

Societal and Human Impacts of Future Technologies, Minor

The Minor in Societal & Human Impacts of Future Technologies (SHIFT)

Overview

Students pursuing the SHIFT minor will gain the skills, knowledge, and experience to successfully take on roles in integrated, multidisciplinary analyses of current and near-future computational technologies. The SHIFT minor requires eight total courses, with no limit to double-counting with other majors or minors. All courses counted towards the minor must be taken for a letter grade and passed with a grade of "C" or above.

Curriculum

Core Courses (2 courses, 10 to 18 units total)

		Units
80-249	AI, Society, and Humanity	9
80-445	Shift Capstone Experience	1-9

Area Courses (6 courses, 54 units total)

Note: Five of the six Area Courses must be taken in different departments

Technology area (18 units)

Courses that build basic technological competence, and teach concepts and frameworks that provide high-level understanding of computational technologies, including their possibilities and limits.

Complete two courses		Units
05-317	Design of Artificial Intelligence Products	12
05-318	Human AI Interaction	12
05-320	Social Web	12
05-452	Service Design	12
15-110	Principles of Computing	10
15-112	Fundamentals of Programming and Computer Science	12
16-467	Introduction to Human Robot Interaction	12
17-303	Cryptocurrencies, Blockchains and Applications	9
17-313	Foundations of Software Engineering	12
17-331	Information Security, Privacy and Policy in the Age of AI	12
17-333	Privacy Policy, Law, and Technology	9
17-355	Program Analysis	12
36-202	Methods for Statistics & Data Science	9
67-250	The Information Systems Milieu	9
88-300	Programming and Data Analysis for Social Scientists	9

Social & Behavioral Sciences area (18 units)

Courses that teach the concepts and frameworks of social and behavioral sciences (e.g., economics, psychology, sociology), including methods and analyses such as experimental design and quantitative and qualitative data analysis.

Complete two courses		Units
05-413	Human Factors	9
36-200	Reasoning with Data	9
36-309	Experimental Design for Behavioral & Social Sciences	9
70-311	Organizational Behavior	9
70-321	Negotiation and Conflict Resolution	9
70-341	Team Dynamics and Leadership	9
73-102	Principles of Microeconomics	9
73-103	Principles of Macroeconomics	9

84-266	Research Design for Political Science	9
84-369	Decision Science for International Relations	9

Ethics, Policy & Design Area (18 units)

Courses that teach core concepts and frameworks to address and analyze ethical, policy, and design challenges relevant to current and near-future computational technologies.

Complete two courses		Units
05-413	Human Factors	9
16-161	Artificial Intelligence and Humanity	12
36-200	Reasoning with Data	9
51-173	Human Experience in Design	9
51-371	Futures I	4.5
51-373	Futures II	4.5
51-382	Design for Social Innovation	9
70-311	Organizational Behavior	9
70-321	Negotiation and Conflict Resolution	9
70-332	Business, Society and Ethics	9
70-341	Team Dynamics and Leadership	9
70-364	Business Law	9
73-102	Principles of Microeconomics	9
73-103	Principles of Macroeconomics	9
79-175	Moneyball Nation: Data in American Life	9
79-234	Technology and Society	9
79-302	Killer Robots? The Ethics, Law, and Politics of Drones and A.I. in War	9
80-130	Introduction to Ethics	9
80-135	Introduction to Political Philosophy	9
80-330	Ethical Theory	9
80-335	Social and Political Philosophy	9
84-266	Research Design for Political Science	9
84-275	Comparative Politics	9
84-319	Civil-Military Relations	9
84-325	Contemporary American Foreign Policy	9
84-369	Decision Science for International Relations	9
84-370	Nuclear Security & Arms Control	9
84-372	Space and National Security	9
84-373	International Law	9
84-380	US Grand Strategy	9
84-386	The Privatization of Force	9
84-387	Remote Systems and the Cyber Domain in Conflict	9
84-389	Terrorism and Insurgency	9
84-390	Social Media, Technology, and Conflict	9
84-405	The Future of Warfare	9
88-221	Markets, Democracy, and Public Policy	9