

## 과목명 | 공학수학 I (1반)

### 공학수학 I 수업계획서

수업계획서 복사

소속 / 분류	본교 / 오프라인
강의소개	
수업목표	To understand engineering math
수업진행방법	Lecture and recitation 1 session / week (total 2 hours/week and total 15 weeks including midterm and final exam) online
중요교재및 문헌	TBA,TBA
학습평가	과제5,출석10,기타15,시험(중간)30,시험(기말)40

평가기준 설정 인쇄하기

학습목표 및 목차		
주차	강의주제	강의내용 및 성취수준
1 -1	Elementary operations, geometry of linear equations	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
2 -1	Gauss-elimination, rules for matrix operations	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
3 -1	Inverse matrices, LU decomposition, transposes	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
4 -1	Permutations, determinants, Cramer's rule	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
5 -1	Linear vector spaces	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
6 -1	Rank and echelon form , solving $Ax=0$ and $Ax=b$	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
7 -1	Solving $Ax=b$ , independence, spanning sets and basis	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
8 -1	Midterm (1-6 week)	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
9 -1	Dimensions of four fundamental subspaces, orthogonal vector and subspaces	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
10 -1	Projections onto subspaces, projection matrices	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
11 -1	Least-square solution of unsolvable systems	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
12 -1	Orthogonal bases, Gram-Schmit orthogonalization	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
13 -1	Linear transformation, eigenvalues and eigenvectors, characteristic equation	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
14 -1	Diagonalization, summary	Video lecture ( <a href="http://ecampus.ut.ac.l">http://ecampus.ut.ac.l</a> )
15 -1	Finals (1-14 week)	
16 -1		
17 -1		