A) Catalogue CORE

1. Estimation and Detection Theory (Ascheid)  X  X
2. Mobile Radio Networks 1 (Petrova)  X  X
3. Principles and Design of Communication Systems and Networks (Mähönen)  X  X
4. RF Systems (Negra)  X  X

B) Catalogue ELECTIVE

1. Ad Hoc Networks: Architectures and Protocols (Mähönen) X
2. Advanced Coding and Modulation (Jax)  X
3. Advanced Topics in Signal Processing and Communication (Ohm) X
4. Algorithm Design for Digital Receivers (Ascheid)  X  X
5. Antenna Design for Radar Systems (Knott)  X  X
6. Antenna Engineering (Knott)  X  X
7. Communications Protocols (Mähönen) X
8. Computer Arithmetic – Fundamentals (Gemmeke) X
9. Computer Arithmetic – Advanced Topics (Gemmeke) X
10. Design of Software Defined Radio Transceivers (Petrova)  X  X
11. Digital Speech Transmission (Jax)  X
12. DSP Design Methodologies and Tools (Leupers)  X
13. HF-System und Übertragungstechnik 2 (Heinen)  X  X
14. High Frequency Electronics (Negra) X
15. High Frequency Electronics – Antennas and Wave Propagation (Heberling)  X  X
16. High Frequency Technology – Antennas and Wave Propagation (Heberling)  X
17. Information Theory (Mathar) X
18. Internet of Things and Sensor Networks (Mähönen) X
19. Machine Learning for Speech and Audio Processing (Jax)  X
20. Microwave Electronics (Negra) X
21. Mobile Radio Networks 2 (Mähönen) X
22. Navigation for Safety-Critical Applications (Meurer) X
23. Optical Telecommunications – Devices (Witzens) X
24. Optical Telecommunications - Systems (Witzens)  X  X
25. Optimierung in den Ingenieurwissenschaften (Schmeink) X
26. Pattern Recognition in Image Data (Stegmaier) X
27. Power Management Integrated Circuits (Heinen) X
28. Principles and Architectures of Cognitive Radios (Mähönen) X
29. Radar System Design and Applications (Knott)  X
30. Radar Systeme (Negra)  X  X
31. Satellitenavigation (Meurer) X
33. VLSIDesign for Digital Signal Processing: Architectures (Gemmeke) X
34. VLSI-Architecture Design for Digital Signal Processing – Fundamentals (Gemmeke) X
35. Wireless communication systems (Negra) X

C) Catalogue LABORATORY

1. Laboratory ADS  X
2. Laboratory: Advanced Network Programming – Switching and Routing X
3. Laboratory: Analog and Mixed Signal Electronics X  X
4. Laboratory: Digital Mobile Receiver Design: Synchronization and Detection  X  X
5. Laboratory: Internet of Things  X
7. Laboratory: Network Programming X
8. Laboratory: Network Simulators (irregular) X
9. Laboratory: Optimization Lab for Communication and Signal Processing using MATLAB X
10. Laboratory: Satellite Navigation  X
11. Laboratory: SMEAGOL – Small Embedded Advanced and Generic Objects Laboratory X
12. Laboratory: VLSI Design Technology  X
13. Laboratory: Wireless Communications: Software Radio Implementations X  X
D) Catalogue PROJECT

1. Project: Communications and Multimedia

2. Project: Electromagnetic Noise in Power Electronics

3. Projekt: Schaltungsentwurf und HF-Systemtechnik

4. Project SMEAGOL – Small Embedded Advanced and Generic Objects

5. Projekt: Systemsoftware für echtzeitfähige Simulationen von technischen Prozessen

Please note that some information may have changed. You can find up-to-date information on RWTHonline.