

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 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
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