

강좌번호 Course No.	409.202	001	Title	핵공학개론2 Introduction to Nuclear Engineering 2	credit	3
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담당교수 Instructor	Name: Kyoung-Jae Chung (Associate Professor) Department of Nuclear Engineering	Homepage :
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	Office Hours : Any time but prior appointment recommended	

강의목표 Objective	Students will get broad knowledge on nuclear engineering related to fusion, plasma and radiation engineering.
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교재 Textbook and references	<p>Radiation engineering</p> <p>A. Waltar, Radiation and Modern Life: Fulfilling Marie Curie's Dream, Prometheus Books (2004)</p> <p>C. Grupen and M. Rodgers, Radioactivity and Radiation, Springer (2016)</p> <p>J. Shultis and R. Faw, Fundamentals of Nuclear Science and Engineering, CRC Press (2016)</p> <p>N. Tsoufanidid and S. Landsberger, Measurement and Detection of radiation, CRC Press (2015)</p> <p>Plasma engineering</p> <p>Plasma Science: Advancing Knowledge in the National Interest, The National Academic Press (2007)</p> <p>F. Chen, Introduction to Plasma Physics and Controlled Fusion, Springer (2016)</p> <p>Fusion engineering</p> <p>G. McCracken and P. Stott, Fusion: The Energy of the Universe, Elsevier (2005)</p> <p>F. Chen, An Indispensable Truth, Springer (2011)</p>
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평가방법 Evaluation	Participation	Home Assignment	Mid-term Exam	Final Exam		Sum
	10 %	10 %	40 %	40 %		100%
	비고					

수강생 참고사항 Note to the students	
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부정행위자에 대한 처리 Note about Plagiarism	<ul style="list-style-type: none"> - Plagiarism is strictly prohibited. - Home assignments must include 'statement of originality'.
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강의 계획 Schedule	주(기간)	강의내용
	week 1 9/4, 6	Introduction
	week 2 9/11, 13	Radiation and radioactivity
	week 3 9/18, 20	Radiation interaction with matter
	week 4 9/27, 10/2	Radiation source technology
	week 5 10/4, 11	Detection and measurement of radiation
	week 6 10/16, 18	Radiation dose and hazard assessment
	week 7 10/23, 25	Radiation applications Mid-term exam (10/25)
	week 8 10/30, 11/1	Basic concepts of plasmas
	week 9 11/6, 8	Plasma and sheath
	week 10 11/13, 15	Plasma source technology
	week 11 11/20, 22	Plasma applications
	week 12 11/27, 29	Fusion energy
	week 13 12/4, 6	Various fusion concepts
	week 14 12/11, 13	Tokamaks
week 15 12/18	Final Exam (12/18)	