

Historical CAPP Student Elective Choices

This document is a comprehensive compilation of electives that CAPP students have taken in the past. Please note this list is not an exhaustive list of courses that are available (course offerings and seat availability change from year to year), and is not an endorsement of these courses. Cross-listed courses are not compiled - they are listed separately under each school/division's course code.

We encourage you to research courses and course evaluations, speak with your academic advisor, and consider what courses are best for your specific career goals.

Important Quick Links

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[University of Chicago Academic Calendar](#)

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Harris School of Public Policy (PPHA)

Note: ALL PPHA course offerings listed below are elective courses previous CAPP students have taken. PPHA core courses required for MSCAPP can be found on the Harris website.

2020-2021 Course Offerings

PPHA 30300 Philosophical Foundations of Public Policy

PPHA 30520 Text Mining in Public Policy

PPHA 30525 Next Generation Data: Sources, Access

PPHA 30540 Machine Learning for Public Policy

PPHA 30560 Data Visualization

PPHA 30580 Civic Technology

PPHA 31720 The Science of Elections and Campaigns

PPHA 31730 The Strategic Uses of Survey Research in Political Campaigns

PPHA 31810 Lessons from Policies that Went Wrong

PPHA 31941 Behavioral Science and Public Policy

PPHA 32000 Finance

PPHA 32735 African Development

PPHA 32740 Order & Violence

PPHA 32750 Hydropolitics: Water Policy and Conflict

PPHA 32810 Winning Issue Campaigns

PPHA 33230 Inequality: Theory, Methods, and Evidence

PPHA 33420 Contemporary US Intelligence

PPHA 33510 Nuclear Policy

PPHA 33520 The Social Psychology of Behavior in Organizations

PPHA 33611 Foundations of Social Entrepreneurship

PPHA 33620 Leading with Innovation

PPHA 33820 The Intersection of Cyber Threats and Human Rights OR Democracy Hacked: Cyber Threats to Modern Governments in the Digital Age

PPHA 33901 Matching Efficiency and Inequality

PPHA 34241 Household Finance: Theory and Applications
PPHA 34410 Corporate Finance
PPHA 34330 Attaining Equity in K-12: Theory and Practice
PPHA 34500 Macroeconomics for Pbpl
PPHA 34799 Race, Politics, and the Press in Chicago
PPHA 34810 Mixed Methods to Policy Research
PPHA 35310 International Trade, Banking and Capital Markets
PPHA 35550 Economic Development and Policy
PPHA 35570 Conflict and Humanitarian Intervention: Blurring Humanitarian, Development, and Security Policy
PPHA 35700 Economics of Education Policy
PPHA 36101 Financial Investments for Public Policy
PPHA 36410 Epidemiology and Population Health
PPHA 36701 Poverty Inequality and Welfare St
PPHA 36921 Energy Economics and Policy
PPHA 36922 Energy in the Developing World
PPHA 36930 Environmental Economics: Theory and Applications
PPHA 36941 Strategic Behavior and Regulation of Firms
PPHA 37008 State Formation in Latin America
PPHA 37102 Crime Policy
PPHA 37103 Crime Prevention
PPHA 37105 Crime, Conflict, and the State
PPHA 37106 Police Reform and Police Legitimacy
PPHA 37110 Competition Policy
PPHA 37300 Health Law and Policy
PPHA 37302 Key Issues in Healthcare: An Interdisciplinary Case Studies Approach
PPHA 37411 Management Matters: Leadership, Strategy, and Getting
PPHA 37420 Fundamentals of Leadership
PPHA 37510 The US Healthcare System
PPHA 37820 Health Care Markets and Regulations
PPHA 38290 Introduction to Health Economics
PPHA 38300 Health Economics and Public Policy
PPHA 38520 GIS Application in the Social Sciences
PPHA 38530 City Lab
PPHA 38550 Technology for Public Policy: Building Connected, Engaged, and Empowered Communities
PPHA 38615 Modern Political Communications
PPHA 38720 Urban Economics and Policy
PPHA 38740 Conflict: Root Causes, Consequences and Solutions

PPHA 38750 Refugees, Security and Forced Migration
PPHA 38751 Child Exploitation, Human Trafficking and the Supply Chain
PPHA 38790 Introduction to Peacebuilding
PPHA 38820 Machine Learning and Policy
PPHA 38829 Artificial Intelligence for Public Policy
PPHA 38900 Environmental Science/Policy
PPHA 39506 The Supreme Court and Public Policy
PPHA 39750 Politics and Public Policy in Latin America
PPHA 39830 Quantitative Security
PPHA 39925 Energy Policy and Human Behavior
PPHA 39930 International Climate Policy
PPHA 40010 Leadership and Modern American Politics
PPHA 40310 Poverty and Social Welfare Policy
PPHA 40321 The Modern Welfare State
PPHA 40700 Early Childhood: Human Capital Development and Public Policy
PPHA 40101 Policy Analysis Meths/Apps
PPHA 40321 The Modern Welfare State
PPHA 41210 Physics and Technology for Future Policy Workers
PPHA 41300 Cost-Benefit Analysis
PPHA 41400 Applied Regression Analysis: Analysis of Microeconomic Data
PPHA 41420 Multilevel Regression Modeling for Public Policy
PPHA 41600 Survey Research Methodology
PPHA 41750 Women in the Labor Market
PPHA 41800 Survey Questionnaire Design
PPHA 42000 Applied Econometrics 1
PPHA 42510 Applied Financial Management
PPHA 42535 Banking Regulation and Management
PPHA 42715 Introduction to Law and Economics
PPHA 43401 Diplomacy and Defense
PPHA 44550 Weak States and International Relations
PPHA 44900 Social Experiments: Design and Generalization
PPHA 45210 Regional Innovation Strategies
PPHA 46610 Workplace and Family Policy
PPHA 46350 Economics of Regulation
PPHA 47610 Intergenerational Mobility
PPHA 48403 Optimization - Conscious Econometrics
PPHA 50101 OR PPHA 50501 Leadership in Chicago
PPHA 50400 Science Technology and Policy
PPHA 50502 Chicago Urban Leadership

PPHA 60000 Policy Lab
PPHA 60020 Policy Lab: Criminal Justice Reform
PPHA 60021 Policy Lab II: Criminal Justice Reform
PPHA 60030 Policy Lab I: Human Services Innovation

Masters Program in Computer Science (MPCS)

2020-2021 Course Offerings

MPCS 50101 Concepts of Programming
MPCS 50103 Mathematics for Computer Science: Discrete Mathematics
MPCS 51031 Android Application Development
MPCS 51032 Advanced iOS Application Development
MPCS 51033 Backends for Mobile Applications
MPCS 51036 Java Programming
MPCS 51039 Mobile Software Development
MPCS 51044 C/C++ for Advanced Programmers
MPCS 51042 Python Programming
MPCS 51043 Swift Programming
MPCS 51046 Intermediate Python Programming
MPCS 51050 OO Arch: Patterns Tech Implem
MPCS 51081 Unix Systems Programming
MPCS 51083 Cloud Computing
MPCS 51087 High Performance Computing
MPCS 51100 Advanced Programming
MPCS 51205 Topics in Software Engineering
MPCS 51220 Applied Software Engineering
MPCS 51230 User Interface and User Experience Design
MPCS 51240 Product Management
MPCS 51250 Entrepreneurship in Technology
MPCS 51400 Functional Programming
MPCS 51410 Object Oriented Programming
MPCS 52011 Introduction to Computer Systems
MPCS 52015 Advanced Computer Systems
MPCS 52030 Operating Systems
MPCS 52040 Distributed Systems
MPCS 52060 Parallel Programming
MPCS 52553 Web Development
MPCS 52554 Advanced Web Development
MPCS 53001 Databases
MPCS 53014 Big Data Application Architecture

MPCS 53111 Machine Learning
MPCS 54001 Networks
MPCS 55001 Algorithms
MPCS 56420 Bioinformatics for Computer Scientists
MPCS 56511 Introduction to Computer Security
MPCS 56512 Application Security
MPCS 56600 Introduction to Blockchain
MPCS 58020 Time Series Analysis and Stochastic Processes
MPCS 53013 Big Data
MPCS 51200 Introduction to Software Engineering
MPCS 56515 Computer and Network Security
MPCS 51030 iOS Application Development

School of Social Service Administration (SSAD)

List of Courses and 2020-2021 Course Offerings

SSAD 47452 Smart Decarceration: A Grand Challenge for Social Work
SSAD 65600 Special Issues in Healthcare MGT: Health Systems
SSAD 63200 Crime Prevention

Booth - Business (BUSE, BUSF, BUSW, BUSN)

Course Search

BUSE 38116 Leading and Managing Teams
BUSF 38002 Managerial Decision Making
BUSF 35000 Investments
BUSW 41202 Analysis of Financial Time Series
BUSN 30000 Financial Accounting
BUSN 32901 Applications of Machine Learning to the Empirical Sciences
BUSN 37105 Data Science for Marketing Decision Making
BUSN 35200 Corporation Finance
BUSN 37304 Digital and Algorithmic Marketing
BUSN 33402 Understanding Central Banks
BUSN 41000 Business Statistics
BUSN 33401 Money and Banking
BUSN 42706 Entrepreneurship: Urban Opportunities and Solutions I
BUSN 42707 Entrepreneurship: Urban Opportunities and Solutions II
BUSN 30000 Financial Accounting
BUSN 34502 Intro to Venture Capital: A Toolkit for Analyzing and Financing
BUSN 41202 Analysis of Financial Time Series

BUSN 30235 Databases for Public Policy
BUSN 42118 Business Applications of Natural Language Processing
BUSN 40721 Healthcare Analytics Lab
BUSN 38103 Strategies and Processes of Negotiation
BUSN 42001 Competitive Strategy
BUSN 33040 Macroeconomics
BUSN 34500 Macroeconomics for Pbpl
BUSN 41203 Financial Econometrics
BUSN 30121 Accounting for Entrepreneurship: From Start Up to IPO
BUSN 32901 Applications of Machine Learning to the Empirical Sciences
BUSN 53013 Big Data
BUSN 41201 Big Data
BUSN 53014 Big Data Application Architecture
BUSN 33222 Sports Analytics
BUSN 33502 International Financial Policy

The College: Department of Computer Science (CMSC)

Course Information

CMSC 23200 Introduction to Computer Security
CMSC 23900 Data Visualization
CMSC 25040 Introduction to Computer Vision
CMSC 20900 Computers for Learning
CMSC 30560 Data Visualization
CMSC 30370 Inclusive Technology, Graduate
CMSC 33001 Topics in Systems
CMSC 33210 Usable Security and Privacy
CMSC 33231 Topics in Human Computer Interaction
CMSC 31230 Fundamentals of Deep Learning
CMSC 33400 Mobile Computing
CMSC 35200 Deep Learning Systems
CMSC 35400 Machine Learning
CMSC 35401 Topics in Machine Learning: Deep Learning OR Topics in Machine Learning:
Applied Machine Learning
CMSC 35600 Image Processing/Computer Vision
CMSC 33750 Machine Learning & Cancer
CMSC 35300 Mathematical Foundations of Machine Learning
CMSC 35050 Computational Linguistics

Department of Ecology & Evolution (ECEV)

List of Courses

ECEV 42800 Population Ecology

Toyota Technological Institute at Chicago (TTIC)

2020-2021 Course Offerings

TTIC 31010 Algorithms

TTIC 31020 Introduction to Statistical Machine Learning OR Advanced Natural Language Processing OR Introduction to Machine Learning

TTIC 31070 Mathematical Computation IIA: Convex Optimization

TTIC 31050 Introduction to Bioinformatics & Computational Biology

TTIC 31230 Fundamentals of Deep Learning

TTIC 31210 Advanced Natural Language Processing

TTIC 31190 Natural Language Processing

TTIC 31110 Speech Technologies

TTIC 31180 Probabilistic Graphical Models

TTIC 41000 Special Topics: Spectral Techniques for Machine Learning

TTIC 31220 Unsupervised Learning and Data Analysis

TTIC 31170 Planning, Learning, and Estimation for Robotics

The College: Department of Sociology (SOCI)

2020-2021 Tentative Course Offerings

SOCI 40217 Spatial Regression Analysis

SOCI 30253 Introduction to Spatial Data Science

SOCI 40133 Computational Content Analysis

SOCI 60013 Workshop on Education

Department of Mathematics (MATH)

2020-2021 Course Offerings

MATH 60000 Computational Content Analysis

MATH 20400 Analysis in \mathbb{R}^n II

Committee on Medical Physics (MPHY)

General Courses Offered (Varied)

MPHY 39600 Image Processing/Computer Vision

Masters in Computational Social Science (MACSS)

List of Courses

MACS 30123 Large Scale Computing for the Social Sciences
MACS 54000 Introduction to Spatial Data Science
MACS 60000 Computational Content Analysis
MACS 40200 Structural Estimation
MACS 40800 Unsupervised Machine Learning
MACS 40500 Computational Methods for American Politics

Department of Statistics (STAT)

Course Information

STAT 34700 Generalized Linear Models
STAT 24400 Statistical Theory/Method-1
STAT 34800 Modern Methods in Applied Statistics
STAT 37601 Machine Learning and Large-Scale Data Analysis
STAT 32940 Multivariate Data Analysis via Matrix Decompositions
STAT 33100 Sample Surveys
STAT 30850 Multiple Testing, Modern Influence and Replicability
STAT 27850 Multiple Testing, Modern Influence and Replicability
STAT 28000 Optimization
STAT 34300 Applied Linear Stat Methods
STAT 24400 Statistical Theory and Methods I

The Law School (LAW)

Curriculum and Course Search

LAWS 43260 Election Law
LAWS 53201 Corporate Criminal Prosecutions and Investigations
LAWS 53221 Current Issues in Criminal and National Security Law
LAWS 51704 Critical Legal Studies vs. Law and Economics

Division of the Humanities Philosophy (PHIL)

2020-2021 Course Offerings

PHIL 57201 Spinoza's Psychological Politics

Department of English Language and Literature (ENGL)

List of Courses

ENGL 33000 Academic and Professional Writing

Department of Comparative Human Development (CHDV)

List of Courses

CHDV 30510 Computational Content Analysis

Committee on Conceptual and Historical Studies of Science (CHSS)

[2020-2021 Course Offerings](#)

CHSS 35415 History of Information

Division of Humanities and Creative Writing (CRWR)

[2020-2021 Course Offerings](#)

CRWR 10406 Beginning Non-Fiction Workshop

CRWR 30406 Beginning Nonfiction Workshop

Department of Art History (ARTH)

[2020-2021 Course Offerings](#)

ARTH 38606 Early Twentieth Century Urban Visions

Department of Visual Arts (ARTV)

[List of Courses](#)

ARTV 32501 Art & Machine Intelligence

Department of Political Science (PLSC)

[Tentative 2020-2021 Course Offerings](#)

PLSC 57200 Network Analysis

Master of Arts Program in the Social Science

MAPPS/ECON Concentration (ECON)

[List of Courses](#)

ECON 34930 Inequality: Theory, Methods and Evidence

ECON 33230 Inequality: Theory, Methods and Evidence

ECON 34901 Social Interactions and Inequality

ECON 28620 Crony Capitalism

Public Health Sciences (PBHS)

[List of Courses](#)

PBHS 32400 Applied Regression Analysis

PBHS 38300 Health Economics and Public Policy

Financial Mathematics (FINM)

List of Courses

FINM 33180 Multivariate Data Analysis via Matrix Decomposition

FINM 35910 Applied Algorithmic Trading

FINM 33170 Financial Statistics: Time Series

FINM 32600 Computing for Finance in C++

FINM 33160 Machine Learning in Finance

FINM 32700 Advanced Computing for Finance

FINM 33165 Probabilistic Programming and Deep Learning

FINM 34510 Introduction to Stochastic Calculus

FINM 37301 Foreign Exchange Markets, Pricing and Products

FINM 37602 Mathematical Market Microstructure w/o Rationality

Committee on Geographical Sciences (GEOG)

2020-2021 Course Offerings

GEOG 39650 Environmental Data Science Practicum I

GEOG 38402 Geographic Information Science II

GEOG 38702 Introduction to GIS and Spatial Analysis

GEOG 35900 Introduction to Location Analysis

GEOG 34600 Introduction to Urban Sciences

GEOG 30500 Introduction to Spatial Data Science

GEOG 40217 Spatial Regression Analysis

Division of Humanities: Digital Studies of Language, Culture and History (DIGS)

Core Courses and Electives

DIGS 30006 Natural Language Processing

Center for Health and Social Sciences:

Committee on Clinical and Translational Science (CCTS)

List of Courses

CCTS 20500 Machine Learning & Advanced Analytics for Biomedicine

Department of History (HIST)

2020-2021 Course Offerings

HIST 49302 Colloquium: History of Political Corruption

Pozen Family Center for Human Rights (HMRT)

2020-2021 Course Offerings

HMRT 37700 International Human Rights

Department of Cinema and Media Studies (CMST)

[2020-2021 Course Offerings](#)

CMST 38006 Minimalist Experiment in Film & Video