

과목명	확률과정론	과목번호	ELEC743002	학점	3.0
개설대학	전자공학부	개설학기	20171	교과구분	전공
담당교수	진성일	강의시간	수 7A7B8A 금 7A7B8A	강의실명	IT 대학 1 호관(공대 10 호관)713 IT 대학 1 호관(공대 10 호관)713
연락처/E-mail	** 통합정보시스템 로그인- 수업/성적- 수업- "강의담당교수조회"에서				확인 가능함.
면담시간	After the pre-appointment interviews.		강의언어	한국어	

## [ 강의계획서 ]

강의개요 및 목적
<p>This course deals with the theoretical understanding of probability and statistics and its application in engineering areas.</p>
교재 및 참고문헌
<p>Textbook</p> <p>Rod D.Yates and David J. Goodman, Probability and Stochastic Processes, 2nd edition, Wiley, 2005</p> <p>References</p> <p>Dimitri P. Bertsekas and John N. Tsitsiklis, Introduction to Probability, 2002</p> <p>Alberto Leon-Garcia, Probability and Random Processes for Electrical Engineering (2nd edition) Addison-Wesley, 1994</p>
강의진행 방법 및 활용매체
<p>The lecture notes are in PDF files and using beam projector.</p> <p>Video texts will be used, too.</p>
과제, 평가방법, 선수과목
<p>Exam two times(80%), attendance and homework(20%)</p>
수강에 특별히 참고할 사항
<p>This course is mainly for graduate students who did not take this course at undergraduate time or was not good at random variables or processes. Do not take this course if students have strong</p>

undergraduate background about this course.
장애학생을 위한 학습지원 사항

**[ 강의 내용 및 일정 ]**

no	강의 요목 및 수업목표	과제 및 연구문제	교재 및 참고자료	비고
1	Set Theory, Probability Axioms, and Some Consequences of the Axioms.			
2	Conditional Probability and Independence.			
3	Discrete Random Variables : PMF and CDF			
4	Discrete Random Variables : Variance and Standard Deviation.			
5	Continuous Random Variables : CDF, PDF, and Gaussian RV's			
6	Pairs of Random Variables : Joint CDF and Marginal PMF and PDF			
7	Pairs of Random Variables : Conditioning and Bivariate Gaussian Random Variables			
8	MID-TERM EXAM			
9	Random Vectors : Expected Value Vector and Correlation Matrix.			
10	Random Vectors : Gaussian Random Vectors.			
11	Sums of Random Variables : Moment Generating Function.			
12	Parameter Estimation Using The Sample Mean.			
13	Point Estimation and Confidence Interval. Random Process1			
14	Random Process2		Video Texts	
15	FINAL EXAM			

수험부정행위시, 경북대학교 수험부정행위에관한처벌규정에 의거 그 정상에 따라 수험자격박탈, 근신, 유기·무기정확, 또는 제적 처분될 수 있으니, 각별히 유의하여 주시기 바랍니다.