



# BAPATLA WOMEN'S ENGINEERING COLLEGE::BAPATLA

AN ISO 9001:2015 CERTIFIED INSTITUTION

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Class/Sem: IV/IV B. Tech, I Sem

A.Y: 2023-24

### Course Outcomes

After Successful completion of this course, Students should be able to learn

<b>Course Name: Image And Video Processing</b>		<b>Code: EC-411, R20</b>
<b>CO No.</b>	<b>Course Outcome Statement</b>	<b>Bloom's Taxonomy Level</b>
C411.1	Describe the basic principles and fundamentals of Digital image processing.	Understand
C411.2	Demonstrate the performance of basic image processing techniques (Enhancement, Restoration and segmentation)	Apply
C411.3	Discuss the Image compression fundamentals & models	Understand
C411.4	Illustrate the concept of video sampling and Modeling	Analyze
<b>Course Name: Wireless Communications and Cellular Networks</b>		<b>Code: EC-412, R-20</b>
<b>CO No.</b>	<b>Course Outcome Statement</b>	<b>Bloom's Taxonomy Level</b>
<b>C412.1</b>	Discuss the functioning of wireless communication system and the cellular concept and different methodologies to improve the coverage and capacity in cellular systems.	Understand
<b>C412.2</b>	Illustrate the mobile radio propagation, fading.	Apply
<b>C412.3</b>	Describe the equalization and diversity techniques.	Understand

<b>C412.4</b>	Distinguish the generations of wireless standards and multiple access techniques for wireless communications.	Analyze
<b>Course Name: Artificial Neural Networks</b>		<b>Code: EC-413, R-20</b>
<b>CO No.</b>	<b>Course Outcome Statement</b>	<b>Bloom's Taxonomy Level</b>
<b>C413.1</b>	<b>Discuss</b> History of ANN ,differences between BNN and ANN, Architecture of ANN and terminology in it.	Understand
<b>C413.2</b>	<b>Calculate</b> the change in weight using different learning rules, using ADALINE and MADALINE network	Analyze
<b>C413.3</b>	<b>Compare</b> different types of algorithms used in ANN	Analyze
<b>C413.4</b>	<b>Determine</b> the different types of memory used and the weight vector of different networks	Understanding
<b>C413.5</b>	<b>Assemble</b> some applications of ANN in Image processing	Apply
<b>Course Name: Information Theory &amp; Coding</b>		<b>Code: EC-414/2, R-20</b>
<b>CO No.</b>	<b>Course Outcome Statement</b>	<b>Bloom's Taxonomy Level</b>
<b>C414.1</b>	<b>Understand</b> The Entropy and Information Content	Understand
<b>C414.2</b>	<b>Explain</b> the Channel Performance using Information Theory	Understand
<b>C414.3</b>	<b>Analyze</b> The Error Detection and Correction using Linear Block Codes & Cyclic Codes	Analyze

<b>C414.4</b>	<b>Apply</b> The Convolutional Codes for Performance Analysis	Apply
<b>Course Name: Intellectual Property Rights &amp; Patents</b>		<b>Code: EC-415/2, R-20</b>
<b>CO No.</b>	<b>Course Outcome Statement</b>	<b>Bloom's Taxonomy Level</b>
<b>C415.1</b>	<b>Distinguish</b> various forms of Intellectual Property Rights	Understand
<b>C415.2</b>	<b>Implement</b> knowledge of patent laws and procedures	Apply
<b>C415.3</b>	<b>Illustrate</b> copyright protection and infringement	Apply
<b>C415.4</b>	<b>Distinguish</b> trademark law and its practical implications	Analyze
<b>C415.5</b>	<b>Outline</b> trade secret law and cyber law	Analyze
<b>Course Name : Antenna Designing &amp; Modeling LAB</b>		<b>CODE: EC 451 ,R20</b>
<b>CO No.</b>	<b>Course Outcome Statement</b>	<b>Bloom's Taxonomy Level</b>
<b>C451.1</b>	Discuss the basic construction and working principle of different antennas.	Understand
<b>C451.2</b>	Demonstrate the design steps and simulation procedure of an antenna using HFSS software.	Apply
<b>C451.3</b>	Analyze & design different types of antennas and examine the simulation results.	Analyze
<b>C451.4</b>	Illustrate different antenna parameters like return loss, far field radiation pattern, VSWR, etc.	Apply