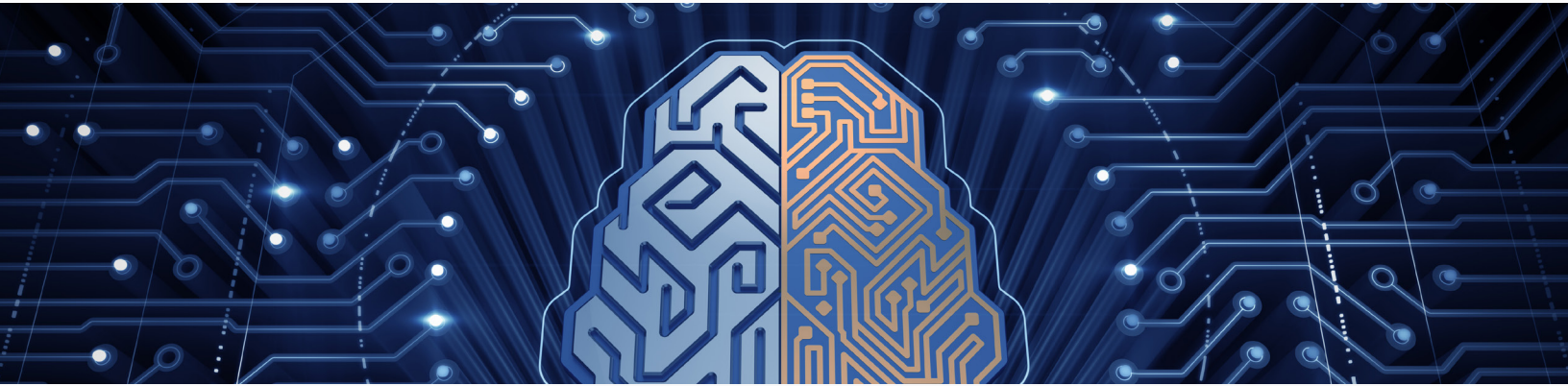


MASTER OF SCIENCE IN ELECTRICAL ENGINEERING

MACHINE LEARNING & ARTIFICIAL INTELLIGENCE



Welcome to the age of machine learning/AI where algorithms can paint pictures rivaling the greatest artists, dream and imagine new worlds and paradigms, design medicine and new diagnostics to detect and cure the most difficult ailments and revolutionize the ways in which we travel and communicate with each other.

ML/AI specialists are now the most sought after engineers with top salaries reshaping the 21st century. Join our graduate program to witness, learn and participate in the cutting-edge research our faculty does in machine learning and AI from fundamentals to their applications in cybersecurity, smart cities, smart agriculture, robotics and digital communications.



Dr. Kwang-Cheng Chen
Professor

Research
AI and Robotics



Dr. Mahshid Rahnamay Naeini
Assistant Professor

Research
Cyberphysical Systems
and Smart Cities

Dr. Ravi Sankar
Professor

Research
Speech and Signal
Processing



Dr. Ismail Uysal
Associate Professor

Research
Deep Learning, IoT Sensor
Applications



Dr. Yasin Yilmaz
Assistant Professor

Research
Data Analytics, Probabilistic Machine
Learning

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING (MSEE)

MACHINE LEARNING & ARTIFICIAL INTELLIGENCE TRACK* OPTIONS

Course Title	Number	Credits	Semester	Grade
1. Math Common Core: (4 hours - both required)				
Random Process in Electrical Engineering	EEE 6542	2		
Linear and Matrix Algebra	EEL 6029	2		
2. Concentration Requirements: (14 hours)				
a. Track Math (1 required)				
Applied Optimization	EEL 6020	2		
Statistical Inference	EEL 6021	2		
b. Track Core (4 required)				
Deep Learning	EEL 6935	3		
Data Analytics	EEE 6777	3		
Advanced Data Analytics	EEL 6935	3		
Robotics and AI	EEL 6935	3		
AI in Cyberphysical Systems	EEL 6935	3		
3. Electives: (6 / 9 required for Thesis / Non-Thesis)				
<i>Any of the remaining courses from Track Core</i>				
Cryptography and Data Security	EEL 6935	3		
Network Science	EEL 6935	3		
Data Networks, Systems, and Security	EEL 6808	3		
Digital Signal Processing I	EEE 6502	3		
Speech Signal Processing	EEE 6586	3		
Biomedical Image Processing	EEE 6514	3		
Biom. Systems and Pattern Recognition	EEE 6282	3		
Biom. Optical Spectroscopy and Imaging	EEE 6217	3		
4. Thesis/Non-Thesis (Course Work) Options:				
<i>Thesis Option: 6 to 9 hours</i>				
<i>Non-Thesis Option: Combined total of 6 hours of additional electives, independent study, internship, project or out of department courses.</i>				
* Tracks are for student benefit only. They will not show on transcripts or diplomas.		Total Credits Outside Dept.		
		Total Credits Indep. Study		
		Total Credits (30 required)		