

**School of Computer Science & Software Engineering
CITS4419 Mobile and Wireless Computing**

**The Holes Problems in WSNs (Part 1)
Week 9 Tuesday 2 October 2018**

In this lecture we consider the of “holes problem” in WSNs that prevent sensors from delivering their data to the sink. This week focuses on sensor coverage and routing.

Questions (to guide your listening and reading)

1. What challenges do WSNs have (compared with other ad hoc networks) for avoiding holes problems ?
2. For a WSN with static nodes, what strategies can be used to achieve k-coverage of the sensing field?
3. If nodes are mobile, or their availability changes over time, how does that change the node coverage problem.
4. Why is flooding a good approach for mitigating routing holes?
5. What are some ways of overcoming the disadvantage of flooding?
6. Summarise the main ideas used in CTP the collection tree protocol.