# Track 4 Smart cities

| | A | B | C | D | E |
|---|---|---|---|---|---|
| Quarter 1 | 6a. 5CTA0 Statistical signal processing | T1 7LY5M0 Data science for intelligent buildings | 1. 5ARB0 Data acquisition and analysis<br>T1 7LY3M0 Building performance and energy systems simulation | 3. 5ARA0 Software engineering for artificial intelligence | 2. 5ARC0 Human and ethical aspects of AI |
| Quarter 2 | 4b. 5ARD0 Control principles for linear systems<br>T1 1CM110 Decision making in transport and mobility<br>5XSL0 Fundamentals of machine learning | T2 7KT4M0 Digital design & manufacturing | 5LIQ0 Linear systems, signals and control | 5a. 5SSD0 Bayesian machine learning and information processing<br>T1 7ZW5M0 Smart healthy urban environments | T3 7M900 Fundamentals of building information modeling<br>T3&4 5LSH0 Computer vision AI and 3D Data Analysis<br>2DL70 Probability and Statistics |
| Quarter 3 | 5EPD0 Physics for EE | 6a. 5CTA0 Statistical signal processing<br>6b. 4DM20 Engineering optimization | Team Internship | 4a. 4CM40 Physical and data-driven modelling<br>JBI050 Data management for data analytics | T4 5XSK0 Data fusion and semantic interpretation<br>T3 2IMA20 Algorithms for Geovisualization<br>T2 0HM150 Advanced cognitive engineering<br>T4 5LSM0 Neural networks for computer vision |
| Quarter 4 | 5EZB0 Math 2<br>Team Internship | | 5b. 1BM120 Decision making with artificial and computational intelligence | | |

**Legend:** Core courses | Specialization courses | Homologation | Team Internship

T1 Domain-specific knowledge T2 AI in Engineered Systems T3 Data Cultivation T4 Learning and Intelligence

The specialization courses and the core course 6a 5CTA0 Statistical signal processing can be taken in Year 2 as well.
Keep in mind that the graduation project AI&ES is scheduled in Q2-Q4 Year 2.