

SMART AND SUSTAINABLE CITIES MAJOR

Program Curriculum

Code	Title	Credits
Degree Core Requirements		
<i>Required Courses</i>		
UAP 1004	Introduction to Career & Professional Development in Public Service	1
UAP 1024	Leadership, Service, and Public Problem Solving	3
PSCI 1014	Introduction to United States Government and Politics	3
STAT 3604	Statistics for Social Science	3
SPIA 3554	Transdisciplinary Problem Solving for Social Issues	3
UAP 4754	Legal Foundations of Planning	3
UAP 3224	Policy Implementation	3
UAP/PSCI 3744	Public Policy Analysis	3
UAP 3024	Urban and Regional Analysis	3
UAP 4914	Seminar in Public and Urban Affairs	3
UH 4514	Honors SuperStudio	1
Subtotal		29
Major Requirements		
<i>Required Core Courses</i>		
SPIA 2004	Introduction to Urban Analytics (Covers Pathway 5a)	3
SPIA/GEOG 2244	Sustainable Urbanization	3
SPIA 4464	Data and the Art of Policy-Making and Planning (Covers Pathway 5a)	3
SPIA 4454	Future of Cities	3
Subtotal		12
<i>Required Elective Courses</i>		
Select nine credit hours from the list below		9
Subtotal		9
Bridge Experience		
SPIA 3900	Bridge Experience (with one of the following)	0
CEP 3084	University Internship	0
or CEP 4084	Cooperative Education Program	
or SPIA 4954	Study Abroad	
or SPIA 4964	Field Work/Practicum	
or UAP 3954	Study Abroad	
or UAP 4624	The Washington Semester: Seminar in American Politics and Public Policy	
or UAP 4964	Field Study	
or UAP 4994	Undergraduate Research	
Free Electives		
Select as many credits as needed to reach 120 credits		31
Subtotal		31
Pathways to General Education		
<i>Pathways Concept 1 - Discourse</i>		
ENGL 1105	First-Year Writing	3

ENGL 1106	First-Year Writing	3
Select three credits in Pathway 1a (https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G01A)		3
<i>Pathways Concept 2 - Critical Thinking in the Humanities</i>		
PHIL 1304	Morality and Justice	3
or PHIL 2304	Global Ethics	
Select three credits in Pathway 2 (https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G02)		3
<i>Pathways Concept 3 - Reasoning in the Social Sciences</i>		
Select one of the following:		6
ECON 2005	Principles of Economics	
& ECON 2006	and Principles of Economics	
AAEC 1005	Economics of the Food and Fiber System	
& AAEC 1006	and Economics of the Food and Fiber System	
<i>Pathways Concept 4 - Reasoning in the Natural Sciences</i>		
Select six credits in Pathway 4 (https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G04) ¹		6
<i>Pathways Concept 5 - Quantitative and Computational Thinking</i> <i>The Pathways 5a requirement is met by completing the SSC Major core (specifically - SPIA 2004 and SPIA 4464)</i>		
MATH 1014	Precalculus with Transcendental Functions	3
<i>Pathways Concept 6 - Critique and Practice in Design and the Arts</i>		
Select three credits in Pathway 6a (https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G06A)		3
Select three credits in Pathway 6d (https://catalog.vt.edu/course-search/?attrs_pathways=attrs_pathways_G06D)		3
<i>Pathways Concept 7 - Critical Analysis of Identity and Equity in the United States</i>		
SPIA 2554	Collaborative Policy-Making and Planning	3
Subtotal		39
Total Credits		120

¹ No labs are required

Required Elective Courses

Select nine (9) credit hours from the elective courses listed below. All courses listed below are 3 credit hours.

Code	Title	Credits
Urban Policy and Decision-Making		
UAP 3014	Urban Policy and Planning	3
UAP/PSCI 3714	The U. S. Policy Process	3
UAP 3264	Contemporary Urban Issues	3
UAP 4344	Law of Critical Environmental Areas	3
UAP 4374	Land Use and Environment: Planning and Policy	3
UAP 4394	Community Renewable Energy Systems	3
UAP 4854	Planning of the Urban Infrastructure	3
UAP/PSCI 4624	The Washington Semester: Seminar in American Politics and Public Policy	3
UAP/PSCI 4644	Washington Semester: Politics, Policy and Administration in A Democracy	3
SPIA 4964	Field Work/Practicum	3
SPIA/HNFE 2314	Active Transportation for a Healthy, Sustainable Planet	3
SPIA 3704	Urban Contention and Mobilization	3

HD 3024	Community Analytics	3
PSCI 3424	State and Local Government	3
PSCI 3434	Urban Politics	3
UAP 4964	Field Study	3
GIS/Data		
GEOG 2084	Principles of Geographic Information Systems	3
GEOG/GEOS 4084	Modeling with Geographic Information Systems	3
CS 1064	Introduction to Programming in Python	3
Urban Design		
ARCH 3504	Topics in Architectural Media and Methods	3
ARCH 4324	Advanced Topics in Architectural Media and Methods	3
LAR 3044	Land Analysis and Site Planning	3
CEE 2834	Civil Engineering Drawings and Virtual Modeling	3
Cities, Culture, and Place		
LAR 2254	Social and Cultural Landscapes	3
LAR 3264	People Community and Place	3
LAR 4034	Evolution of the American Landscape	3
FREC/HORT 2134	Plants and Greenspaces in Urban Communities	3
FREC 4454	Urban and Community Forestry	3
GEOG 3244	The U.S. City	3
Economics		
UAP/REAL 2004	Principles of Real Estate	3
ECON 3024	Economic Justice	3
ECON 4014	Environmental Economics	3
AAEC 3324	Environment and Sustainable Development Economics	3
International		
UAP 3954	Study Abroad	3
UAP/SOC/GEOS 4764	International Development Policy and Planning	3
SPIA 4954	Study Abroad	1-19