

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

COURSE TITLE		LT LB CR		COURSE TITLE		LT LB CR			
Freshman 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
Sophomore 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
IAS 212	Professional Ethics	2	0	2					
		14	6	17			13	5	15
Junior 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
IAS 3XX-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	17			13	6	16
Summer Session					SSC 399	Summer Training	0	0	1
Senior Year									
SSC 411	Senior Design Project I	0	1	0	SSC 412	Senior Design Project II	0	6	3
SSC 406	City Design III: Digital Urban Twin	1	4	3	SSC 422	Management of Smart Cities & Governance	3	0	3
SSC 433	Smart Mobility	3	0	3	SSC 434	Digital Transformation of Cities	3	0	3
ICS 474	Big Data Analytics	3	0	3	XXX XXX	Technical Elective I	3	0	3
SSC 4XX	SSC Elective I	3	0	3	XXX XXX	Technical Elective II	3	0	3
SSC 4XX	SSC Elective II	3	0	3					
		13	5	15			12	6	15
Total Credit Hours: 126									