumar Biswas
OE - NPTEL 4	noc19-cs85	Computer Science and Engineering	Programming In Java	Prof. Debasis Samanta
OE - NPTEL 5	noc19-cs56	Computer Science and Engineering	Natural Language Processing	Prof. Pawan Goyal

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## Agenda ECE 9.9: Approval of Examiners list.

The BoS committee authorized the Chairperson and subcommittee to modify the list of external examiners.

- All teaching faculty of ECE Department are default examiners.
- The Following list is approved for recommendation to BOE for ECE examiners panel:

S.No	Name	Position	University / Institute	Exp. in Yrs.	Mail Id	Phone No.
	Mrs P Kalyani	Assistant Professor	GITAM University Bangalore	9	yalamanchi.kalyani@gmail.com	9632366699
	Dr Mrinal Sarvagya	Professor	Reva University	23	mrinalsarvagya@reva.edu.in	9448694837
	Dr SN Prasad	Professor	Reva University	25	prasadsn@reva.edu.in	9845177025
	Dr Vijayashree R B	Professor and HOD	SVCE Bangalore	25	vrbudyal@yahoo.co.in	8105148994
	Dr. G. Seshikala	Professor	Reva University Bangalore	30	seshikala.g@reva.edu.in	9480400238
	Dr.H V Ravish	Professor	RVCE	25	ravisharadhya@rvce.edu.in	9449542583

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Aradhya						
Dr. Rajesh N	Professor	NMIT, Bangalore	20	rajesh.n@nmit.ac.in		9448912098
Dr. Thangadurai	Professor	Jain University	11	mrgoldjain2015@gmail.com		8056975530
Dr. Vaibhav Mesham	Professor	DSU	27	vaibhav-ece@dsu.edu.in		7259108645
Mr. Dankan V gowda	Assistant Professor	NMIT, Bangalore	11	dankan.v@nmit.ac.in		7892055621
Mrs. Bhuvaneshwari	Associate Professor	Nitte Meenakshi Institute of Technology	20	bhuvaneshwari.vm@gmail.com		9731451393
Ms. Kanmani B S	Assistant Professor	Dayanand sagar university	18	kanmani-ece@dsu.edu.in		9900710775
Prof. N. Mahaveeraswamy	Professor	Nitte Meenakshi Institute of Technology	45	nmahaviraswamy@gmail.com		9886320801
Dr. Rita Jain	Professor and HOD	Rajiv Gandhi Proudyougiki Viswavidyalaya-LNCT, Bhopal, MP	25	ritajain_bpl@yahoo.com		9893573575

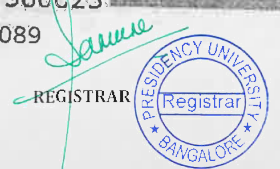
## Agenda ECE 9.10: Any other matter with the permission from the Chair.

9.10.1 Feedback on curriculum from stake holders: This was deliberated. The External suggested to specifically add the following in feedback and implement it. He suggested that we should ask feedback from industry on the need for a compulsory project work and dissertation for all B.Tech students. The present structure has Internship concept only with an option for either industry / professional practice or University Project. Some students pass out only with internship. The external member said that in such a situation, the student may even get a starting job in the company where he/she is doing PP but after a year if the student goes either for job change or for higher studies, the first question will be what his/her B.Tech project was. This will be a hindrance in his/ her future growth. He said we can ask this point as a feedback from the companies coming for placements and get to a conclusion as per the feedback received. But he strongly suggested to have some compulsory academic project with assigned credits.

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9.10.2 Regarding Examiners list, the external member said that we should not have a blanket approval for all staff – rather it should be experience based.

9.10.3 Points on PSO's, PEO's, PO's and LO's and preamble were discussed in the BOS meeting. The external member suggested have a well-defined model, we need not blindly follow some set models, and rather the university should come up with its own model. He said we should do a market research on skillsets required in job market and plan accordingly.

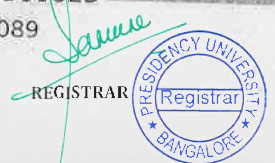
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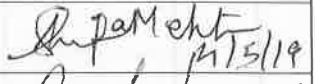
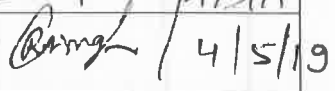
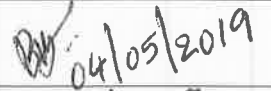
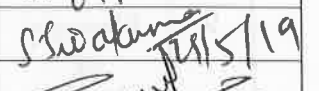

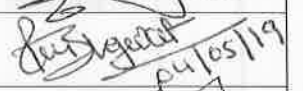

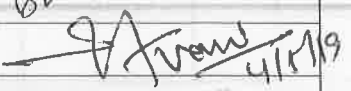
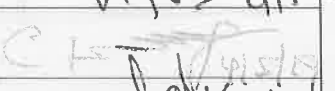
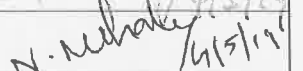
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The BOS Committee has authorized the BOS Chairperson and the subcommittee consisting of the internal BOS members of Electronics and Communication Engineering, to incorporate minor corrections/ edits, if required. As BOS meetings for all the departments are taking place simultaneously in different venues today, the Chairperson has requested approval from the committee to incorporate modifications/ alterations, if any, approved by the BOS committee of other departments for the existing courses offered in ECE PRCs by other departments. It is also informed by the Chairperson that there is a possibility of some modifications in the syllabus of 1<sup>st</sup> year courses. The BOS Committee for Electronics and Communication Engineering has approved the proposal unanimously.

The BOS Chairperson has conveyed that the decisions taken during the 9<sup>th</sup> meeting of BOS for B.Tech Electronics and Communication Engineering, B.Tech Electronics and Computer Engineering, and also MTech Embedded System and VLSI will be implemented for 2019 incoming batches, and existing 2018-2022, 2017-2021, and 2016-2020 batches wherever applicable. The Chairperson has conveyed thanks to all the members and informed that the date of next BOS meeting will be notified soon.

The meeting ended with Vote of Thanks to the Chair.

## BOS Committee:

S. No.	Name	Position	Signature with date
1	Dr. Shilpa Mehta	Chairperson, Ex-Officio	 4/5/19
2	Dr. Rajiv Ranjan Singh	Member	 4/5/19
3	Dr. Sreenivasappa B V	Member	 04/05/2019
4	Dr. Sivakumar S	Member	 4/5/19
5	Mr. Sunil Kumar Dasari	Internal Member	 4/5/19
6	Mrs. Renuka Bhagwat	Internal Member	 4/5/19
7	Dr. Bheemsain Rao	External Member, (Academic)	 4/5/19
8	Mr. G Tirumala Vasu	Member Secretary	 4/5/19
9	Dr C Kalaiarasan	Special Invitee	 4/5/19
10	Dr. N. Mehala	Special Invitee	 4/5/19

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## **ANNEXURE ECE 9.4**



# **PRESIDENCY UNIVERSITY**

Presidency University Act, 2013 of the Karnataka Act No. 41 of 2013 | Established under Section 2(f) of UGC Act, 1956  
Approved by AICTE, New Delhi

## **School of Engineering**



## **Bachelor of Technology Degree**

## **Program Regulations and Curriculum 2019-2023**

## **B. Tech. (Electronics and Communication Engineering)**

## **2019-2023**





## PROGRAM STRUCTURE

<b>I SEM - PHYSICS CYCLE (Aug-Dec) *</b>									
S. NO.	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONTACT HOURS	TYPE OF SKILL	COURSE ADDRESSES TO
			L	T	P	CREDITS			
1	MAT 105	Calculus and Linear Algebra	3	1	0	4	4	F <sup>1</sup>	-
2	PHY 101	Engineering Physics	4	0	0	4	4	F	-
3	EEE 101	Elements of Electrical Engineering	3	0	0	3	3	P <sup>2</sup>	-
4	CIV 101	Elements of Civil Engineering	3	0	0	3	3	P	Env <sup>4</sup>
5	MEC 152	Engineering Graphics	2	0	4	4	6	P	-
6	ENG 1XX	Humanities-I	2	1	0	3	3	F/E <sup>3</sup>	-
7	PHY 151	Engineering Physics Lab	0	0	2	1	2	F	-
8	MEC 151	Workshop Practice	0	0	2	1	2	P	-
9	PPS 105	Building Self Confidence	0	0	2	1	2	E	-
<b>TOTAL</b>			<b>17</b>	<b>2</b>	<b>10</b>	<b>24</b>	<b>29</b>		
<sup>1</sup> Foundation Course <sup>2</sup> Professional Skills					<sup>3</sup> Employability Skills <sup>4</sup> Environmental Issues				

<b>I SEM - CHEMISTRY CYCLE (Aug-Dec)#</b>									
S. NO.	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONTACT HOURS	TYPE OF SKILL	COURSE ADDRESSES TO
			L	T	P	CREDITS			
1	MAT 105	Calculus and Linear Algebra	3	1	0	4	4	F	-

  
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2	CHE 101	Engineering Chemistry	4	0	0	4	4	F	-
3	ECE 101	Elements of Electronics Engineering	3	0	0	3	3	P	-
4	MEC 101	Elements of Mechanical Engineering	3	0	0	3	3	P	-
5	CIV 102	Environmental Science and Disaster Management	3	0	0	3	3	F	Env
6	ENG 1XX	Humanities-I	1	0	2	2	3	E	-
7	CSE 151	Computer Programming	2	0	4	4	6	E	-
8	CHE 151	Engineering Chemistry Lab	0	0	2	1	2	F	-
9	PPS 105	Building Self Confidence	0	0	2	1	2	F	PE <sup>5</sup> /S <sup>6</sup>
		<b>TOTAL</b>	<b>19</b>	<b>1</b>	<b>10</b>	<b>25</b>	<b>30</b>		

<sup>5</sup> Professional Ethics

<sup>6</sup> Sustainability Issues

<b>II SEM - CHEMISTRY CYCLE (Jan-May) *</b>									
S. NO.	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONTACT HOURS	TYPE OF SKILL	COURSE ADDRESSES TO
			L	T	P	CREDITS			
1	MAT 106	Calculus, Differential Equations and Complex Variables	3	1	0	4	4	F	-
2	CHE 101	Engineering Chemistry	4	0	0	4	4	F	-
3	ECE 101	Elements of Electronics Engineering	3	0	0	3	3	P	-
4	MEC 101	Elements of Mechanical Engineering	3	0	0	3	3	P	-
5	CIV 102	Environmental Science and Disaster Management	3	0	0	3	3	F	Env

  
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6	ENG 1XX	Humanities-II	1	0	2	2	3	E	-
7	CSE 151	Computer Programming	2	0	4	4	6	E	-
8	CHE 151	Engineering Chemistry Lab	0	0	2	1	2	F	-
9	PPS 106	Effective Communication	0	0	2	1	2	F	PE/S
		<b>TOTAL</b>	<b>19</b>	<b>1</b>	<b>10</b>	<b>25</b>	<b>30</b>		

II SEM - PHYSICS CYCLE (Jan-May)#									
S. NO.	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONTACT HOURS	TYPE OF SKILL	COURSE ADDRESSES TO
			L	T	P	CREDITS			
1	MAT 106	Calculus, Differential Equations and Complex Variables	3	1	0	4	4	F	-
2	PHY 101	Engineering Physics	4	0	0	4	4	F	-
3	EEE 101	Elements of Electrical Engineering	3	0	0	3	3	P	-
4	CIV 101	Elements of Civil Engineering	3	0	0	3	3	P	Env
5	MEC 152	Engineering Graphics	2	0	4	4	6	P	-
6	ENG 1XX	Humanities-II	2	1	0	3	3	F/E	-
7	PHY 151	Engineering Physics Lab	0	0	2	1	2	F	-
8	MEC 151	Workshop Practice	0	0	2	1	2	P	-
9	PPS 106	Effective Communication	0	0	2	1	2	E	-
		<b>TOTAL</b>	<b>17</b>	<b>2</b>	<b>10</b>	<b>24</b>	<b>29</b>		

**Note: At the end of the 1<sup>st</sup> year (Common to all B. Tech. Programs) the total credits offered is 49.**  
The 1<sup>st</sup> year B.Tech Program structure is executed in two cycles.

  
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\* The students undergoing the “Physics” cycle shall take the Courses as indicated.



# The students undergoing “Chemistry” cycle shall take the Courses as indicated.

III SEMESTER									
S. No	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONTA CT HOURS	Types of Skills	Course Addresses to
			L	T	P	CRED ITS			
1	MAT 107	Transform Techniques, Partial Differential Equations and Probability	3	1	0	4	4	F <sup>5</sup>	-
2	ECE 201	Analog Electronics	4	0	0	4	4	F <sup>5</sup>	-
3	ECE 202	Signals and Systems	3	1	0	4	4	F <sup>5</sup>	-
4	ECE 220	Digital Electronics	4	0	0	4	4	F <sup>5</sup>	-
5	EEE 219	Network Theory	3	0	0	3	3	F <sup>5</sup>	-
6	ECE 251	Analog Electronics Lab	0	0	2	1	2	F <sup>5</sup>	-
7	ECE 264	Digital Electronics Lab	0	0	2	1	2	F <sup>5</sup>	-
8	ECE 253	Signals and Systems Lab	0	0	2	1	2	F <sup>5</sup>	-
9	PPS 107	Design Thinking and Team Building	0	0	2	1	2	E <sup>1</sup>	-
		<b>TOTAL</b>	17	2	8	23	27		

**Skills: E<sup>1</sup>: Employability skills, P<sup>2</sup>: Professional skills, E<sup>3</sup>: Entrepreneurship skills, R<sup>4</sup>:Research skills, F<sup>5</sup>: Fundamentals, K<sup>6</sup>:Knowledge Enhancement, S<sup>7</sup>: Social Responsibility**

**Course Addresses to G<sup>1</sup>:Gender Equality, S<sup>2</sup>:Sustainability, E<sup>3</sup>:Environmental Needs, E<sup>4</sup>:Ethics.**

IV SEMESTER									
S. No	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONTA CT HOURS	Types of Skills	Course Addresses to
			L	T	P	CRED ITS			
1	MAT 108	Numerical Methods, Probability Distributions and Sampling Techniques	3	1	0	4	4	F <sup>5</sup>	-
2	EEE 204	Electromagnetic Theory	4	0	0	4	4	F <sup>5</sup>	-
3	ECE 206	Linear Integrated Circuits	4	0	0	4	4	F <sup>5</sup>	-
4	ECE 207	Microprocessor Programming and Interfacing	4	0	0	4	4	P <sup>2</sup>	-

  
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5	ECE 213	Digital Signal Processing	3	1	0	4	4	P <sup>2</sup>	-
6	ECE 254	Linear Integrated Circuits Lab	0	0	2	1	2	F <sup>5</sup>	-
7	ECE 260	Digital Signal Processing Lab	0	0	2	1	2	P <sup>2</sup>	-
8	ECE 256	Microprocessor Programming and Interfacing Lab	0	0	2	1	2	P <sup>2</sup>	-
9	PPS 108	Being Corporate Ready	0	0	2	1	2	E <sup>1</sup>	-
		<b>TOTAL</b>	18	2	8	24	28		

**\*\*NOTE:** Students will undergo Professional Practice – I during the Summer Break between the fourth and the fifth semesters and the credits earned will be accounted for in the fifth semester.

V SEMESTER									
S. No	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONTACT HOURS	Types of Skills	Course Addresses to
			L	T	P	CREDITS			
1	EEE 205	Control Systems	3	1	0	4	4	P <sup>2</sup>	-
2	ECE 210	Analog Communication	4	0	0	4	4	P <sup>2</sup>	-
3	ECE 211	Transmission Lines and Waveguides	3	0	0	3	3	P <sup>2</sup>	-
4	ECE 3XX	Discipline Elective – I	3	0	0	3	3	K <sup>6</sup>	-
5	ECE 3XX	Discipline Elective – II	3	0	0	3	3	K <sup>6</sup>	-
6	MGT 1XX	Management Sciences-I	3	0	0	3	3	E <sup>3</sup>	-
7	ECE 265	Computer Aided Electronics Design Lab	0	0	2	1	2	P <sup>2</sup>	-
8	ECE 258	Analog Communication Lab	0	0	2	1	2	P <sup>2</sup>	-
9	SIC 501	Social Immersion Course*	0	0	0	1		S <sup>7</sup>	E <sup>4</sup> , G <sup>1</sup> , E <sup>3</sup>
10	<b>PIP 101</b>	Professional Practice – I **				5		P <sup>2</sup> , E <sup>1</sup>	
		<b>TOTAL</b>	19	1	4	27/28	24		

\* Student has to register for Social Immersion Courses in any one semester 5 / 6 to earn the mandatory credits.

VI SEMESTER									
S.N O.	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONTACT HOURS	Types of Skills	Course Addresses to
			L	T	P	CREDITS			

  
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1	ECE 212	Digital Communication	3	1	0	4	4	P <sup>2</sup>	-
2	ECE 215	VLSI Design	4	0	0	4	4	E <sup>1</sup> , R <sup>4</sup>	-
3	ECE 214	Antenna And Microwave Engineering	3	1	0	4	4	P <sup>2</sup>	-
4	MGT 1XX	Management Sciences-II	3	0	0	3	3	E <sup>3</sup>	-
5	ECE 3XX	Discipline Elective – III	3	0	0	3	3	K <sup>6</sup>	-
6	ECE 259	Digital Communication Lab	0	0	2	1	2	P <sup>2</sup>	-
7	ECE 262	VLSI Design Lab	0	0	2	1	2	E <sup>1</sup> , R <sup>4</sup>	-
8	SIC 501	Social Immersion Course*	0	0	0	1	-	S <sup>7</sup>	E <sup>4</sup> , G <sup>1</sup> , E <sup>3</sup>
9	XXX XXX	Open Elective I	3	0	0	3	3		-
<b>TOTAL</b>			19	2	4	23/24	25		

### VII SEMESTER

S. No	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONT ACT HOURS	Types of Skills	Course Addresses to
			L	T	P	CR EDITS			
1	ECE 216	Information Theory and Coding	4	0	0	4	4	P <sup>2</sup>	-
2	ECE 218	Micro Controller Applications	3	0	0	3	3	P <sup>2</sup> , E <sup>1</sup>	-
3	ECE 221	Data Communication and Networking	4	0	0	4	4	P <sup>2</sup> , E <sup>1</sup>	-
4	ECE 3XX	Discipline Elective – IV	3	0	0	3	3	K <sup>6</sup>	-
5	XXX XXX	Open Elective-II	3	0	0	3	3	K <sup>6</sup>	-
6	ECE 263	Micro Controller Applications Lab	0	0	2	1	2	P <sup>2</sup> , E <sup>1</sup>	-
<b>TOTAL</b>			17	0	2	18	19		

VIII SEMESTER									
S.No.	COURSE CODE	COURSE NAME	CREDIT STRUCTURE				CONTACT HOURS	TYPE OF SKILL	COURSE ADDRESS TO
			L	T	P	C			
1.	PIP 102	Professional Practice - II	0	0	0	15		P/E	PE
		<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>		

  
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