

**YEDİTEPE UNIVERSITY
DEPARTMENT OF COMPUTER ENGINEERING**

SEMINAR

TÜBİTAK BİLGEM Integrated Circuit Design and Training Laboratory (TÜTEL) and National Chip Design Activities

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Engineering Building (B-307)

Meeting Link: <https://meet.google.com/kwm-vxbe-ved>

16:00 - 17:00

Abstract

TÜBİTAK BİLGEM TUTEL (Integrated Circuit Design and Training Laboratory) was established to develop Türkiye's national capabilities in integrated circuit and system-on-chip (SoC) design. In this direction, it aims to create an ecosystem that all stakeholders in our country, including researchers, companies, universities and citizens, can benefit from. This talk introduces the mission, infrastructure, and core chip design activities of the TUTEL lab, as well as, the fundamental knowledge on the chip design process. The presentation highlights TUTEL's work on RISC-V-based processors, application-specific accelerators, and secure hardware platforms. Through selected project examples, it demonstrates how TUTEL contributes to building a skilled workforce and a sustainable domestic semiconductor ecosystem for critical national applications.

* Dr. Hasan Erdem Yantır received the Ph.D. degree from The University of California at Irvine, Irvine, CA, USA, in 2018. He is currently a Chief Researcher at the TÜBİTAK-Informatics and Information Security Research Center, Gebze, Kocaeli, Turkey and an Assistant Professor at Istanbul Technical University. Dr. Hasan Erdem Yantır currently serves as technical leader in the chip design projects inside the Integrated Circuit Design and Training Laboratory (TÜTEL). His current research interests include AI accelerator architectures, RISC-V high performance processor architectures, neuromorphic computing, digital IC design, in-memory computing, computer architectures, and reconfigurable computing.