**Lesson Plan Form**

**Course Title: Digital and Satellite Communication**

**Course Code: ETE-452**

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| **Title:** Propagation Effects and Their Impact on Satellite –Earth Links | | | **Ref. No:** ETE 452/08 | |
| **Target Population:** 25 | | | **Duration :** 90 minutes | |
| **Aims/Rationale:** After completing this lessons students are able to understand the different kind of propagation effects and their impact on Satellite Earth Links. | | | | |
| **Learning Outcomes:** At the end of the session participant will be able to :   1. Understand the introduction of the propagation effects and impact on satellite earth links. 2. Understand the Qualifying Attenuation and Depolarization 3. Understand the propagation effects that are not associated with Hydrometeors. | | | | |
| **Content** | **Method or Technique** | **Resource or Aid** | | **Time** |
| **Introduction:** Welcome address  Rapport building  Bridging topic  Layout/ content outline  Attendance  Pre-assessment | Lecture  Q/A | W/B | | 10 minutes |
| **Development:**  **Section-A**  Introduction  Qualifying Attenuation and Depolarization  **Section-B**  Propagation that are not associated with Hydrometeors  Cloud Attenuation  Tropospheric scintillation and low angle fading  **Section-C**  Definitions of Terms for Earth-Orbiting Satellite.  Orbital Elements.  **Section-D**  Satellite frequency bands.  LEO,MEO,GEO | Lecture  Discussion  Do  Do  Do | W/B  MMP  Video | | 20 minutes  15 minutes  20 minutes  15 minutes |
| **Conclusion:**  Recap main points  Feedback & answer  Assessment of LOs  Reference  Forward plan | Lecture  Discussion  Q/A |  | | 10 minutes |
| E**quipment & aids:** Optional | | | | |