

# CIS NONCIS ELECTIVE (EMCI)

Code	Title	Course Units
AMCS 5141	Advanced Linear Algebra	1
AMCS 5461	Advanced Applied Probability	1
AMCS 5840	The Mathematics of Medical Imaging and Measurement	1
ARCH 7250	Design Thinking	1
BE 5210	Brain-Computer Interfaces	1
BE 5300	Theoretical and Computational Neuroscience	1
BE 5840	The Mathematics of Medical Imaging and Measurement	1
BIOL 5536	Fundamentals of Computational Biology	1
BIOL 5860	Mathematical Modeling in Biology	1
BSTA 5500	Applied Regression and Analysis of Variance	1
CIS 5360	Fundamentals of Computational Biology	1
CRIM 6002	Criminal Justice Data Analytics	1
EAS 5070	Intellectual Property and Business Law for Engineers	1
EAS 5100	Technical Communication and Academic Writing for Non-native Speakers of English	1
EAS 5120	Engineering Negotiation	1
EAS 5450	Engineering Entrepreneurship I	1
EAS 5460	Engineering Entrepreneurship II	1
EAS 5900	Commercializing Information Technology	1
EAS 5950	Foundations of Leadership	1
ECON 6100	Microeconomic Theory	1
ECON 6110	Game Theory and Applications	1
ECON 7100	Microeconomic Theory I	1
ECON 7110	Microeconomic Theory II	1
EDUC 5100	Experimental Course (Teaching, Learning, and Leadership)	1
EDUC 5271	Technology in Language Education	1
EDUC 5272	Selected Topics in ELX: Conversation Analysis for Second Language Teaching and Research	1
EDUC 5273	Selected Topics in ELX: Task Based Language Teaching	1
EDUC 5299	TESOL Classroom Fundamentals	1
EDUC 6577	EdTech and International Development	1
ENGR 5400	Engineering Economics	1
ENM 5020	Numerical Methods and Modeling	1
ENM 5030	Introduction to Probability and Statistics	1
ENM 5400	Topics In Computational Science and Engineering	1
ESE 5050	Feedback Control Design and Analysis	1
ESE 5070	Introduction to Networks and Protocols	1
ESE 5190	Smart Devices	1
ESE 5300	Elements of Probability Theory	1
ESE 5310	Digital Signal Processing	1
ESE 5320	System-on-a-Chip Architecture	1
ESE 5350	Electronic Design Automation	1
ESE 5400	Engineering Economics	1
ESE 5420	Statistics for Data Science	1
ESE 5450	Data Mining: Learning from Massive Datasets	1
ESE 5460	Principles of Deep Learning	1
ESE 6050	Modern Convex Optimization	1
ESE 6500	Learning in Robotics	1
ESE 6760	Coding Theory	1
ESE 6800	Special Topics in Electrical and Systems Engineering	1
FNCE 7170	Financial Derivatives	1
FNCE 7250	Fixed Income Securities	1
FNCE 7380	Capital Markets	0.5-1
FNCE 8920	Financial Engineering	1
G AFL 5310	Data Science for Public Policy	1
GCB 5360	Fundamentals of Computational Biology	1
IPD 5150	Product Design	1
IPD 5190	Smart Devices	1
IPD 5450	Engineering Entrepreneurship I	1
IPD 5720	Design Thinking	1
LAW 5770	Internet Law	3
LING 5150	Dynamics of Language	1
LING 5250	Computer Analysis and Modeling of Biological Signals and Systems	1
MATH 5000	Topology	1
MATH 5020	Abstract Algebra	1
MATH 5080	Advanced Analysis	1
MATH 5130	Computational Linear Algebra	1
MATH 5140	Advanced Linear Algebra	1
MATH 5300	Mathematics of Finance	1
MATH 5460	Advanced Applied Probability	1
MATH 5700	Logic and Computability 1	1
MATH 5710	Logic and Computability 2	1
MATH 5800	Combinatorial Analysis	1
MATH 5810	Topics in Combinatorial Theory	1
MATH 5840	The Mathematics of Medical Imaging and Measurement	1
MATH 5861	Mathematical Modeling in Biology	1
MEAM 5100	Design of Mechatronic Systems	1
MEAM 5130	Feedback Control Design and Analysis	1
MEAM 5200	Introduction to Robotics	1
MEAM 6200	Advanced Robotics	1
MEAM 6460	Computational Mechanics	1
MKTG 7760	Applied Probability Models in Marketing	1
NGG 5210	Brain-Computer Interfaces	1
NGG 5940	Theoretical and Computational Neuroscience	1
NPLD 7920	Social Entrepreneurship	1
NRSC 5585	Theoretical and Computational Neuroscience	1
OIDD 5150	Product Design	1

OIDD 6530	Mathematical Modeling and its Application in Finance	0.5,1
OIDD 9100	Linear Optimization	0.5
OIDD 9340	Dynamic Programming and Stochastic Models	0.5
OIDD 9500	Perspectives on Information Systems	1
PHIL 6721	Logic and Computability 1	1
PHIL 6722	Logic and Computability 2	1
PHYS 5585	Theoretical and Computational Neuroscience	1
PSYC 5390	Theoretical and Computational Neuroscience	1
PSYC 6110	Applied Regression and Analysis of Variance	1
SOCI 6002	Criminal Justice Data Analytics	1
STAT 5000	Applied Regression and Analysis of Variance	1
STAT 5100	Probability	1
STAT 5110	Statistical Inference	1
STAT 5120	Mathematical Statistics	1
STAT 5200	Applied Econometrics I	1
STAT 5330	Stochastic Processes	1
STAT 5420	Bayesian Methods and Computation	1
STAT 5710	Modern Data Mining	1
STAT 7010	Modern Data Mining	1
STAT 7050	Statistical Computing with R	0.5
STAT 7110	Forecasting Methods for Management	1
STAT 7700	Data Analytics and Statistical Computing	1
STAT 7760	Applied Probability Models in Marketing	1
STAT 9280	Statistical Learning Theory	1
STAT 9910	Seminar in Advanced Application of Statistics	0.5-1