

UNDERGRADUATE RESEARCH COURSE GUIDE

Undergraduate Research Courses are semester-long, credit-bearing courses that are overseen and graded by a Cornell faculty member and meet at least one of the following criteria:

- Independent, not classroom-based.
- Project-based (working on a short or long-term project with a particular outcome).
- Includes for-credit project team experiences (e.g., Engineering project teams, non-classroom-based capstone projects).
- Note: Research may be supervised by individuals in an academic position serving as a PI, co-PI or Project director as outlined by Research & Innovation, excluding undergraduates.

Learn more about Undergraduate Research (<https://undergraduateresearch.cornell.edu/>) at Cornell.

Undergraduate Research Courses (CU-UGR)

Code	Title	Hours
AAS 4950	Independent Study	1-4
AEP 4900	Undergraduate Research in Engineering Physics	1-6
AEP 4910	Honors Research in Engineering Physics	2-6
AIIS 4970	Independent Study	1-4
ALS 4990	Undergraduate Research in Agriculture and Life Sciences	1-6
AMST 4993	Honors Essay Tutorial I	4
AMST 4994	Honors Essay Tutorial II	4
ANSC 4020	Seminar in Animal Sciences	1
ANSC 4990	Undergraduate Research in Animal Science	1-6
ANTHR 3200	Heritage Forensics	3
ANTHR 4263	Zooarchaeological Method	6
ARCH 3197	Special Investigations in Architectural Design	1-3
ARCH 3397	Special Investigations in the Theory of Architecture I	1-3
ARCH 4508	Special Investigations in Visual Representation	1-3
ARCH 4697	Special Investigations in Construction	1-3
ARCH 4698	Special Investigations in Environmental Systems and Conservation	1-3
ARCH 4699	Special Investigations in Structures	1-3
ARCH 4901	Undergraduate Thesis in the History of Architecture and Urbanism	4
ARCH 5902	Design X Thesis	8
ARCH 5903	Design IX Expanded Design Thesis	6
ARCH 5904	Design X Expanded Design Thesis	8
ARKEO 3200	Heritage Forensics	3
ARKEO 4263	Zooarchaeological Method	6
ART 3091	Directed Readings in Art	1-2
ART 3093	Directed Research in Art	1-2
ARTH 4991	Independent Study	1-4
ARTH 4992	Independent Study	1-4

ARTH 4998	Honors Work I	4
ARTH 4999	Honors Work II	4
ASIAN 4401	Asian Studies Honors Course	4
ASIAN 4402	Asian Studies Honors: Senior Essay	4
ASIAN 4403	Supervised Reading	1-4
ASIAN 4404	Supervised Reading	1-4
ASIAN 4435	Making Sense of China: The Capstone Seminar	4
ASRC 4900	Honors Thesis	4
ASRC 4901	Honors Thesis	4
ASRC 4902	Independent Study	1-6
ASRC 4903	Independent Study	1-6
ASRC 6900	Independent Study	1-6
ASRC 6901	Independent Study	1-6
ASTRO 4940	Independent Study in Astronomy	1-4
BEE 4970	Individual Study in Biological and Environmental Engineering	1-4
BEE 4990	Undergraduate Research	1-8
BEE 4993	Honors Thesis	3-6
BENGL 4431	Directed Study	1-4
BENGL 4432	Directed Study	1-4
BIOEE 3611	Field Ecology	3
BIOEE 3780	Digital Morphology through CT	1
BIOG 1990	Exploring Research in Biological Sciences	1
BIOG 2990	Introduction to Research Methods in Biology	1-3
BIOG 3100	Preparing HHMI-CURT Scholars for Research	1
BIOG 4990	Independent Undergraduate Research in Biology	1-8
BIONB 3500	NeuroAI: Bridging Brains and AI	3
BME 4090	Biomedical Engineering Design II	3
BME 4900	Independent Undergraduate Project in Biomedical Engineering	1-6
BME 4901	Honors Thesis	3
BSOC 3751	Independent Study	1-4
BSOC 4991	Honors Project I	4
BSOC 4992	Honors Project II	4
BTRY 4970	Undergraduate Individual Study in Biometry and Statistics	1-3
BTRY 4990	Undergraduate Research	1-5
BURM 4431	Directed Study	1-4
BURM 4432	Directed Study	1-4
CAPS 4010	Honors Thesis Tutorial I	4
CAPS 4020	Honors Thesis Tutorial II	4
CAPS 4030	Making Sense of China: The Capstone Seminar	4
CAPS 4999	CAPS Independent Study	1-4
CEE 3090	Special Topics in Civil and Environmental Engineering	1-6
CEE 4000	Senior Honors Thesis	1-4
CEE 4090	CEE Undergraduate Research	1-4
CHEM 4210	Introduction to Inorganic Chemistry Research	2-4
CHEM 4330	Introduction to Analytical Chemistry Research	1-4
CHEM 4610	Introduction to Organic Chemistry Research	2-4
CHEM 4770	Introduction to Physical Chemistry Research	1-4
CHEME 4900	Undergraduate Projects in Chemical Engineering	1-7
CHIN 4431	Directed Study	1-4

CHIN 4432	Directed Study	1-4	FSAD 3000	Special Topics in FSAD	1-15
CHIN 4455	Directed Study: CAPS in Beijing	1-4	FSAD 4000	Directed Reading	1-15
CHLIT 4421	Directed Study	2-4	FSAD 4010	Empirical Research	1-15
CHLIT 4422	Directed Study	2-4	FSAD 4990	Honors Thesis Research	1-8
CLASS 3391	Independent Study in Sanskrit, Undergraduate Level	1-4	GDEV 4080	Demographic Techniques	3
CLASS 3686	Independent Study in Classical Civilization, Undergraduate Level	1-4	GDEV 4970	Independent Study in Global Development	1-3
CLASS 4721	Honors: Senior Essay I	4	GDEV 4990	Independent Research in Global Development	1-4
CLASS 4722	Honors: Senior Essay II	4	GERST 4510	Independent Study	1-4
COLLS 4990	Honors Research I	4	GERST 4520	Independent Study	1-4
COLLS 4991	Honors Research II	4	GERST 4530	Honors Research	4
COML 4190	Independent Study	1-4	GERST 4540	Honors Thesis	4
COML 4200	Independent Study	1-4	GOVT 4037	Making Sense of China: The Capstone Seminar	4
COML 4930	Senior Essay	3	GOVT 4999	Undergraduate Independent Study	1-4
COML 4940	Senior Essay	3	GOVT 7999	Independent Study	1-4
COMM 2990	Directed Research Experience	1-3	GREEK 3185	Independent Study in Greek, Undergraduate Level	1-4
COMM 4990	Independent Research	1-3	HADM 4980	Special Studies Project II	1-3
CRP 4900	Student-Faculty Research	1-4	HADM 4990	Special Studies Project I	1-3
CRP 4920	Undergraduate Honors Thesis Research	4	HD 2930	Introduction to Data Science for Social Scientists	3
CRP 4930	Undergraduate Honors Thesis Writing	4	HD 4000	Directed Readings	1-4
CS 1998	First-year and Nontechnical Team Projects	1-3	HD 4010	Empirical Research	1-4
CS 4998	Team Projects	1-4	HD 4630	Introduction to Functional MRI Analysis for Human Neuroimaging	3
CS 4999	Independent Reading and Research	1-4	HD 4990	Senior Honors Thesis	1-6
DEA 2730	Human Centered Design Methods	3	HINDI 4431	Directed Study	1-4
DEA 4000	Directed Readings	1-15	HINDI 4432	Directed Study	1-4
DEA 4010	Empirical Research	1-15	HIST 2001	Supervised Reading - Undergraduate	2
DEA 4020	Supervised Fieldwork	1-15	HIST 3002	Supervised Research - Undergraduate	2-4
DEA 4990	Senior Honors Thesis	1-15	HIST 8004	Supervised Reading	2-4
DEA 5700	Designing Age Friendly Environments	3	ILRGL 4950	Honors Program	3
EAS 4910	Undergraduate Research	1-4	ILRGL 4970	Field Research, Internship	4
EAS 4920	Undergraduate Research	1-4	ILRGL 4980	Internship	8
EAS 4990	Undergraduate Research in Atmospheric Science	1-4	ILRGL 4990	Directed Studies	1-4
ECE 4998	Electrical and Computer Engineering Group Projects	1-4	ILRHR 4950	Honors Program	3
ECE 4999	Electrical and Computer Engineering Independent Projects	1-4	ILRHR 4970	Field Research	4
ECON 3710	The Economics of Risky Health Behaviors	4	ILRHR 4980	Internship	8
EDUC 4990	Undergraduate Research	1-6	ILRHR 4990	Directed Studies	1-4
ENGL 4930	Honors Essay Tutorial I	4	ILRID 4970	Field Research, Internship	4
ENGL 4940	Honors Essay Tutorial II	4	ILRID 4980	Internship	8
ENGL 4950	Independent Study	1-4	ILRLE 4970	Field Research	4
ENGRG 1400	Engineering Project Team Onboarding	1	ILRLE 4980	Internship	8
ENGRG 3400	Engineering Student Project Teams	1-3	ILRLE 4990	Directed Studies	1-4
ENGRG 4960	Entrepreneurial Practicum in Engineering	1-4	ILRST 4950	Honors Program	3
ENTOM 4990	Undergraduate Research in Entomology	1-6	ILRST 4970	Field Research	4
ENVS 4990	Undergraduate Research in Environment and Sustainability	1-8	ILRST 4980	Internship	8
FDSC 4940	Special Topics in Food Science	0.5-4	ILRST 4990	Directed Studies	1-4
FDSC 4970	Individual Study in Food Science	0.5-3	IM 4990	Honors Research I	4
FDSC 4990	Undergraduate Research in Food Science	1-4	IM 4991	Honors Research II	4
FGSS 3316	What's in a Sound? Gender and Race in Sound Cultures	3	INDO 4431	Directed Study	1-4
			INDO 4432	Directed Study	1-4
			INFO 1998	First-year Team Projects	1-3
			INFO 4900	Independent Reading and Research	1-4
			INFO 4998	Team Projects	1-4

JAPAN 4431	Directed Study	1-4	PHIL 4900	Informal Study for Honors I	3
JAPAN 4432	Directed Study	1-4	PHIL 4901	Informal Study for Honors II	3
JWST 4998	Honors Research I	3	PHYS 4490	Independent Study in Physics	1-4
KHMER 4431	Directed Study	1-4	PHYS 4498	Senior Thesis	3
KHMER 4432	Directed Study	1-4	PLSCI 2301	Field Lab in Global Plant Biodiversity and Vegetation	2
KOREA 4431	Directed Study	1-4	PLSCI 2302	Vegetational Analysis of the Patagonian Region	1
KOREA 4432	Directed Study	1-4	PLSCI 2990	Introduction to Research Methods in Plant Science	1-3
LA 4340	Material Ecologies	3	PLSCI 4970	Individual Study in Plant Sciences	1-4
LA 4970	Individual Study in Landscape Architecture	1-5	PLSCI 4990	Independent Undergraduate Research in Plant Science	1-4
LA 4990	Undergraduate Research	1-5	PSYCH 2930	Introduction to Data Science for Social Scientists	3
LA 6340	Material Ecologies	3	PSYCH 4700	Undergraduate Research in Psychology	1-6
LATIN 3286	Independent Study in Latin, Undergraduate Level	1-4	PSYCH 4710	Advanced Undergraduate Research in Psychology	1-6
LING 3390	Independent Study in Linguistics	1-4	PUBPOL 2070	Big Data for Big Policy Problems	4
LING 4491	Honors Research Workshop I	1	PUBPOL 3490	Housing Equity Lab	3
LING 4492	Honors Research Workshop II	1	PUBPOL 3790	Community Impact Analysis in Development Policy I	1
LING 4493	Honors Thesis Research	3	PUBPOL 3791	Community Impact Analysis in Development Policy II	2
LING 4494	Honors Thesis Research	3	PUBPOL 4000	Directed Readings	1-15
LSP 4210	Undergraduate Independent Study	2-4	PUBPOL 4010	Empirical Research	1-15
MAE 1900	First-Year Independent Study in Mechanical Engineering	1-4	PUBPOL 4030	Teaching Apprenticeship	1-15
MAE 4291	Supervised Senior Design Experience	3-4	PUBPOL 4080	Demographic Techniques	3
MAE 4900	Individual and Group Projects in Mechanical Engineering	1-4	PUBPOL 4280	The Economics of Risky Health Behaviors	4
MATH 4900	Supervised Research	1-4	PUBPOL 4990	Honors Program	1-6
MSE 4050	Senior Experimental Thesis I	3	RELST 4990	Directed Study	2-4
MSE 4060	Senior Experimental Thesis II	3	RELST 4991	Directed Study	2-4
MSE 4950	Undergraduate Teaching Involvement	1-3	RELST 4995	Senior Honors Essay I	4
MSE 8000	Research in Materials Science	1-12	RELST 4996	Senior Honors Essay II	4
MSE 8020	Materials Science Research Group Seminars	1.5	RUSSL 4492	Supervised Reading in Russian Literature	1-4
MUSIC 3316	What's in a Sound? Gender and Race in Sound Cultures	3	SANSK 4431	Directed Study	1-4
MUSIC 4911	Honors in Music	4	SANSK 4432	Directed Study	1-4
MUSIC 4912	Honors in Music	4	SHUM 4750	Senior Capstone Seminar for Humanities Scholars	1
NEPAL 4431	Directed Study	1-4	SINHA 4431	Directed Study	1-4
NEPAL 4432	Directed Study	1-4	SINHA 4432	Directed Study	1-4
NES 3204	Heritage Forensics	3	SOC 4910	Independent Study	1-4
NES 4991	Independent Study, Undergraduate Level	1-6	SOC 4950	Honors Research	4
NES 4992	Independent Study, Undergraduate Level	1-6	SOC 4960	Honors Thesis: Senior Year	4
NES 4998	Senior Honors Essay	4	SPAN 4290	Honors Work I	4
NES 4999	Senior Honors Essay	4	STS 3991	Undergraduate Independent Study	1-4
NS 4010	Empirical Research	1-4	STS 4991	Honors Project I	4
NS 4990	Honors Problem	1-15	STS 4992	Honors Project II	4
NTRES 4960	Internship in Natural Resources	1-3	STSCI 4990	Undergraduate Individual Study in Statistics	1-4
NTRES 4970	Individual Study in Environmental Social Science and Resource Policy	1-4	STSCI 4999	Undergraduate Dissertation Research	1-4
NTRES 4971	Individual Study in Applied Ecology and Conservation Ecology	1-4	SYSEN 5500	Systems Modeling Language: Fundamentals and Practice	2
NTRES 4972	Individual Study in Ecosystem Science and Biochemistry	1-4	TAG 4431	Directed Study	1-4
NTRES 4990	Undergraduate Research	1-6	TAG 4432	Directed Study	1-4
ORIE 4990	Teaching in ORIE	1-3	THAI 4431	Directed Study	1-4
ORIE 4999	ORIE Project	1-4	THAI 4432	Directed Study	1-4
PHIL 3900	Independent Study	1-3	URDU 4431	Directed Study	1-4
			URDU 4432	Directed Study	1-4

VIEN 4970	Individual Study in Viticulture and Enology	0.5-3
VIEN 4990	Undergraduate Research in Viticulture and Enology	1-3
VIET 4431	Directed Study	1-4
VIET 4432	Directed Study	1-4
VTPMD 2990	Undergraduate Research in Epidemiology	1-3