

1 WINTER SEMESTER BASICS, URBANISM		2 SUMMER SEMESTER INFRASTRUCTURE, RESILIENCE		3 WINTER SEMESTER BUILDINGS, INFORMATION		4 SUMMER SEMESTER MANAGEMENT, FINANCE		5 FINAL SEMESTER MASTER THESIS
18 CP		18 CP		12 CP		12 CP		30 CP
€ 2,000		€ 2,000		€ 2,000		€ 2,000		€ 2,000
M1 BASICS OF SMART SOLUTIONS ML: Prof. Dr. Belle 6 CP	M2 SMART URBANISM ML: Prof. Dr. Belle 6 CP /	M3 SMART ENERGY & BUILDINGS ML: Prof. Dr.-Ing. Schmidt 6 CP	M4 SMART INFRASTRUCTURE RESILIENCE & AI ML: Prof. Dr.-Ing. Schmidt/Vogt 6 CP	M5 SMART ENERGY & BUILDINGS ML: Prof. Dr.-Ing. Schmidt 6 CP	M6 SMART INFRASTRUCTURE RESILIENCE & AI ML: Prof. Dr.-Ing. Schmidt/Vogt 6 CP	M7 SMART SUSTAINABLE FINANCE ML: Prof. Dr. Popovic 6 CP	M8 SM. GOVERNANCE, CITIZENS & MGMT ML: Prof. Dr. Belle 6 CP	M10 MASTER THESIS ML: Prof. Dr. Belle 30 CP
1.1 CDD Global Climatic & Demogr. Development Challenges Prof. Dr. Iris Belle 1.5 CP	2.1 SCC Smart City & Smart Region Johannes Schwegler, MBA 1.5 CP	5.1 SEG IPM Smart Energy Generation Prof. Dr.-Ing. Benjamin Reuter 1.5 CP	6.1 SWW IPM Smart Water & Waste Management Jörnjakob Dugge, M. Sc. Dr. Konstantin Dinkler 1.5 CP	3.1 SAC Smart Architecture Concept Prof. Dr.-Ing. Max Haug, MBA 1.5 CP	4.1 SDC Smart Data Components Hamidreza Ostadabbas, M.Sc. 1.5 CP	7.1 FMI Financial Markets & Institutions Prof. Dr. Tobias Popovic 1.5 CP	8.1 PPG Principles of Public Policy & Governance Felix Bossemer, M.A. 1.5 CP	10.1 ACW Academic Writing & Smart City Literature Prof. Dr. Iris Belle 1.5 CP
1.2 SME Sustainable Macroeconomics Prof. Dr. Katharina Gapp-Schmeling 1.5 CP	2.2 STP Smart Town Planning & Land Policy Prof. Dr. Iris Belle Gabriel Villegas de la Ossa, M. Sc. 1.5 CP	5.2 SGS IPM Smart Grid Solutions Dr.-Ing. Ahmed Elbaz 1.5 CP	6.2 PPR Pollution Prevention & Recovery Strategies Prof. Dr. Jürgen Breuste 1.5 CP	3.2 SEC Smart Energy Concepts Dipl.-Ing. Cathrin Krumrey 1.5 CP	4.2 GIS Geographic Information Systems Prof. Dr.-Ing. Angela Bianca-Vogt 1.5 CP	7.2 SFI Sustainable Finance Prof. Dr. Tobias Popovic 1.5 CP	8.2 PSS Public Services & Public Sector Management Felix Bossemer, M.A. 1.5 CP	10.2 MTP Master Thesis Proposal Prof. Dr. Iris Belle 1.5 CP
1.3 SDC Societal Developments & Challenges DI Ghazal Etminan 1.5 CP	2.3 SSI Smart Social Infrastructure & Housing Prof. Dr. Iris Belle 1.5 CP	5.3 SMM IPM Smart Mobility Strategies & Management Dr.-Ing. Rebecca Heckmann 1.5 CP	6.3 SUB Smart Urban Biosphere & Habitat (incl. Nutrition) Prof. Dr. Jürgen Breuste 1.5 CP	3.3 SET Smart Engineering & Technologies Samuel Meile, M. Eng. 1.5 CP	4.3 CIM City Information Models Dipl.-Ing. Carsten Rönnerhof 1.5 CP	7.3 IPF Infrastructure & Project Finance Prof. Dr. Tobias Popovic 1.5 CP	8.3 LAM Lean & Agile Management Approaches Prof. Dr.-Ing. Jakob von Heyl 1.5 CP	10.3 MTR Master Thesis Research Prof. Dr. Iris Belle 2 CP
1.4 SPM Smart City Parameters & Measuring Dr.-Ing. Hans-Martin Neumann 1.5 CP	2.4 SUD Smart Urban Development Principles & Concepts Dr. Haris Piplas 1.5 CP	5.4 SOM Smart Operations & Maintenance Dipl.-Ing. Axel Kühn Dipl.-Ing. Johannes Winter 1.5 CP	6.4 RSM Resilience Strategies & Measures Dr.-Ing. Nicole Baron 1.5 CP	3.4 BIM Planning & Building Processes, BIM, Certific. Dipl.-Ing. Peter Scheibstock Maroun Aad, M.Eng. 1.5 CP	4.4 DPS Digital Platforms & Services Jonas Marbeth, M. Sc. 1.5 CP	7.4 DFI Digitalization, Financial Innovation & Technology Prof. Dr. Tobias Popovic 1.5 CP	8.4 LSM Leadership & Stakeholder Management Prof. Dr. Iris Belle 1.5 CP	10.4 MTSC Master Thesis Project in Smart City Solutions Various supervisors 23 CP
				M9.1 CASE STUDY FOCUS: URBANISM, BUILDING & INFORMATION Prof. Dr. Iris Belle 6 CP		M9.2 CASE STUDY FOCUS: INFRASTRUCTURE, MANAGEMENT & FINANCE Prof. Dr. Iris Belle 6 CP		10.5 MTPA Master Thesis Presentation & Abstract Prof. Dr. Iris Belle 2 CP

ELECTIVES

Students can attend lectures of the Master Programme International Project Management (IPM) to specialize in individual subject. Attendance is extracurricular and does not replace of smart city solutions lectures. Credit points and grades earned in IPM do not count towards the SCS grade. Admission is subject to availability. This does not apply to the mandatory joint courses of Modules 5 and 6.

REMARKS

- > CP : Credit Points
- > ML : Module Leader
- > **IPM** Mandatory joint course with the Master Programme International Project Management (International Infrastructure and Technology Management IITM)