❒ Undergraduate Course

Section	Subject	Subject Name	L:E:C(H)	Professor	Semester
Major required	NQE201	Fundamentals of Nuclear and Quantum Science	3:0:3(4)	Sung Min Choi	Spring
	NQE202	Fundamentals of Nuclear Engineering	3:0:3(4)	Changheui Jang	Spring
	NQE204	Interaction of Radiation with Matters	3:0:3(6)	Sung Oh Cho	Fall
	NQE301	Nuclear Reactor Theory	3:0:3(6)	Nam Zin Cho	Spring
	NQE303	Radiation Measurement Experiments	2:3:3(6)	Gyuseong Cho	Fall
	NQE401	System Engineering of Nuclear Power Plants and Experiments	3:3:4(6)	Hee Cheon No	Spring
	NQE402	Nuclear and Quantum Engineering Design Project	1:6:3(4)	Soon Heung Chang Yong Hoon Jeong	Fall
Major electives	NQE221	Introduction to Nuclear Thermal Hydraulics	3:0:3(4)	Jong H.KIM	Fall
	NQE272	Introduction to Medical Physics	3:0:3(4)	Gyuseong Cho	Spring
	NQE281	Energy, Environment and Water	3:0:3(4)	Yong Hoon Jeong	Spring
	NQE311	Numerical Methods and Computer Simulation	3:0:3(6)	Nam Zin Cho	Fall
	NQE331	Nuclear I&C and Experiments	2:3:3(4)	Poong Hyun Seong	Spring
	NQE341	Nuclear Chemistry	3:0:3(4)	Jongil Yun	Spring
	NQE351	Nuclear Materials Engineering and Experiment	3:3:3(4)	Changheui Jang	Fall
	NQE363	Fundamentals of Neutron and X-ray Science	3:0:3(6)	Sung Min Choi	Fall
	NQE373	Interaction to Radiation Biology	3:0:3(4)	C. L. Sanders	Spring
	NQE381	Introduction to Neutron and NMR Spectroscopy	3:0:3(6)	Sung Min Choi	Fall
	NQE441	Environmental Engineering of Nuclear Power	3:0:3(4)	Kun Jai Lee	Fall
	NQE461	Monte Carlo Methods and Applications	3:0:3(6)	Nam Zin Cho	Fall
	NQE481	Introduction to Nuclear Fusion Engineering	3:0:3(4)	Won Ho Choe	Spring
	NQE484	Writing English Essays for Engineers	3:0:3(4)	C. L. Sanders	Spring
	NQE485	Special Topics and Nuclear and Quantum Engineering Ⅰ	1:0:1(4)	Professor	Spring, Summer,Fall
	NQE488	Special Topics and Nuclear and Quantum Engineering Ⅰ	2:0:2(4)	Professor	Spring, Summer,Fall
	NQE489	Special Topics in Nuclear and Quantum Engineering Ⅱ	3:0:3(6)	Professor	Spring Summer,Fall
Research	NQE490	B.S. Thesis Research	0:6:3	Professor	Spring,Fall
	NQE495	Independent Research	0:6:1	Professor	Spring,Fall
	NQE496	Seminar	1:0:1	Professor	Spring,Fall

❒ Graduate Course

Section		Subject	Subject Name	L:E:C(H)	Professor	Semester
Mandatory General	Mandatory	CC010	Leadership	1:0:0		Fall
		CC020	Ethics, Safety and Leadership	1AU		Spring,Fall
	Choose 1	CC500	Scientific Writing in English	3:0:3		Spring,Fall
		CC510	Introduction to Computer Applications	2:3:3		Spring,Fall
		CC511	Probability Statistics	2:3:3		Spring,Fall
		CC512	Introduction to Materials Science and and Engineering	3:0:3		Spring,Fall
		CC513	Engineering Economics and Cost Analysis	3:0:3		Fall
		CC522	Introduction to Instruments	2:3:3		Fall
		CC530	Enterpreneurship and Business Strategies	3:0:3		Fall
		CC531	Patent Analysis and Invention Disclosure	3:0:3		Spring,Fall
		CC532	Collaborative System Design and Engineering	4:0:4		Fall
Major electives		NQE511	Nuclear Reactor Kinetics	3:0:3(3)	Nam Zin Cho	Fall
		NQE512	Nuclear Reactor Analysis and Design	3:0:3(6)	Nam Zin Cho	Spring
		NQE513	Neutron and Quantum Particle Transport Theory and Computation	3:0:3(6)	Nam Zin Cho	Spring
		NQE520	Nuclear Reactor Engineering	3:0:3(6)	Moon Hyun Chun	Fall
		NQE521	Nuclear Thermal-Hydraulics I	3:0:3(6)	Moon Hyun Chun	Spring
		NQE522	Nuclear Power Plant Design Project	3:0:3(6)	Soon Heung Chang	Spring,Fall
		NQE523	Nuclear Reactor Safety I	3:0:3(6)	Soon Heung Chang	Spring,Fall
		NQE524	Simulation of Nuclear and Quantum System	3:0:3(6)	Soon Heung Chang	Spring,Fall
		NQE525	Nuclear System Design Course	3:0:3(4)	Professor	Fall
		NQE526	Quantum and Micro Energy Transport	3:0:3(6)	Soon Heung Chang	Fall
		NQE527	Gas-cooled Reactors and Hydrogen	3:0:3(6)	Hee Cheon No	Fall
		NQE528	Introduction to Risk and Reliability Engineering	3:0:3(6)	Jong H. KIM	Spring
		NQE529	Nuclear System Design Course	3:0:3(4)	Professor	Fall
		NQE532	Nuclear and Quantum Instrumentation Systems	3:1:3(6)	Poong Hyun Seong	Spring,Fall
		NQE534	Nuclear and Quantum Control Systems	3:1:3(6)	Poong Hyun Seong	Spring,Fall
		NQE540	Nuclear Chemical Engineering	3:0:3(6)	Kun Jai Lee	Spring
		NQE541	Radioactive Waste Management	3:0:3(6)	Kun Jai Lee	Fall
		NQE542	Chemistry of Actinides	3:0:3(6)	Jong Il Yun	Fall
		NQE551	Nuclear Materials	3:0:3(6)	In Sup Kim	Fall
		NQE552	Integrity of Nuclear Structural Materials	3:0:3(6)	Changheui Jang	Spring
		NQE561	Radiation Measurement Systems	3:0:3(6)	Gyuseong Cho	Spring,Fall
		NQE562	Radiation Protection and Dosimetry	3:0:3(6)	Gyuseong Cho	Spring
		NQE563	Radiation Biology	3:0:3(4)	C. L. Sanders	Spring,Fall
		NQE571	NMR Engineering	3:1:3(6)	Sung Min Choi	Spring,Fall
		NQE572	Neutron Optics	3:0:3(6)	Sung Min Choi	Spring,Fall

※ 500 unit courses are mutually recognizable between bachelor's and master's course

Section	Subject	Subject Name	L:E:C(H)	Professor	Semester
Major electives	NQE575	Nuclear Energy Policy	3:0:3(6)	Byung Whi Lee	Fall
	NQE581	Nuclear Fusion Engineering	3:0:3(6)	Professor	Spring
	NQE582	Applied Plasma Engineering	3:0:3(6)	Professor	Fall
	NQE583	Engineering of Charged Particle Beams	3:0:3(6)	Sung Oh Cho	Fall
	NQE585	Introduction to Nuclear Safety Regulation	3:0:3(4)	Professor	Fall
	NQE586	Safety Regulation for Nuclear Installations	3:0:3(4)	Professor	Spring
	NQE587	Radiation Safety and Emergency Preparedness	3:0:3(4)	Professor	Summer
	NQE588	Advanced Design Project 1 for Nuclear and Quantum Engineering	0:9:3	Professor	Spring
	NfQE589	Advanced Design Project 2 for Nuclear and Quantum Engineering	0:9:3	Professor	Fall
	NQE595	Technical Writing in Nuclear and Quantum Engineering	3:0:3(4)	C. L. Sanders	Fall
	NQE597	Special Topics in Nuclear and Quantum Engineering III	1:0:1(4)	Professor	Spring Summer,Fall
	NQE598	Special Topics in Nuclear and Quantum Engineering Ⅰ	2:0:2(4)	Professor	Spring Summer,Fall
	NQE599	Special Topics in Nuclear and Quantum Engineering Ⅱ	3:0:3(4)	Professor	Spring Summer,Fall
	NQE623	Nuclear Reactor Safety II	3:0:3(6)	Soon Heung Chang	Fall
	NQE625	Numerical Methods in Reactor Engineering Analysis	3:2:3(6)	Soon Heung Chang	Spring,Fall
	NQE631	Nuclear and Quantum Instrumentation and Control Design	2:3:3(6)	Poong Hyun Seong	Spring,Fall
	NQE653	Nuclear Reactor Fuel Elements	3:0:3(6)	In Sup Kim	Spring
	NQE675	Special Topics in Nuclear Energy Policy	3:0:3(6)	Professor	Fall
	NQE726	Special Topics in Nuclear Safety Analysis	2:3:3(6)	Hee Cheon No	Fall
	NQE727	Special Topics in Probabilistic Risk Assessment	2:0:2(4)	Soon Heung Chang	Spring,Fall
	NQE735	Special Topics in Information Engineering for Nuclear and Quantum Applications	2:3:3(4)	Poong Hyun Seong	Spring,Fall
Research	NQE960	M.S. Thesis Research		Professor	Spring,Fall
	NQE965	M.S. Independent Research		Professor	Spring,Fall
	NQE966	M.S. Seminar	1:0:1	Professor	Sprin,Fall
	NQE980	Ph.D. Thesis Research		Professor	Spring,Fall
	NQE986	Ph.D. Seminar	1:0:1	Professor	Spring,Fall

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