

1 WINTER SEMESTER BASICS, URBANISM 18 CP € 2,000		2 SUMMER SEMESTER INFRASTRUCTURE, RESILIENCE 18 CP € 2,000		3 WINTER SEMESTER BUILDINGS, INFORMATION 12 CP € 2,000		4 SUMMER SEMESTER MANAGEMENT, FINANCE 12 CP € 2,000		5 FINAL SEMESTER MASTER THESIS 30 CP € 2,000
M1 BASICS OF SMART SOLUTIONS ML: Prof. Dr. Belle 6 CP	M2 SMART URBANISM ML: Prof. Dr. Belle 6 CP /	M5 SMART ENERGY & MOBILITY ML: Prof. Dr.-Ing. Schmidt 6 CP	M6 SMART RESOURCES & RESILIENCE ML: Prof. Dr.-Ing. Schmidt 6 CP	M3 SMART BUILDINGS ML: Prof. Binder 6 CP	M4 SMART INFORMATION MODELLING & AI ML: Prof. Dr.-Ing. Blanco-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 Jürnjakob Dugge, M. Sc. Dipl.-Ing. M. Eng. Markus Bleier 1.5 CP	3.1 SAC Smart Architecture Concept Prof. Roland Dieterle 1.5 CP	4.1 SDC Smart Data Components Hamidreza Ostadabbas, M.Sc. 1.5 CP	7.1 FMI Financial Markets & Institutions Andy Yarahmadi, MBA 1.5 CP	8.1 PPG Principles of Public Policy & Governance Felix Bosanac, 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 1.5 CP	5.2 SGS IPM Smart Grid Solutions Dr.-Ing. Tobias Weißbach 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 Blanco-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 Bosanac, 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 Dipl.-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 Christine von Raven, M.A. 1.5 CP	4.3 CIM City Information Models Dipl.-Ing. Carsten Rönadort 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. 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. Dipl.-Ing. David Hick 1.5 CP	7.4 DFI Digitalization, Financial Innovation & Technology Svenja Gillé, B.Sc. 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, Prof. Dr. Max Haug, Dr.-Ing. Hans-Martin Neumann 6 CP		M9.2 CASE STUDY FOCUS: INFRASTRUCTURE, MANAGEMENT & FINANCE Prof. Dr. Iris Belle, Prof. Dr. Max Haug, Dr.-Ing. Hans-Martin Neumann 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)