

IT8313

## Wireless Communications



**Course Aim** To provide students with an advanced understanding of mobile and wireless communication concepts. To allow students to design and implement a modern mobile/wireless infrastructure in a specialist level, similar to the ones implemented by the mobile carriers in Bahrain.

<b>Short Title</b>		<b>Version</b>	3
<b>Faculty</b>	EDICT	<b>Effective From</b>	September 1, 2017
<b>Polytechnic Level</b>		<b>Indicative NQF Level</b>	8
<b>Credits</b>	15	<b>Student Contact hrs</b>	60
<b>Pre-requisites</b>	IT7003 (ITB6003)	<b>Self-directed hrs</b>	90
<b>Co-requisites</b>		<b>Other directed hrs</b>	0
<b>Anti-requisites</b>		<b>Total learning hrs</b>	150

<b>Learning Outcomes</b>	<b>On successful completion of this course, students will be able to:</b>	<b>NQF Sub-strand</b>
1	Summarise the communications theory fundamentals that allow mobile/wireless networks to function.	Theoretical Understanding
2	Implement a mobile network infrastructure for a geographic area using GSM and GPRS.	Practical Application of knowledge
3	Plan and configure UMTS, CDMA and LTE mobile infrastructures.	Generic, Problem Solving and Analytical Skills
4	Implement a WiMax network infrastructure.	Practical Application of knowledge