BSc Smart & Sustainable Cities Curriculum - Summer Training Track (Total Credit Hours: 126)

| COURSE TITLE | | LT LE | CR | COURSE TITL | E | LT LB CR |
|--------------|--|-------|------------|---------------|--|----------|
| | | | Freshn | nan Year | | |
| MATH 101 | Calculus I | 4 0 | 4 | MATH 102 | Calculus II | 4 0 4 |
| PHYS 101 | General Physics I | 3 3 | 4 | PHYS 102 | General Physics II | 3 3 4 |
| IAS 111 | Belief and Its Consequences | 2 0 | 2 | IAS 121 | Language Foundation | 2 0 2 |
| ENGL 101 | Intro. to Academic Discourse | 3 0 | 3 | ENGL 102 | Intro. To Report Writing | 3 0 3 |
| PE 101 | Health and Physical Education I | 0 2 | 1 | ICS 104 | Intro. to Program. in Python & C | 2 3 3 |
| | | 12 5 | 14 | | | 14 6 16 |
| | | | Sophon | nore Year | | |
| SSC 200 | Visual Communication for Urban Planners | 0 6 | 3 | SSC 202 | Sustainable Urbanization | 3 0 3 |
| SSC 211 | Land Use & Environment | 3 0 | 3 | SSC 203 | Humanizing the Smart City | 3 0 3 |
| SSC 201 | Introduction to Smart & Sustainable Cities | 3 0 | 3 | SSC 212 | Urban Information Systems | 2 2 3 |
| ISE 291 | Intro. to Data Science | 3 0 | 3 | COE 292 | Intro. to Artificial Intelligence | 3 0 3 |
| ENGL 214 | Academic & Professional Comm. | 3 0 | 3 | STAT 319 | Probability and Statistics for Engineers and Scientist | 2 3 3 |
| AS 212 | Professional Ethics | 2 0 | 2 | | | |
| | | 14 6 | 1 <i>7</i> | | | 13 5 15 |
| | | | Junio | or Year | | |
| SSC 304 | City Design I: Spatial Analysis | 1 4 | 3 | SSC 305 | City Design II: Urban Form and Formation | 1 4 3 |
| SSC 313 | Urban System Modeling and Simulation | 2 2 | 3 | SSC 321 | Circular Economy | 3 0 3 |
| SSC 331 | Sustainable Infrastructure Systems | 3 0 | 3 | SSC 314 | Urban Indicators Assessment | 3 0 3 |
| ARC 358 | Real Estate & Housing Development | 3 0 | 3 | CE 341 | Transportation Engineering | 3 0 3 |
| AS 4XX | IAS Elective | 2 0 | 2 | BUS 200 | Business & Entrepreneurship | 3 0 3 |
| GS XXX | GS Elective | 3 0 | 3 | GS 392 | Career Essentials | 0 2 1 |
| | | 14 6 | 1 <i>7</i> | | | 13 6 16 |
| Summer Sessi | ion | | | SSC 399 | Summer Training | 0 0 1 |
| | | | Soni | or Year | | |
| SSC 406 | City Design III: Digital Urban Twin | 1 4 | | SSC 407 | Senior Design Project | 0 6 3 |
| SSC 433 | Smart Mobility | 3 0 | | SSC 422 | Management of Smart Cities & Governance | 3 0 3 |
| CS 474 | Big Data Analytics | 3 0 | | SSC 434 | Digital Transformation of Cities | 3 0 3 |
| SSC 4XX | SSC Elective I | 3 0 | | XXX XXX | University Elective I | 3 0 3 |
| SSC 4XX | SSC Elective II | 3 0 | - | XXX XXX | University Elective II | 3 0 3 |
| 330 477 | OOC LIECTIVE II | 13 4 | | ^^^ ^^ | Oniversity Elective II | 12 6 15 |
| | | | | it Hours: 126 | | 12 0 13 |