



Bachelor of Science in Data Science - Social Data Analytics

The interdisciplinary Bachelor of Science in Data Science at MSU goes beyond data analytics and embraces a vision in which data become the power behind the digital transformation of every field of human endeavor. The concentration in Social Data Analytics prepares students to understand sociological and political aspects of social media communication. Students who complete the concentration will be able to leverage social media data to gain insight, make predictions, and influence the future of social collaboration.

Freshman Year

Fall Semester			Spring Semester		
EN 1103	English Composition I	3	EN 1113	English Composition II	3
MA 1713	Calculus I	3	MA 1723	Calculus II	3
DSCI 2013	Data Science Literacy	3	PHI 1113	Intro to Logic	3
— —	Natural Science 1 + Lab	3	— —	Natural Science 2 + Lab	3
— —	Fine Arts	3	CSE 1284	Introduction to Programming	4

Sophomore Year

Fall Semester			Spring Semester		
— —	Social Science	3	MA/ST 3123	Statistical Inference	3
MA 2733	Calculus III	3	MA 3113	Intro to Linear Algebra	3
DSCI 3013	Fundamentals of Data Acquisition	3	BIS 3233	Management Information Systems	3
DSCI 2012	Lab - Data Wrangling	2	DSCI 4013	Data Visualization	3
CSE 1384	Intermediate Programming	4	CSE 2383	Data Structures and Analysis of Algorithms	3

Junior Year

Fall Semester			Spring Semester		
CSE 2813	Discrete Structures	3	CSE 3763	Legal & Ethical Issues Computing	3
DSCI 3012	Lab - Desc., Analysis, Inference	2	CO 1003	Fundamentals of Public Speaking	3
DSCI 3022	Lab - Data Visualization	2	DSCI 3032	Lab - Artificial Intelligence	2
AN 1103	*Intro to Anthropology	3	CSE 4503	Database Management Systems	3
CSE 4633	Artificial Intelligence	3	CO 1403	*Intro to Mass Media	3
— —	Humanities	3	DSCI 2022	Lab - Cloud, Quantum, HPC	2

Senior Year

Fall Semester			Spring Semester		
MGT 3213	Organizational Communication	3	MA/ST 4523	Intro to Probability	3
PS 1313	*Intro to International Relations	3	GR 4123	**Urban Geography	3
CO 4213	**Political Communication	3	PS 4243	**State Election Policy and Politics	3
PS 4283	**Public Opinion	3	SO 4113	**Social Organization and Change	3
DSCI 4553	Capstone 1	3	DSCI 4663	Capstone 2	3

***Choose 9 hours (but no more than 6 hours in any one field) from the following list of courses:**

AN 1103	Intro to Anthropology	PS 1513	Comparative Government
AN 1143	Intro to Cultural Anthropology	PS 2703	Intro to Public Policy
AN 1344	Intro to Bio Anthropology	CRM 1003	Crime and Justice in America
CO 1403	Intro to Mass Media	SO 1003	Intro to Sociology
GR 2313	Maps and Remote Sensing	SO 1103	Contemporary Social Problems
PS 1313	Intro to International Relations		

****Choose 15 hours from the following 3 hour course list:**

AN 3343	Intro to Forensic Anthropology	PS 4283	Public Opinion
AN/SO 4173	Environment and Society	PS 4293	Political Behavior
AN 4163	Anthropology of International Development	PS 4343	International Conflict and Security
AN 4323	Plagues and People	PS 4373	International Terrorism
CO 4213	Political Communication	PS 4464	Political Analysis
CO 4283	Health Communication	PS 4523	Democracy and Inequality
CRM 4253	White Collar and Computer Crime	PS 4613	Civil Wars and Intra-State Conflict
GR 3303	Survey of Geo spacial Technologies	SO 3303	Rural Sociology
GR 4123	Urban Geography	SO 4113	Social Organization and Change
PS 4243	State Election Policy and Politics	SO 4123	Poverty, Analysis: People, Organization, and Program