1. Mobile network architectures

- Data, radio, controller, CS/PS

2. Data communication in mobile networks

- RAT, multi-/duplex, CS/PS, voice, coverage

3. GPRS & EDGE

- RAT control, UE state, RA/LA, coding, IR

4. UMTS fundamentals

- SF, rake, dup, soft(er), RRC

5. UMTS evolution: HSPA

- AMC, HARQ, WCDMA, MIMO, QAM

6. LTE fundamentals

- PS, eNB, PRB, HARQ, MIMO, VoLTE

7. LTE procedures & services

- Handover, tracking, X2, sync, IMS, SIP

8. 5G fundamentals

- (N)SA, 3, bands, numerology, sync

9. 5G procedures and operation

- ENDC, virtual, handover, no TA, tunnel

10. Mobile network procedures

- Assist, GSM, SIP, DTMF, CS, Control

11. Cellular networks: Principles and applications

- GSM, LTE, LoRaWAN, cells