

| Course ID | M/E (Mandatory/ Elective) | Title | Trainer/Lecturer | Affiliation | Type | Duration |
|---------------------------------|---------------------------------|--|--------------------------------------|---------------------------------|-------------------|--|
| CORE COURSES | | | | | | |
| CC01 | M | Spatial Sustainability Science | Prof. Dr. Marc Wolfram | IOER/ TUD | Lecture/ Workshop | 3 hours + 6 hours self-learning ¹ |
| CC02 | M | Interactions of Human-Environment Systems and Transformation | Dr. Martina Artmann | IOER/ TUD | Lecture/ Workshop | 2-4 hours + 6 hours self-learning |
| CC03 | M | Socio-Technical System Transformation | Dr. Markus Egermann | IOER | Lecture/ Workshop | 2 hours + 6 hours self-learning |
| CC04 | M | Transdisciplinary Research | Dr. Franzeska Ehnert | IOER | Lecture/ Workshop | 2 hours + 6 hours self-learning |
| CC05 | M | Transformative Leadership | Dr. Petra Künkel | Collective Leadership Institute | Lecture/ Workshop | 2 half days |
| CC06 | M | Philosophy of Science and Research Design | Dr. Gerd Lintz and Dr. Shikha Ranjha | IOER/ DLGS | Lecture/ Workshop | 2 half days |
| CC07 | M | Good Scientific Practice | Dr. Michael Gommel | Scientific Consultant | Workshop | 2 days |
| SUBJECT SPECIFIC COURSES | | | | | | |
| SC01 | M | Human-environment System | Prof. Dr. Jochen Schanze | IOER/ TUD | Lecture/ Workshop | 2 hours + 6 hours self-learning |

¹ Self-learning module of a lecture/workshop is a standalone pre-prepared educational resource that provides necessary materials and instructions for learners to independently acquire knowledge related to the lecture topic.

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| SC02 | M | Human-environment Crisis | Prof. Dr. Jochen Schanze | IOER/ TUD | Lecture/ Workshop | 2 hours + 6 hours self-learning |
| SC03 | M | Transformative Capacity | Prof. Dr. Marc Wolfram | IOER/ TUD | Lecture/ Workshop | 3 hours + 6 hours self-learning |
| SC04 | M | Place and Transformation | Prof. Dr. Robert Knippschild | IOER/ TUD | Lecture/ Workshop | 2 hours + 6 hours self-learning |
| SC05 | M | Urban and Regional Resilience | Dr. Gérard Hutter | IOER | Lecture/ Workshop | 2 hours + 6 hours self-learning |
| SC06 | M | Sociology of Space | Prof. Dr. Antonia Kupfer | TUD | Lecture | 2 hours + 6 hours self-learning |
| SC07 | M | Spatial Sustainability Economics | Prof. Dr. Artem Korzhenevych | IOER/ TUD | Lecture | 2 hours + 6 hours self-learning |
| SC08 | E | From Waste Management to Circular Economy | Prof. Dr. Christina Dornack | TUD | Lecture | 2 hours + 6 hours self-learning |
| SC09 | E | Planning and Environment: Landscape Change and Management | Prof. Dr. Wolfgang Wende | IOER/ TUD | Lecture | 2 hours + 6 hours self-learning |
| SC10 | E | Spatial Data Science | Dr. Martin Behnisch | IOER | Lecture/ Workshop | 2 hours + 6 hours self-learning |
| SC11 | E | Climate Change Adaptation | Dr. Regine Ortlepp | IOER | Lecture | 2 hours + 6 hours self-learning |
| SC12 | E | Urban and Regional Metabolism | Dr. Georg Schiller | IOER | Lecture | 2 hours + 6 hours self-learning |

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| METHODOLOGICAL COURSES | | | | | | |
| RM0 | M | Systematic literature reviews | Prof. Dr. Artem Korzhenevych | IOER/ TUD | Interactive workshop | 2-4 hours + 6 hours self-learning |
| RM02 | E | Modeling (System dynamics) | Dr. Christoph Schünemann | IOER | Workshop | 2 hours |
| RM03 | E | Qualitative methods | Dr. Bishwajit Mallick | Utrecht University | Workshop | 2 hours |
| RM04 | E | Designing and Conducting Surveys | Dr. Anna-Maria Schielicke | IOER | Workshop | 2 half days |
| RM05 | E | Quantitative Methods | Prof. Dr. Natalja Menold | TUD | | |
| RM06 | E | Environmental Modeling | Prof. Dr. Olaf Kolditz | UFZ/ TUD | | |
| RM07 | E | Modeling (System dynamics) | Chair for Adaptive Dynamic Systems | TUD | | |
| RM08 | E | Agent-Based Modeling | Dr. Iris Lorscheid | Agents for Theory | | |
| SKILL DEVELOPMENT COURSES | | | | | | |
| SD01 | M | Literature research and management | Ms. Evi Rockstroh | IOER | Seminar | 3 Hours |
| SD02 | M | Research Data Management for PhD researchers | Dr. Stefano Della Chiesa | IOER | Workshop | 1 full day |
| SD03 | M | Writing and publishing research | Dr. Dorothea Sommerfeldt | Scientific Consultant | Workshop | 4 days |
| SD04 | M | How to Compile Scientific Papers - Spot your Weaknesses and Improve your Style | Ms. Antje Kaufmann | Scientific Consultant | Workshop | 2 days |

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| SD05 | E | Time Management for PhD candidates | Dr. Alexander Egeling/ Dr. Markus Gyger | Scientific Consultant | Workshop | 2 days |
| SD06 | E | Effective reading | Dr. Martha Boeglin | Scientific Consultant | Workshop | 4 half-days |
| SD07 | E | Project Management for Early Career Researchers | Differs with semester | | Workshop | 2 days |
| SD08 | E | Grant Proposal Writing | Dr. Sabine Preusse | RaumZeit Research & Innovation | Workshop | 2 days |
| SD09 | E | Visual Communication for Scientists- figures, slides and posters | Dr. Helena Jambor | TUD | Workshop | 1 day |
| SD10 | E | Designing Effective Academic Posters | Dr. Birgit Lukowski | Mediadesign Hochschule Berlin | Workshop | 1 day |
| SD11 | E | Academic Presentations with an Impact - Skills Training | Dr. Silvia Scheinert | Scientific Consultant | Workshop | 2 days |