**Lesson Plan Form**

**Course Title: Digital and Satellite Communication**

**Course Code: ETE-452**

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| **Title:** * Error Detection and Correction
* Implementation of Error Detection on Satellite Links
 | **Ref. No:** ETE 452/15 |
| **Target Population:** 25 | **Duration:** 90 minutes |
| **Aims/Rationale:** The transmission of information over a satellite communication system always results in degradation in the quality of the information. In this lesson, students are able to find out the error detection and Correction and implemented the error Detection on Satellite Links. |
| Learning Outcomes: At the end of the session participant will be able to :1. Understand the Error Detection and Correction
2. Understand the Implementation of Error Detection on Satellite Links.
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| **Content** | **Method or Technique** | **Resource or Aid** | **Time** |
| **Introduction:** Welcome addressRapport buildingBridging topicLayout/ content outlineAttendancePre-assessment | LectureQ/A | W/B | 10 minutes |
| **Development:****Section-A**Error Detection and Correction Channel Capacity**Section-B**Error Control CodingExampleLinear and Cycle Block CodesGolay Codes**Section-C**Performance of Block Error Correction Codes Convolution Codes**Section-D**Implementation of error Detection on Satellite LinksConcatenated Coding and InterleavingExamples | LectureDiscussionDoDoDo | W/BMMPVideo | 20 minutes15 minutes20 minutes15 minutes |
| **Conclusion:**Recap main pointsFeedback & answerAssessment of LOsReferenceForward plan | LectureDiscussionQ/A |  | 10 minutes |
| **Equipment & aids:** Optional |