

SKILLS

- **Test and measurement:** USRP, GPS front-end, Signal generators, oscilloscopes, spectrum analyzers
- **Hardware description languages:** VHDL, Verilog, Xilinx Spartan-3
- **High-Level Languages:** C, C++
- **Algorithm development environment:** MATLAB, Simulink, GNU Radio, LabView
- **Other Softwares:** Latex, Modelica, Proteas, Code Composer Studio, Atmega and PIC Studio

MAJOR COURSES

Communication Systems Stream	Digital Signal Processing Stream	Electronics and Control Systems Stream
Digital Communication Principles	Advanced Digital Signal Processing	Digital Control Systems
Stochastic Systems	Digital Wireless Transceiver Design	Feedback Control Systems
Wireless Networks and Standards	Digital Signal Processing	Digital Systems Design
Communication Systems	Signals and Systems	Micro-Electronic Design

COURSE PROJECTS

- **OFDM Transceiver with USRP**
- **GPS satellite acquisition stage on FPGA**
- **NPN MOSFET automatic testing circuit**
- **Autonomous Maze Solver Robot**
- **Earth Map Using Persistence of Vision**

AWARDS

- *Graduated With Distinction*
- *Placed on Dean's Honor List for all semesters*

REFERENCES

- **Dr. Momin Uppal**
Assistant Professor, Department of Electrical Engineering, LUMS
- **Dr. Muhammad Tahir**
Assistant Professor, Department of Electrical Engineering, LUMS
- **Dr. Waqas Majeed**
Assistant Professor, Department of Electrical Engineering, LUMS

Ph.D Texas A&M University
momin.uppal@lums.edu.pk

Ph.D Politecnico Di Torino
tahir@lums.edu.pk

Ph.D Georgia Institute of Technology
waqas.majeed@lums.edu.pk