

Satellite Communications Systems Engineering

Course Outline

Introduction Satellite orbits and how it affects communications (2 hours)

Antennas and EM wave propagation (2 hours)

Analogue and digital techniques in Satellite Communications (7 hours)

Data transmissions (2 hours)

Satellite ground segments (2 hours)

Link budgeting (2 hours)

Transmission-reception impairments (2 hours)

Future Satellite applications and growth trends (2 hours)

Trainer's Profile

Yee Kan Leong received the B.E. degree from the Auckland University (NZ, 1984) and M.Sc. in Electronics Engineering from Surrey University (UK, 1998). From 1985 to 1990 he was project engineer in the area of aircraft avionics upgrade at Singapore Aerospace (ST) Singapore. In 1991 he began teaching at the Electronics and Computer Engineering (ECE) Division in Ngee Ann Polytechnic. He helped develop and teach the Aerospace curriculum when it was started in 2004 till today. In 2015, he started teaching Introduction to Satellite Technology and Satellite Communication as part of the Diploma Plus Programme. He is currently the Deputy Course Chair of Aerospace Electronics (School of Engineering).