Engineering @
Middle East Technical University Northern Cyprus Campus

Prof. Dr. Ali Muhtaroğlu
Head of Academic Board of Engineering & Natural Sciences
(Dean)
Faculty Member, Electrical-Electronics Engineering

Fall 2020 Orientation
METU NCC Engineering

- Aerospace Engineering
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Electrical Electronics Engineering
- Mechanical Engineering
- Petroleum and Natural Gas Engineering
METU NCC Engineering

- Encourage student projects
  - Solar car, autonomous machines
  - UAVs, UGVs, ...

- Nurture leadership, involvement, creativity
  - IEEE, ACM, ASME, SPE,
  - TIMOB, T3, Hackathon, conference papers
  - Undergraduate Teaching/Research/Administrative Assistantships

- Connect students to industry projects

Collaborations across disciplines, campuses, countries...
• Requires industry internships to gain practical experience

• Offers:

  Engineering Minor Degrees for those who want to do more...
  * Data Science
  * Digital Electronics
  * Engineering Management
  * Mechatronics
  * Renewable Energy
  * Water Resources
  * Other: Economics, Political Science and International Relations, Psychology

  Engineering Degree Options for those with special interests...
  * Option for All Engineering: Multi-Disciplinary Engineering Design Capstone project
  * Electrical-Electronics Engineering Options: Communications and Microwave Design, Computer Design, Power Electronics and Power Systems Design
  * Computer Engineering Option: Software Engineering

• Provides exchange opportunities with the Main Campus and many prestigious international Universities with bilateral exchange agreements

• [http://ico.metu.edu.tr/overseas-exchange-program](http://ico.metu.edu.tr/overseas-exchange-program)
METU NCC Engineering Sample Projects

- Self-charging Unmanned Aerial Vehicle (UAV) to map regions autonomously and discover routes

- Unmanned Aerial Vehicle (UAV) and base station to search, recognize, and archive members of endangered turtle species in Northern Cyprus (Industry supported)

- Aerodynamic, accurately controlled rocket system design (Industry supported)

- Intelligent Home System

- Unmanned Ground Vehicle (UGV) for Operations in Dangerous Zones (Industry supported)

- Intelligent Health Watch to select Music based on Body Motion

- Camera Based Attendance Capture

- Intelligent Pill Box for Elders (Industry supported)

- Unmanned Ground Vehicle (UGV) to Search and Find Metal Objects
METU NCC IEEE Student Branch wins Region 8 (Europe, Middle East, Africa) Exemplary Student Branch Award in 2018 and 2019

1st Place in Europe in Undergraduate Research Paper Contest by International Society of Petroleum Engineers

Successful organization of “Science is Fun” fair to raise social awareness of scientific approach with local communities
Sample Eng. Undergrad Stories During Study

- IEEE Regional **Exemplary Student Branch Award** 2018 & 19
- Abdullah Alchibabi (2017) and Mohammad Askari (2014) rank 1st at METU and deliver speeches at Graduation Ceremony in Ankara
- Intelligent Street Lighting project becomes a winner in Green Brain

- **Student conference paper wins ‘Best Paper Award’**
- **SCI indexed journal papers** based on senior design projects
  - “Structural Crashworthiness Analysis of a Ladder Frame Chassis Subjected to Full-Frontal and Pole Side Impacts”
  - “A generic framework for optimizing performance metrics by tuning parameters of clustering protocols in WSNs”

- A number of **undergraduate conference papers**
- Oğuz Kazan gets selected for summer internship at CERN, ranks 3rd at METU, completes MS at METU (Ankara), and enrolls to PhD in UC San Diego.
- Hunain Jawed’s movie, has been granted the second prize in “My METU”, a short film/video competition
- **Yasir Yousuf Thara wins Student Paper Contest of SPE Europe Section**
First of its kind in Cyprus
Will be home to many start-up and technology companies
Internships (possibly job opportunities) will be available
Student Support @ METU NCC Programs

**Personal Advising + Automation**
- Accessible Guidance
- and Best of Digital Support

Every student is assigned an academic advisor at the beginning of the year
- Students CANNOT register for semester courses until a face-to-face meeting has taken place
- Open-Door Policy is generally accepted at METU NCC (within mutual respect limits)
Existing infrastructure and tools enabled smooth transition to online education in Spring semester

Expect to do even better in Fall semester, but quality of online instruction also depends on you

Highly Recommended:

• Have a webcam/microphone/speaker setup with good internet connection

• Discipline yourself to follow through with pre-lecture assignments, lectures, and all assessment activities (homeworks, assignments, quizzes...)
More on University Success:

✓ Neither success, nor motivation can prevail in isolation

✓ Work hard to be successful, which will motivate you to work hard to be even more successful
At METU NCC Engineering, we:

- Are aware of today’s engineering challenges
- Aim to provide the best engineering education to our students with METU’s historical discipline, modern labs and digital environment
- Support, appreciate and highly value the contributions and successes of our students

- Offer
  - Design Project schemes to collaborate across disciplines and with industry,
  - Minor degrees and program options to encourage interested students to build further breadth and depth
- Take quality and continuous improvement seriously