

# GMU TCOM 652 - 5G Service, Technology and Network

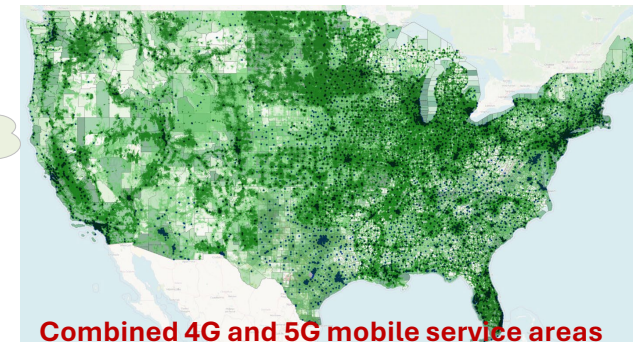
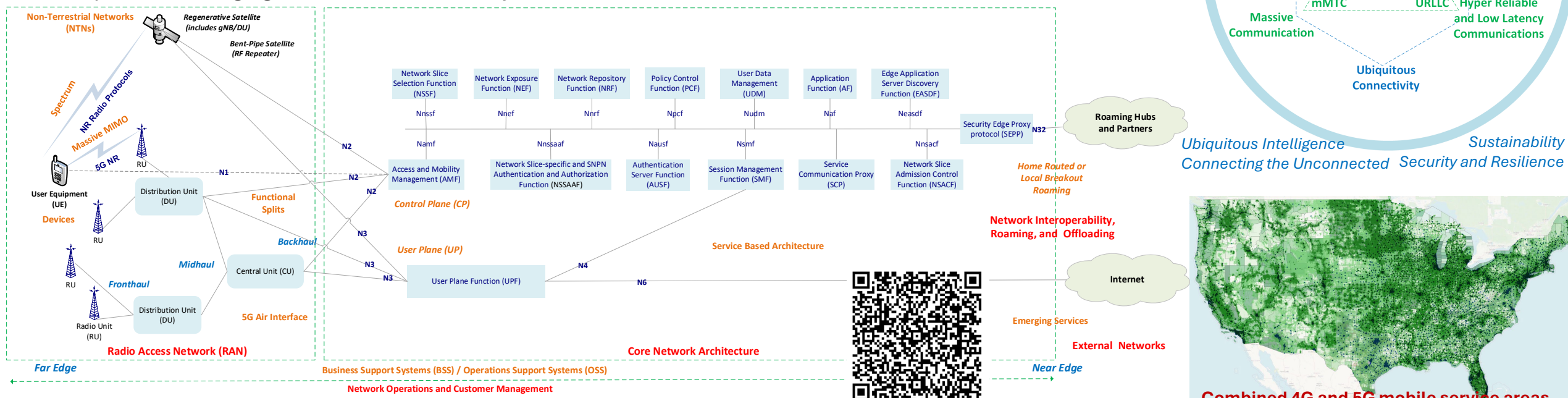
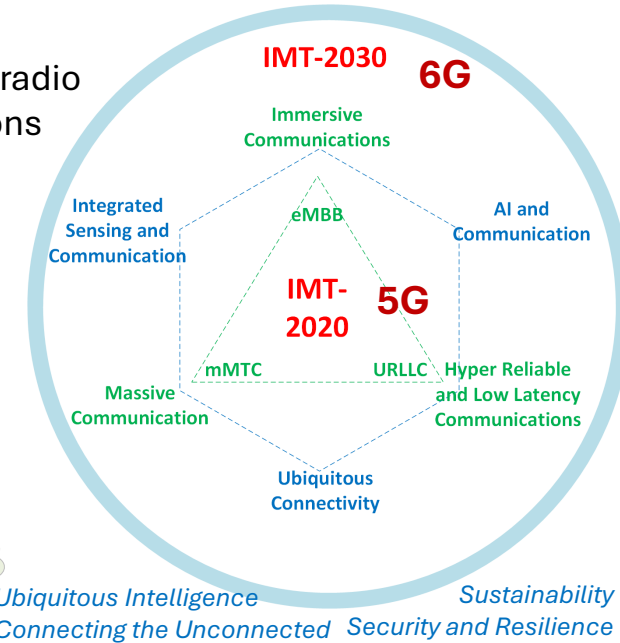
Instructor: Narendra Mangra

Fall 2025: Mondays from 7:20 pm – 10:00 pm

Cellular communications have revolutionized the way we work, live, and play. 5G and the anticipated 6G system are expected to provide advanced communications capabilities such as space terrestrial integration, AI enabled systems, IoT, eXtended Reality (XR), holographic communications, tactile internet applications and much more.

This comprehensive course on the end-to-end 5G network, 6G vision, and emerging services includes topics from 5G radio access network (RAN), core network functions such as network slicing, network management, business and operations support services (BSS/OSS), (inter)national roaming, network deployments, and emerging applications and services including agriculture, public safety, telehealth, smart cities, rural development, and so on.

The course outcomes include a comprehensive understanding of the 5G system architecture and deployments, 6G developments, emerging services, and familiarity with bodies of work from 3GPP, GSMA, IEEE, ITU, TM-Forum, etc.



Previous cellular or satellite background is not required to take this course.

Click on QR code for TCOM 652 syllabus or go to <https://ntms.gmu.edu/course-offerings/>