Telecoms & Tech Academy

SMART CITIES 101

Format:
Online Academy

Duration:
5 Modules

SMART CITIES 101 PROGRAMME

COURSE OVERVIEW

This Online Academy programme looks at the systems, frameworks, control mechanisms, and technologies behind Smart City initiatives, as well as the opportunities, ecosystems, and the global community behind much of the progress.

Case studies are used extensively to illustrate and analyse the requirements, as well as the dangers (and associated safeguarding mechanisms). Standardisation, benchmarking and the role of the different players within the various ecosystems are explored, including the role and opportunities for leading and coordinating specific elements of the overall system.

PROGRAMME MODULES

1) Defining the Smart City — as a living entity

2) Problems to be solved & issues to be addressed

3) Technology, Data & Infrastructure

4) Strategy, Governance & Industry Support
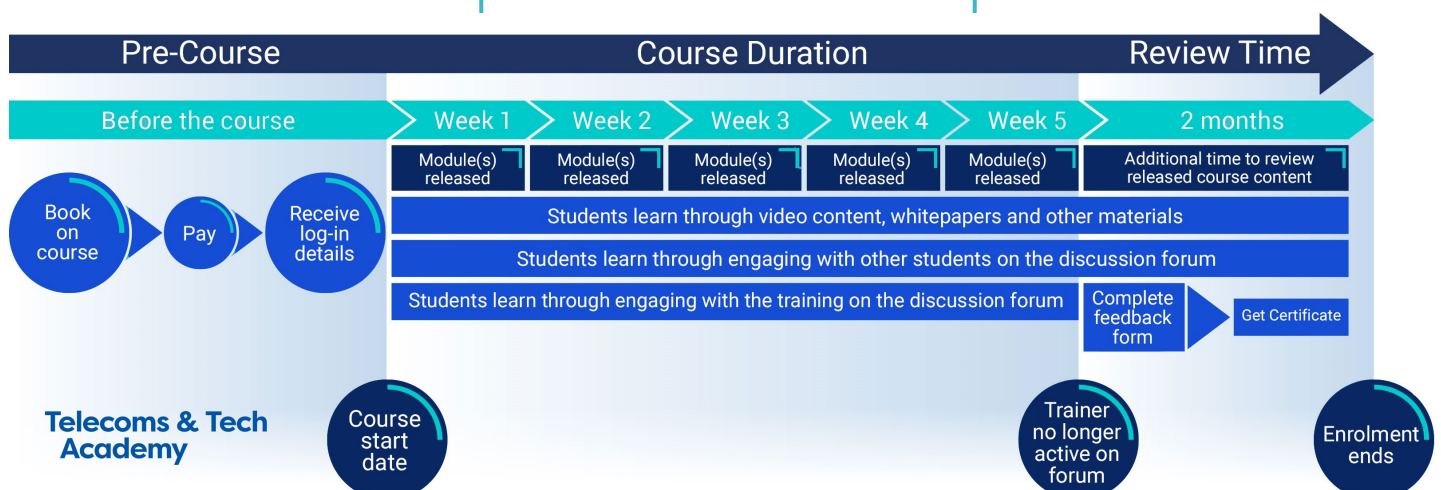
5) Safeguards, Risk & Mitigation

WHAT WILL YOU LEARN

- Assess issues and problems that need to be solved by city initiatives

- Evaluate business opportunities within Smart City project s

- Contribute to strategic debate and agenda setting within Smart City projects

- Identify the key technologies available, their benefits and features - and their likely impact on key issues including:
  - Security
  - Safety
  - Cost
  - Standardisation
  - Future development

- Assess implementation options and technology requirements for Smart City systems and solutions

- Develop solutions identifying where value can be created for businesses, citizens and city authorities, and where that value can be monetized

- Make decisions on technology implementation and procurement that are commercially viable with a measurable RoI

BENEFITS OF ONLINE ACADEMY

- **Boost your resume** — with self-paced learning and advance your career with specialist technical skills

- **Convenience and flexibility** — Learn whenever you want – from the comfort of your home or office

- **Enabled for mobile** – make use of downtime with easy bite sized chunks of learning

- **Learn and apply right now** – immediately implement what you learn during the course

- **Become part of a professional learning community** — discuss any problems with students and the Course Instructor

- **Cost effective** — save on travel expenses, reduce unproductive down time and no crowded airports

- **Grow as a team** — with multiple licenses your team can access the course and learn together, no matter where they are in the world

WHAT HAPPENS DURING YOUR ONLINE ACADEMY COURSE?

Pre-Course | Course Duration | Review Time

Before the course | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | 2 months

Module(s) released (Week 1–5) | Additional time to review released course content

Students learn through video content, whitepapers and other materials

Students learn through engaging with other students on the discussion forum

Students learn through engaging with the training on the discussion forum

Book on course → Pay → Receive log-in details

Complete feedback form → Get Certificate

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Course start date | Trainer no longer active on forum | Enrolment ends

PROGRAMME MODULES

MODULE 1:
DEFINING THE SMART CITY - AS A LIVING ENTITY

- Smart, Future and Sustainable Cities
- Citizens, Work and Commerce, Government
- City Infrastructure and Layout
- Key Development Projects and Focus
- Aspirations and Status
- The Drive for better Living and better Working
- Resources, Costs and Budgeting

MODULE 2:
PROBLEMS TO BE SOLVED AND ISSUES TO BE ADDRESSED

- Sustainability, Planning, Resources and Growth
- Connectivity
- Transportation
    - Public Transport, including Ticketing
    - Smart Cars and Private Transport
    - Congestion & Parking
- Health and Wellbeing
- Energy – Efficiency, Distribution and Maintenance
- Utilities – Metering and Control
- Sanitation and Waste Management
- Security and Safety
- Education and Learning
- Commerce and Smart Working
- Effects of Climate Change
- Information - Access and Control

MODULE 3:
TECHNOLOGY, DATA AND INFRASTRUCTURE

- Connectivity
- The Role of IoT and M2M
- Cloud Technology
- Virtualisation
- Big Data
- Sensors and Infrastructure
- Connecting the Sensors & Infrastructure
- Data - Storage, Access Handling, Analysis
- Security, Data Protection and Privacy
- Control Schemes and Control Rooms
- Interfaces
    - Administration & System Control
    - Citizens and Users
    - Role of Apps
- Technology Standardisation
- Example Systems and Frameworks
    - Intel
    - IBM

MODULE 4:
STRATEGY, GOVERNANCE AND INDUSTRY SUPPORT

- Smart City Drivers
- Smart City Initiatives - Global, Regional
- EU Initiatives
- Resources and the Global Smart City Community
- Main Players and Their Roles
- Leading the Initiative
- The Role of the Citizen
- The Role of City Businesses
- Top Down and Bottom Up
- Partnerships
- Example Ecosystem
- Ethics and Governance
- Compliance
- Performance, Progress and Benchmarking

MODULE 5:
SAFEGUARDS, RISK AND MITIGATION

- Warning Systems
- Disaster Recovery
- Protecting the Data
- Data Security Breaches
- Malicious Access / Control Breach
- Failsafe Infrastructure and Systems

CASE STUDIES - NOMINAL EXAMPLES MAY INCLUDE ...

- Santander, Spain
- Milton Keynes, UK
- Lusail, Qatar
- Rio de Janeiro, Brazil
- Istanbul, Turkey

EXAMPLES

Examples and Case Studies are used throughout in order to apply the concepts to real-life projects and to allow for deeper evaluation and analysis. More comprehensive case studies are used to bring the concepts together in order to develop clarity and to assess bothy the next-steps and additional learning opportunities.

About Telecoms & Tech Academy

Telecoms & Tech Academy, part of Informa Tech is a leading training partner to the telecoms, media and technology (TMT) industries, having trained more than 30,000 professionals and 500 businesses globally.

We were borne out of the telecoms industry and understand the challenges the sector has been facing. Our training portfolio continues to evolve to help address new and emerging skills gaps faced by telecoms & tech businesses.

Our In-Company Solutions

Expert insight, delivered in a format to suit your needs, to enhance knowledge and drive performance in your team. Our learning & development consultants will work closely with your team to establish your unique business needs and define success measurements.

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