KING FAHD UNIVERSITY OF PETROLEUM & MINERALS DEPARTMENT OF ELECTRICAL ENGINEERING

EE 672	Satellite Communications	
Semester (062)	Project	

The EE 672 term project is to study and completely design a satellite communication system. The objective is to apply all system design principles to a selected system that will be chosen from the many fields of applications of satellite systems. You will apply all design principles studied in the course to your selected system. The design steps will be as follows:

- 1. Select the application that your system will serve.
- 2. Choose a suitable frequency from the available frequency charts organized by the ITU. And the required bandwidth.
- 3. Analyze all propagation effects.
- 4. Perform a complete uplink and downlink budget.
- 5. Select and apply a suitable modulation and multiple access schemes.
- 6. Perform a complete cost analysis and compare both cost analysis and system performance to existing systems in the literature.