

**GOVERNMENT GIRLS POLYTECHNIC BILASPUR**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**LESSON PLAN**

**Session July-Dec 2025**

Session start date as per University Calendar-25/08/2025

Course Name : IT Trends & Cyber Security

Course Code : 2022575(22)

Name of Subject teacher : ASHA MIRI

Lecture plus Tutorial/Week : 3

LESSON PLAN		
SESSION July-Dec 2025		
Discipline : CSE		Class room Instruction Start Date :21/08/2025
Semester : 5th		
Chapter/Unit No./CO	Topics/Subtopics to be covered under this unit	No. of periods planned
<b>Chapter-1</b> Identify the concept of IOT and Embedded System	Internet of Things Introduction	1
	Fundamentals of IoT	
	Design Characteristics of IoT	1
	Functional Blocks of IoT	
	Comparison between IoT and M2M	1
	Domain Specific Applications of IoT	
	Embedded Systems Introduction	1
	Fundamentals of Embedded System	1
	Functioning of Embedded Operating System	
	Real Time Operating System (RTOS)	1
	Applications of Embedded Systems	
<b>Assignment-1</b>		<b>Given Date-</b>
<b>Chapter-2</b> Introduction to E-commerce and E-Governance	E-Commerce Definition	1
	Emergence of E-Commerce	
	E-Commerce Marketing	1
	Security Issues in E-Commerce	
	Legal Considerations in E-Commerce	1
	E-Governance Introduction	1
	Comparison of Conventional Governance and E-Governance	
	E-Governance Initiatives by Government	1
	Challenges in E-Governance	1
	Privacy and Security Issues in E-Commerce	1
<b>Assignment-2</b>	<b>Given Date-</b>	

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Chapter-3 Fundamentals of Machine Learning and Artificial Intelligence	Machine Learning Introduction	1
	Types of Machine Learning	
	Supervised Learning	1
	Unsupervised Learning	
	Applications of Machine Learning	1
	Artificial Intelligence Introduction	1
	Propositional Logic	1
	Fuzzy Logic	1
	Decision Trees	1
	Applications of Artificial Intelligence	1
Assignment-3	Given Date-	
Chapter-4 Introduction to Cyber Crime and Cyber Laws	Cyber Crime Introduction	1
	Types of Cyber Crimes	
	Hacking	1
	Cyberspace and Criminal Behavior	1
	Digital Forensics	
	Cyber Laws	1
	Indian IT Act 2000 and Amendments	1
Assignment-4	Given Date-	
Chapter-5 Cyber Security and Cryptography	Security and Recovery Techniques against Cyber Crime	1
	Firewalls and Packet Filters	1
	Password Cracking	1
	Spyware	1
	Virus, Worms and Trojan	1
	Types of Cyber Attacks and Recovery Techniques	1
	Cryptography Introduction	1
	Types of Cryptography (Symmetric and Asymmetric)	
	Classical Cryptography Techniques	1
	Digital Signature	
Assignment-5	Given Date-	
Total		34

Class room Instruction End date:

Subject Teacher : Asha Miri

  
(Name and signature)