Interdisciplinary Graduate Concentration in Transformational Innovation and Design – Course Matrix

	ENVISION - Problem Framing and Contextualization	SHAPE - Conceptualization, Exploration and Development	PURSUE - Trial, Adoption, and Impact Realization
Theory	ZONE 1	ZONE 2	ZONE 3
	ANTH 50500 - Culture and Society ANTH/COM 50700 - Theory in Sociocultural Anthropology ANTH 51900 - Introduction to Semiotics ANTH E4570 - Ethnic Identity CE59801 - Breakthrough Thinking for Complex Challenges COM 56500/LING 56500 – Sociolinguistics ENE 55400 - Introduction to Globalization and Engineering ENE 62000 - Design, Cognition, and Learning IE / PSY 57700 - Human Factors in Engineering LC 57000 - Introduction to Semiotics SYS 50000 - Perspectives on Systems	AAE 56000 - Systems-of-Systems Modelling and Analysis AD 53200 – Cognition in Design CGT 56200 - Cognition and Human-Computer Interaction EDCI 52800 - Human Performance Technology EDCI 53100 - Learning Theories and Instructional Design ENE 62000 - Design, Cognition, and Learning SYS 50000 - Perspectives on Systems TECH 53300 - Design Theory and Technology TLI 62500 - Research in Open Innovation I	AAE 55000 - Multidisciplinary Design Optimization COM 51800 - Theories of Persuasion COM 57400 - Organizational Communication ECON 51000 - Game Theory IE 64600 - Advanced Decision Theory MGMT 65000 - Strategic Management MGMT 65500 - Competitive Strategy PSY 64200 - Social Influence

Methods	ZONE 4	ZONE 5	ZONE 6
	ANTH 64000 - Foundations and Frameworks: Applying Anthropology ANTH 64100 - Discovery and Design: Making Projects Work CNIT 58100 - Natural Language Technologies COM 60411 – Seminar in Communication Methods CS 57300 - Data Mining ECON 58500 - Behavioral Economics IE 59000 - Nature Inspired Computing (this title only) MGMT 57100 - Data Mining SOC 68000 - Advanced Social Research Methods	AAE 55000 - Multidisciplinary Design Optimization AAE 56000 - Systems-of-Systems Modelling and Analysis AD 51200 - Interaction Design Studies AD 52200 - Interaction Design Evaluation CGT 51600 - Collaborative Virtual and Augmented Environments IDE 48400 - Multidisciplinary Engineering Design Methodology* IE 48600 - Work Analysis & Design II IE 58100 - Simulation Design and Analysis IE 59000 - Nature Inspired Computing (this title only) ME 44400 - Computer-Aided Design and Prototyping ME 55700 - Design for Manufacturability MGMT 52200 - New Product Development MGMT 65700 – Manufacturing Strategy and Process Innovation MGMT 67000 - Business Analytics STAT 52900 - Applied Decision Theory and Bayesian Statistics SYS 51000 - Tools and Methodologies for Designing Systems	AAE 55000 - Multidisciplinary Design Optimization ABE 62600 - Life of A Faculty Entrepreneur; Discovery, Delivery, Translation CE59601 - Entrepreneurship and Business Strategy in Engineering CS / ECE 66200 - Pattern Recognition and Decision-Making Processes CSR 68200 - Analytical Tools for Consumer Economists ECON 58500 - Behavioral Economics IE 54600 - Economic Decisions in Engineering MGMT 62000 – Marketing Management MGMT 62200 - Marketing Strategy MGMT 63800 - Pricing Strategies and Analysis MGMT 65700 - Manufacturing Strategy and Process Innovation MGMT 67000 - Business Analytics STAT 52900 - Applied Decision Theory and Bayesian Statistics

Experience	ZONE 7	ZONE 8	ZONE 9
	IE 58000 - Systems Simulation POL 60500 - Research Design and Methods	AD 54200 - Information Visualization Design AD 60500 - Problems in Industrial Design ENGR 50000 - Global Design Team V ME 44400 - Computer-Aided Design and Prototyping ME 55300 - Product and Process Design MGMT 65200 – Entrepreneurship MGMT 68700 - - Design for Instincts - Social Networks and Engagements SYS 53000 - Practical Systems Thinking	CE59601 - Entrepreneurship and Business Strategy in Engineering CE59801 - Breakthrough Thinking for Complex Challenges ECON 62100 - Applied Industrial Organization MGMT 69000 - ELI Corporate Consulting (this title only)

*5 week accelerated course