



Amar Sewa Mandal's  
**GOVINDRAO WANJARI COLLEGE OF ENGINEERING & TECHNOLOGY**  
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**NAAC ACCREDITED**

**AN ISO 9001-2015 & ISO 14001-2015 CERTIFIED INSTITUTE**

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President	Secretary	Treasurer	Principal
Dr. (Smt) SuhasiniWanjari	Adv. Abhijit G. Wanjari	Dr.SmeetaWanjari	Dr Salim Chavan

## DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

### BTECH 5<sup>TH</sup> SEMESTER

#### LEARNING MANAGMENT SYSTEM (LMS)

S.N.	NAME OF SUBJECT	CO'S	NOTES LINK
1	ELECTROMAGNETIC FIELD (BTETC501)	<b>CO1:</b> Illustrate the physical concepts of static electric fields.	<a href="#">UNIT NO.1</a>
		<b>CO2:</b> Describe the physical concepts of static magnetic fields.	<a href="#">UNIT NO.2</a>
		<b>CO3:</b> To understand the boundary conditions for different materials/surfaces.	<a href="#">UNIT NO.3</a>
		<b>CO4:</b> Use sections of transmission line sections for realizing circuit element.	<a href="#">UNIT NO.4</a>
		<b>CO5:</b> Acquainted with different physical laws and theorems and provide basic platform for upcoming communication technologies.	<a href="#">UNIT NO.5</a>
2	DIGITAL SIGNAL PROCESSING (BTETC502)	<b>CO1:</b> Explain the fundamentals of Digital Signal Processing (DSP) and its advantages over analog processing.	<a href="#">UNIT NO.1</a>
		<b>CO2:</b> Analyze the concept of frequency domain representation of discrete-time signals	<a href="#">UNIT NO.2</a>
		<b>CO3:</b> Apply the Z-transform to solve difference equations in DSP systems.	<a href="#">UNIT NO.3</a>
		<b>CO4:</b> Design IIR filters using impulse invariance and bilinear transformation methods.	<a href="#">UNIT NO.4</a>
		<b>CO5:</b> Evaluate FIR filter characteristics using windowing techniques and frequency sampling methods.	<a href="#">UNIT NO.5</a>
3	ANALOG COMMUNICATION (BTETC503)	<b>CO1:</b> Understand and identify the fundamental concepts and various components of analog communication systems	<a href="#">UNIT NO.1</a>
		<b>CO2:</b> Understand the concepts of modulation and demodulation techniques	<a href="#">UNIT NO.2</a>
		<b>CO3:</b> Understand the concepts of modulation and demodulation techniques of angle modulation (frequency and phase).	<a href="#">UNIT NO.3</a>



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		<b>CO4:Equip</b> students with various issues related to analog communication such as modulation, demodulation, transmitters and receivers	<a href="#">UNIT NO.4</a>
		<b>CO5:Explain</b> signal to noise ratio, noise figure and noise temperature	<a href="#">UNIT NO.5</a>
4	ANALOG CIRCUIT (BTETPE504)	<b>CO1:Understand</b> the internal operation of Op-Amp and its specifications.	<a href="#">UNIT NO.1</a>
		<b>CO2:Analyze</b> and design linear applications like adder, subs tractor, instrumentation amplifier and etc. using Op-Amp.	<a href="#">UNIT NO.2</a>
		<b>CO3:Analyze</b> and design non linear applications like clippers and claspers and comparator, precision rectifiers etc. using Op-Amp.	<a href="#">UNIT NO.3</a>
		<b>CO4:Classify</b> the Oscillators and design various oscillators' circuit by using op-amp.	<a href="#">UNIT NO.4</a>
		<b>CO5:Explain&amp;</b> design the applications of DAC, ADC and V- I Converter using OP – AMPS.	<a href="#">UNIT NO.5</a>
5	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (BTETPE505)	<b>CO1: Understand</b> the fundamental concepts of Artificial Intelligence.	<a href="#">UNIT NO.1</a>
		<b>CO2: Apply</b> techniques to solve the AI problems.	<a href="#">UNIT NO.2</a>
		<b>CO3: Analyze</b> and apply decision-making strategies in game theory.	<a href="#">UNIT NO.3</a>
		<b>CO4: Design</b> and implement knowledge-based agents using logic and inference techniques.	<a href="#">UNIT NO.4</a>
		<b>CO5: To understand</b> , apply, and evaluate various machine learning models.	<a href="#">UNIT NO.5</a>