2021 - 2022 ACADEMIC YEAR SPRING SEMESTER
SYLLABUS

COURSE CODE AND TITLE	ECE 530 Advanced Computer Architecture IT 531 Computer Architecture
TEACHING MEMBER	Prof. Dr. Hasan Huseyin Balik
GRADING PROCEDURE	
TEXT BOOK	1-Computer Organization and Architecture Designing for Performance, 11th Edition (William Stallings) 2-The Essentials of Computer Organisation and Architecture, 5th Edition (Linda Null and Lulia Lobur) 3-Advanced Computer Architecture And Parallel Processing (Mostafa Abd-El-Barr & Hesham El-Rewini) 4-The Essentials of Computer Architecture, 2nd Edition (Douglas Comer) 5-Computer Architecture A Quantitative Approach, 6th Edition (John L. Hennessy & David A. Patterson) 6-Computer Organisation Design and Architecture, 5th Edition (Sajjan G. Shiva)
COURSE OUTLINE	1-Overview 2-A Top-Level View of Computer Function and Interconnection 3-Instruction Sets: Characteristics and Functions 4-Instruction Sets: Addressing Modes and Formats 5-Processor Structure and Function 6-Reduced Instruction Set Computers (RISCs) 7-Instruction-Level Parallelism and Superscalar Processors 8-Parallel Processing 9-Multicore Computers 10-Control Unit Operation 11-Microprogrammed Control