# **Department of Electronics**

# Under Graduation (UG)

After	After Successful completion of three year degree programme in (B.Sc. Electronics ) a student should be able to		
able t			
Sr.	Programme Outcomes(PO's)	Programme Specific Outcome(PSO's)	
No			
1	To make student capable of studying	To develop the ability to apply the knowledge of	
	Electronics in academic and Industrial	content of principle of Electronics.	
	courses.		
2	To promote understanding of basic facts	To develop ability and to acquire the knowledge of	
	and concept in Electronics while retaining	terms facts and concepts processes technique and	
	the excitement of Electronics.	principle of subject.	
3	To expose the student to various emerging	To enquire the new knowledge of Electronics and	
	new areas of Electronics	development therein.	
4	To develop problem solving skills in	To develop ability of students and motivate them to	
	students.	apply advanced concepts of Electronics to solve real	
		life problems.	
5	To expose the student to different	To prepare the students for successful career in	
	processes used in Industrial and their	industry and motivate them for higher education.	
	applications.		
6	To develop proper attitude towards the	To provide exposure to the students for analyzing	
	subject.	electronics problems.	
7	To develop software skills in students.	To provide necessary foundation on computational	
		platforms and software simulation tools.	

#### **Course Outcomes**

## Semester-I (F.Y.B.Sc. Electronics)

After	After Successful completion of these courses student should be able to		
Sr.	Courses	Outcomes	
No			
1	ELE-101:- Network Analysis and Semiconductor Diode	<ol> <li>Know the characteristics of basic electronics components.</li> <li>Apply knowledge to develop circuits using electronic devices.</li> <li>Understand and analyze linear electronic circuits.</li> </ol>	
2	ELE-102:- Digital Integrated Circuits	<ol> <li>Understand und und und und und und und und und u</li></ol>	
3	ELE-103:- ELECTRONICS LAB -I	<ol> <li>Identify the of basic electronics components.</li> <li>Apply the concept and knowledge of electronics devices to real life problems.</li> <li>Review, prepare and present technological developments.</li> </ol>	

### **Course Outcomes**

## Semester-II (F.Y.B.Sc. Electronics)

After	After Successful completion of these courses student should be able to	
Sr.	Courses	Outcomes
No		
1	ELE-201:- Analog Electronics	<ol> <li>Know the characteristics transistor</li> <li>Understand the function and need of Amplifiers.</li> <li>Understand the function and need of feedback</li> <li>in oscillators.</li> </ol>
2	ELE-202:- Linear Integrated Circuits	<ol> <li>Understand function of operational amplifiers</li> <li>Use of operational amplifiers</li> <li>Understand the function digital and analog converters</li> </ol>
3	ELE-203:- ELECTRONICS LAB -II	<ol> <li>Apply the concept and knowledge of integrated circuit chips to develop new systems.</li> <li>Model complex circuits and simulate them.</li> <li>Handle simulation software to analyze electronics circuits.</li> </ol>

#### **Course Outcomes**

## Semester-III (S.Y.B.Sc. Electronics)

After	After Successful completion of these courses student should be able to		
Sr.	Courses	Outcomes	
No			
1	ELE-301:- Analog Communication	1. Understand and identify the fundamental concepts and various components of analog communication systems.	
		<ol><li>Apply knowledge to develop circuits of analog modulation and demodulation.</li></ol>	
		3. Analyze modulation circuits and understand the behavior of the systems.	
2	ELE-302:-Microprocessors and Applications	1. Understand and analyze 8085 microprocessor and its programming.	
		2. Apply the concept and knowledge of microprocessors to real life problems.	
		3. Develop interfacing to real world devices.	
3	ELE-303:- ELECTRONICS LAB –III	1. Identify and describe different analog modulation techniques.	
		2. Analyze AM radio receiver.	
		3. Learn use of hardware & software tools.	
4	ELE-304:- Electrical Circuits and Network Skills	1 Measurement of R,L,C, Voltage, Current, Power Factor, Power.	
		2. Measure frequency, phase with Oscilloscope	
		3. Use Digital voltmeters	

#### **Course Outcomes**

### Semester-IV (S.Y.B.Sc. Electronics)

Sr.	Courses	Outcomes
No		
1	ELE-401:- Digital Communication	1. Understand and identify the fundamental concepts and various components of digital Communication systems.
		2. Apply the concept and knowledge of digital communication to develop new systems.
		3. To understand Multiple Access and Spread Spectrum Techniques for mobile and cellular communication system.
2	ELE-402:-Microcontrollers and Applications	1. Learn importance of Microcontroller in designing real time applications
		2. Gain knowledge of microcontroller programming.
		3. Apply practical knowledge of microcontrollers to solve real life problems of the society.
3	ELE-403:- ELECTRONICS LAB -IV	1. Identify and describe different digital modulation techniques.
		2. Develop interfacing to real world devices using microcontroller.
		3. Learn use of hardware & software tools.
4	ELE-404:- Computational Techniques in Electronics	1. Evaluate the True roots using Bisection method.
		2. To understand the Gauss Elimination Method.
		3.Write numerical programs, such as C Language programs, to solve the problems;



(Prof. Dr

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