**School of Computer Science & Software Engineering**

**CITS4419 Mobile and Wireless Computing**

**Wireless Communications  
Week 2 Tuesday 7 August 2018**

This lecture gives an overview of wireless communications.

**Recommended Reading**

Pahlavan, K. and Krishnamurthy, P. 2009. Networking Fundamentals: Wide, Local and Personal Area Communications. Wiley. Chapter 13: Wireless Sensor Networks, Sections 13.4 and 13.5. Online available at <http://media.johnwiley.com.au/product_data/excerpt/91/04709928/0470992891-4.pdf>

**Questions (to guide your listening and reading)**

1. What is the unit disk model for communications in wireless networks? Why is this model not correct?

1. What is path loss, and why is it important for wireless network designers?

3. Why is it beneficial to employ unlicensed spectrum for sensor networks? What are the disadvantages?

4. Identify two or three properties that affect delivery of packets on a wireless channel. Suggest some ways of overcoming these problems (we will by studying these solutions next week).

5. Describe some metrics for channel quality that are useful for an end-user. Compare those metrics.