Table of Curriculum(Graduate Program)

Classification	Course No.	Code	Course Name	Credit(s) (Homework)	Semester	Remark
Elective Major Courses	AI495	F2.495	Individual Study	0:6:1	Spring, Summer Fall, Winter	
	AI501	F2.501	Machine Learning for AI	3:0:3	Spring or Fall	◎
	AI502	F2.502	Deep Learning	3:0:3	Spring or Fall	
	AI503	F2.503	Mathematics for AI	3:0:3	Spring or Fall	
	AI504	F2.504	Programming for AI	3:0:3	Spring or Fall	
	AI505	F2.505	Optimization for AI	3:0:3	Spring or Fall	◎
	AI506	F2.506	Data Mining and Search	3:0:3	Spring or Fall	◎
	AI507	F2.507	Stochastic Process for AI	3:0:3	Spring or Fall	
	AI508	F2.508	Introduction to Autonomous Vehicles	3:0:3	Spring or Fall	
	AI599	F2.599	Special Topics in Machine Learning	3:0:3	Spring or Fall	◎
	AI601	F2.601	Advanced Machine Learning for AI	3:0:3	Spring or Fall	
	AI602	F2.602	Advanced Deep Learning	3:0:3	Spring or Fall	
	AI603	F2.603	Machine Learning Theory	3:0:3	Spring or Fall	
	AI604	F2.604	Deep Learning for Computer Vision	3:0:3	Spring or Fall	
	AI605	F2.605	Deep Learning for Natural Language Processing	3:0:3	Spring or Fall	
	AI606	F2.606	Recommender Systems	3:0:3	Spring or Fall	
	AI607	F2.607	Graph Mining and Social Network Analysis	3:0:3	Spring or Fall	
	AI608	F2.608	AI-based Time Series Analysis	3:0:3	Spring or Fall	
	AI609	F2.609	Parallel and Distributed Computation for AI	3:0:3	Spring or Fall	
	AI610	F2.610	Sequential Decision Making under Uncertainty	3:0:3	Spring or Fall	
	AI611	F2.611	Deep Reinforcement Learning	3:0:3	Spring or Fall	
	AI612	F2.612	Machine Learning for Healthcare	3:0:3	Spring or Fall	
	A613	F2.613	Musical Applications of Machine Learning	3:0:3	Fall	◉GCT634
	AI614	F2.614	Robot Task and Motion Planning	3:0:3	Spring or Fall	
	AI615	F2.615	Information Theory	3:0:3	Fall	◉EE623
	AI616	FS.616	Deep Learning Theory	3:0:3	Spring or Fall	
	AI617	FS.617	Machine Learning for Robotics	3:0:3	Spring or Fall	
	AI618	FS.618	Generative Model and Unsupervised Learning	3:0:3	Spring or Fall	
	AI619	FS.619	AI for medical imaging and signals	3:0:3	Spring or Fall	
	AI620	FS.620	Bias and Ethics in Natural Language Processing	3:0:3	Spring or Fall	
	AI621	FS.621	Computational Image Generation and Manipulation	3:0:3	Spring or Fall	
	AI622	FS.622	3D Vision	3:0:3	Spring or Fall	
	AI623	FS.623	Mathematical Analysis for AI	3:0:3	Spring or Fall	
	AI624	FS.624	Information Retrieval for AI	3:0:3	Spring or Fall	
	AI701	F2.701	Bayesian Machine Learning	3:0:3	Spring or Fall	
	AI702	F2.702	Interpretability and Interactivity in AI	3:0:3	Spring or Fall	
	AI703	F2.703	Systems and Applications of Artificial Intelligence and Machine Learning	3:0:3	Spring	
	AI704	F2.704	Embodied Intelligence	3:0:3	Spring or Fall	
	AI705	F2.705	Large Language Models	3:0:3	Spring or Fall	
	AI706	F2.706	Bayesian nonparametric methods for machine learning	3:0:3	Spring or Fall	
	AI707	F2.707	Advanced Topics in Deep Reinforcement Learning	3:0:3	Spring or Fall	
	AI708	F2.708	Bayesian deep learning	3:0:3	Spring or Fall	
	AI709	F2.709	Advanced Deep Learning Theory	3:0:3	Spring or Fall	
	AI810	F2.810	Special Topics in Artificial Intelligence	3:0:3	Spring, Summer Fall, Winter	

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Classification	Course No.	Code	Course Name	Credit(s) (Homework)	Semester	Remark
Research	AI960	F2.960	M.S. Thesis Research		Spring and Fall	
	AI966	F2.966	M.S. Seminar	1:0:1	Spring and Fall	
	AI980	F2.980	Ph.D. Thesis Research		Spring and Fall	
	AI986	F2.986	Ph.D. Seminar	1:0:1	Spring and Fall	

◎: A Course mutually recognized by undergraduate and graduate programs.

◉: Alternative courses

Course No.	Course Name	Alternative courses	
		Course No.	Course Name
AI615	Information Theory	EE623	Information Theory
AI613	Musical Applications of Machine Learning	GCT634	Musical Applications of Machine Learning