

UC Merced guidelines on the use of wireless products that implement or may interfere with wireless networking

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A number of wireless products on the market utilize the same frequency ranges that the UC Merced wireless network infrastructure and other services use. These include other 802.11 wireless access points, certain models of cordless telephones, wireless speakers, and Bluetooth devices.

The unmanaged use of these devices may potentially interfere with UC Merced's wireless infrastructure, degrading performance, and, in extreme cases, rendering wireless access inoperable. Following are guidelines that will be updated by the Information Technology Department as the technologies, products, and our knowledge of their interactions evolve. Departments, faculty, staff and students may not connect their own wireless network devices to the UC Merced network. In cases where such devices are required for a specific research or teaching application by faculty, IT will work with the individual or faculty unit to engineer a solution that mitigates any potential interference and satisfies security requirements.

Following is a list of devices that are prohibited from use in UC Merced buildings, and another list of devices that may interfere with wireless connectivity in a range of 10-15 feet or more, but are not prohibited:

Prohibited devices:

- **Wireless routers and access points or those equivalent features incorporated into other devices:**
 - **Apple AirPort Base Stations:** this also includes any wireless Macintosh configured to act as an Airport Software Base station.
 - **Linksys and similar routers :** the wireless features in these devices must be disabled.
 - **HP and similar wireless printers:** the 802.11 wireless features must be disabled on these printers. The use of Bluetooth wireless features is permitted, but may interfere with wireless connectivity for nearby computers (see below).
- **Many cordless telephones:**
 - **2.4 GHz cordless telephones:** these interfere with 802.11 B/G WiFi
 - **5.8 GHz cordless telephones:** these interfere with 802.11 A WiFi
 - **(900 MHz cordless telephones:** these may be used)

Devices that may cause local interference:

- **Bluetooth devices (headsets, keyboards, printers, ...):** work in 2.4 GHz range at low power and may cause interference with 802.11 B/G WiFi. These signals usually have an effective range of around 10-30 feet.

- **800 MHz radios (Nextel Walkie-Talkie and similar):** may interfere with or encounter interference from UC Merced's emergency response radio system. Not all push-to-talk services use 800 MHz; check with vendor if you are unsure.
- **Microwave ovens:** may interfere with 802.11 B/G WiFi over short distances.