



SMART AND SUSTAINABLE CITIES

UNDERGRADUATE MAJOR



HANDBOOK FALL 2018



Bachelor of Arts in Public and Urban Affairs
Major in Smart and Sustainable Cities (SSC)

— UT PROSIM



Smart and Sustainable Cities at Virginia Tech

By 2050 nearly 70% of the world's population will reside in urbanized areas. Over the same horizon, the volume, variety, and velocity of data is expected to continue its exponential growth unabatedly, reaching some 40 Zettabytes (40 trillion gigabytes) of data created by 2020 – that is roughly 160 million times the information stored today by the Library of Congress. The Smart and Sustainable Cities (SSC) major will provide students with a deep understanding of sustainable urban development and how smart technology and urban analytics can be combined in the search for solutions to critical urban challenges. The major will prepare students to understand the dynamics of urban change across time, space, and place and to prepare them for employment in various planning and public policy-related areas and/or for the pursuit of advanced degrees in allied fields.

SSC majors will be able to show competency in their ability to:

- Obtain, process, and analyze data in response to a complex urban problem
- Critically evaluate the use of data in urban decision making
- Articulate strategies to advance urban sustainability

SSC majors will be employed with:

- Local, state, and federal government
- Domestic and international nonprofit and nongovernmental organizations
- Planning and engineering consulting firms
- Real estate developers
- Private industry

SSC majors will pursue graduate study in:

- Urban planning and design
- Government and public policy
- International affairs and development
- Law
- Business
- Education
- Architecture
- Landscape architecture
- Construction management



Road Map for the Smart and Sustainable Cities Major

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Major in Smart and Sustainable Cities (SSC)

SAMPLE Academic Plan for students graduating calendar year 2022

Total of 120 credit hours needed for graduation

	PUA Degree Core		SSC Major Core
	CLE/Pathways		SSC Major Elective

Fall Semester Freshman 2018	Credits	Spring Semester Freshman 2019	Credits
ENGL 1105 (Discourse Path)	3	ENGL 1106 (Discourse Path)	3
UAP 1024	3	SPIA 2244	3
MATH 1014 (Q&C Thinking Path)	3	Pathways Natural Science (student choice)	3
PSCI 1014	3	Pathways Humanities (student choice)	3
PHIL 1304 or 2304 (Humanities Path)	3	Free Elective	3
UAP 1004	1	---	---
TOTAL	16	TOTAL	15
Fall Semester Sophomore 2019	Credits	Spring Semester Sophomore 2020	Credits
ECON 2005 or AAEC 1005 (Social Science Path)	3	ECON 2006 or AAEC 1006 (Social Science Path)	3
SPIA 2554	3	STAT 3604 (Q&C Thinking Path advanced)	3



SPIA 2005, SPIA 2006, SPIA 2104 (Q&C Thinking Path)	3	UAP 3744	3
UAP 3714	3	Pathways Discourse Adv (student choice)	3
Pathways Natural Science (student choice)	3	Pathways Design and the Arts	3
SPIA 2114	1	---	---
TOTAL	16	TOTAL	15
Fall Semester Junior 2020	Credits	Spring Semester Junior 2021	Credits
UAP 4754	3	SPIA 3354	3
UAP 3024	3	SPIA 4454	3
SSC Major Elective	3	SPIA 4464	3
Pathways Design and the Arts	3	Pathways Equity/Identity (student choice)	3
Free Elective	3	Free Elective	3
TOTAL	15	TOTAL	15
Fall Semester Senior 2021	Credits	Spring Semester Senior 2022	Credits
SSC major Elective	3	UAP 4914	3
Free Electives	12	SSC Major Elective	3
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TOTAL	15	TOTAL	13



The Master of Urban and Regional Planning (MURP) Accelerated Program

The Urban Affairs and Planning Program (UAP) and the School of Public and International Affairs (SPIA) offers an accelerated program that enables students to earn credit toward a Master of Urban and Regional Planning (MURP) degree while they are completing the requirements for their Bachelor of Arts in Public and Urban Affairs with a major in Environmental Policy and Planning (EPP). This (4+1) five-year program provides qualified students with a unique opportunity to advance in the field of urban and regional planning.

Criteria for Admission:

Application: VT Graduate School application submitted by end of junior year

Minimum GPA: 3.5 cumulative

Test score requirements: None

Please contact your undergraduate advisor (Chris LaPlante) for more information.

Undergraduate Advising

Chris LaPlante

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Office hours: Monday-Friday 9:30-3:00 (during the academic year)



SPIA Undergraduate Program Faculty



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Useful Websites

Hokie Spa: <http://hokiespa.vt.edu/>

VT-Blacksburg Campus Map: http://www.maps.vt.edu/PDF/main_campus_map.pdf

SPIA Undergraduate Page: <https://www.spia.vt.edu/undergrad>

Timetable Calendar: <https://registrar.vt.edu/dates-deadlines-accordion/index1.html>

Pathways Course List: <https://www.pathways.prov.vt.edu/about/table.html>

Undergraduate Catalog (see Academic Policies): <http://www.undergradcatalog.registrar.vt.edu/>

Important Forms: <https://www.caus.vt.edu/academics/resources/forms/>

Undergraduate Research Opportunities at VT:
https://www.research.undergraduate.vt.edu/ugr-opportunities/SearchforOpportunities_1.html

Clubs and Organizations at VT: <https://gobblerconnect.vt.edu/organizations>

Student Employment at VT:
<https://www.hr.vt.edu/jobs/prospective-employees/student-employment.html>

VT Financial Aid Office (for info regarding student loans, scholarships, etc.): <https://finaid.vt.edu/>

VT Registrar's Office (for info regarding transfer/AP credits, transcripts, etc.): <https://registrar.vt.edu/>

VT Career and Professional Development: <https://career.vt.edu/>

Schiffert Health Center: <https://www.healthcenter.vt.edu/appointments.html>

Cook Counseling Center: <https://www.ucc.vt.edu/>

VT Student Engagement and Campus Life: <https://campuslife.vt.edu/>