



# Kommunikationsnetze III – Mobilität in Netzen (V2+Ü0 or V2+Ü2)

## Communication Networks III – Mobile Networking (L2+E0 or L2+E2)

darmstadt.de  
www.httc.de

### Teacher

- Dr.-Ing. Matthias Hollick
- Prof. Dr.-Ing. Ralf Steinmetz

### Organization

- Lecture 2 weekly hours
- Exercise 2 weekly hours (optional)
- Graded exam (oral or written)

### Prerequisites

- Students of etit, cs, natural sciences
- Keen interest to explore challenging topics in mobile/wireless comms.
- KN/CN I and II not mandatory but useful

### Contents

1. Intro to Mobile/Wireless NWs
2. Wireless Transmission
3. Medium Access
4. Telecommunication Systems
5. Wireless Local Area NWs
6. Wireless Mesh & Metro. Area NWs
7. Mobility Support at Network Layer
8. Ad hoc Networking
9. Mobile NW Performance Analysis
10. Mobility at the Transport Layer
11. Mobility at the Application Layer

### Learning Objectives

- Acquire fundamentals/principles as well as practical knowledge in the domain of mobile and wireless comm. networks
- Develop a thorough understanding of mechanisms/protocols for mobile/wireless NWs (emphasis on the network layer)
- Methodologically apply the gained knowledge to holistically analyze communication systems such as ad hoc and mesh networks

