

Engineering @ Middle East Technical University Northern Cyprus Campus

Prof. Dr. Ali Muhtarođlu

**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...

METU NCC Engineering

- 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

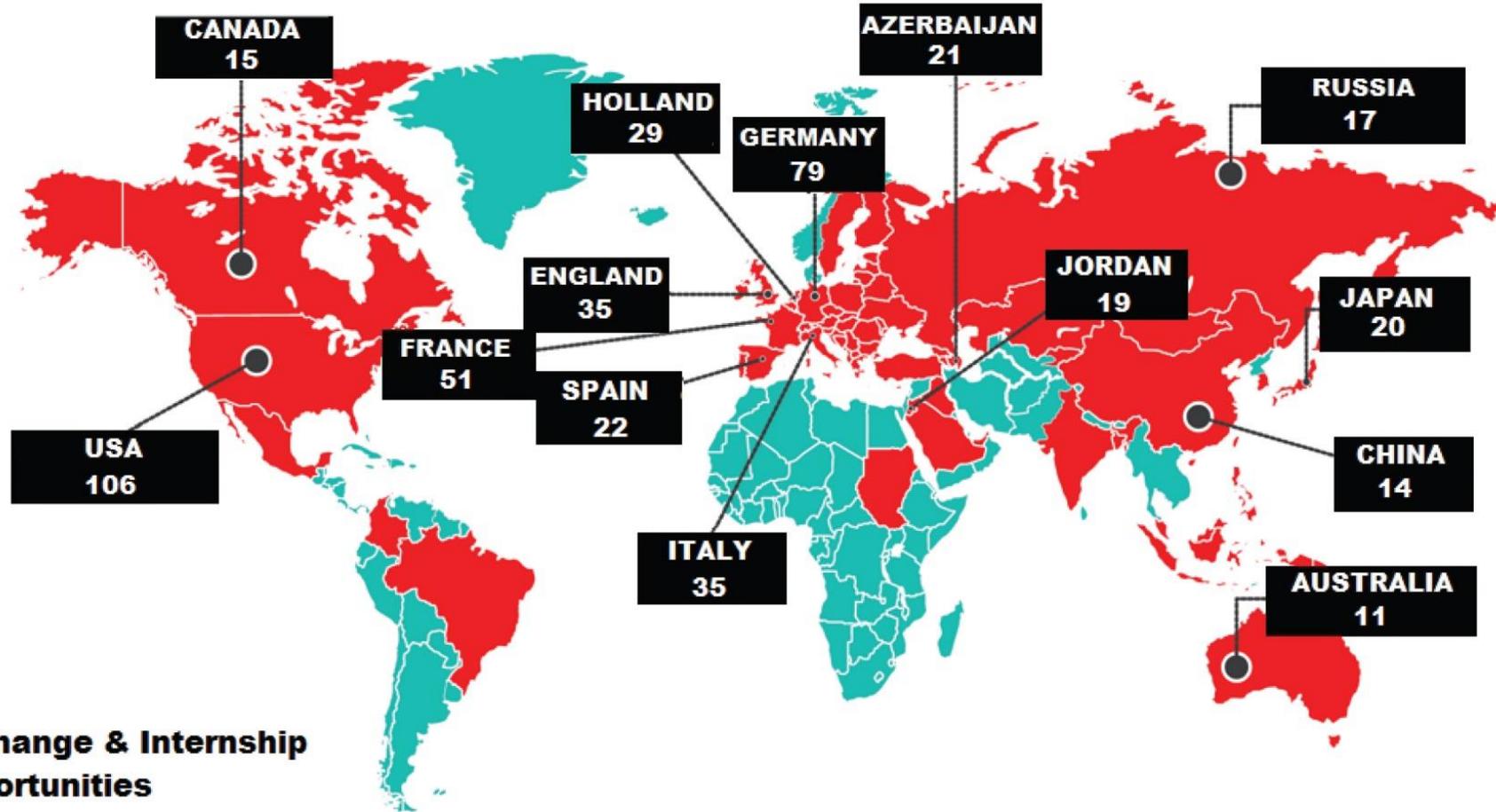


- Provides **exchange opportunities** with the **Main Campus** and **many prestigious international Universities** with bilateral exchange agreements

- <http://ico.metu.edu.tr/overseas-exchange-program>

Exchange Opportunities

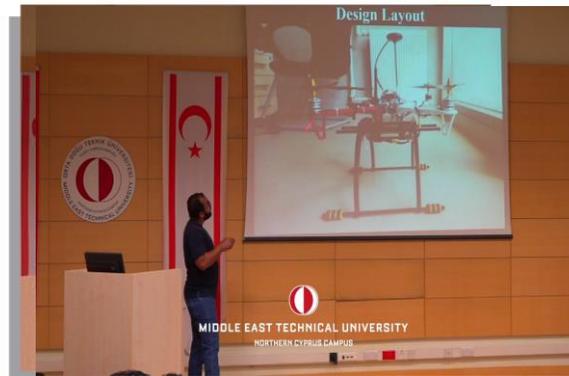
808 Exchange Agreements around the World



Exchange & Internship Opportunities

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 Student Societies – Recent Success Stories...

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



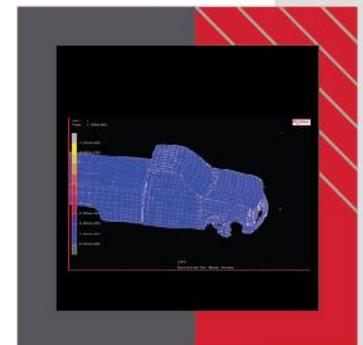
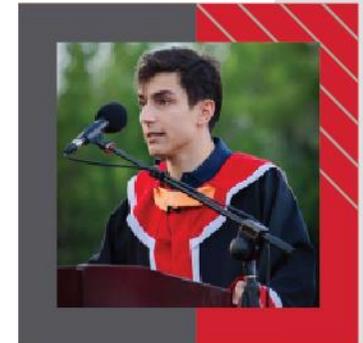
Sample Eng. Undergrad Stories During Study

- 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





ODTÜ KALTEV

Orta Doğu Teknik Üniversitesi | Middle East Technical University
Kalkanlı Teknoloji Vadisi | Kalkanlı Technology Valley

First of its kind in Cyprus

Will be home to many start-up and technology companies

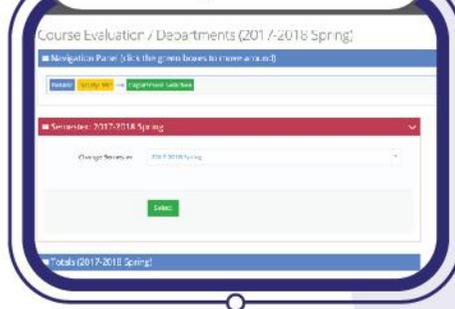
Internships (possibly job opportunities) will be available

ODTÜ KALTEV



Student Support @ METU NCC Programs

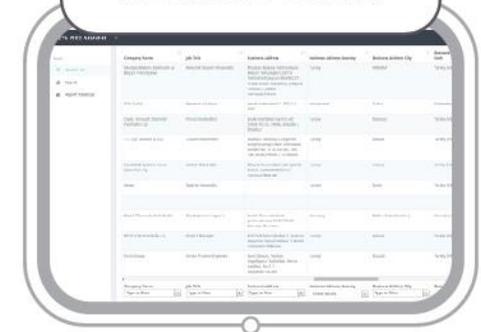
Course Evaluation System



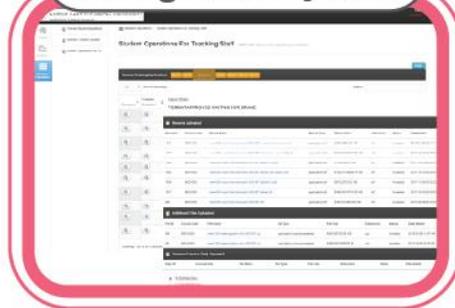
Personal Advising + Automation

- 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)

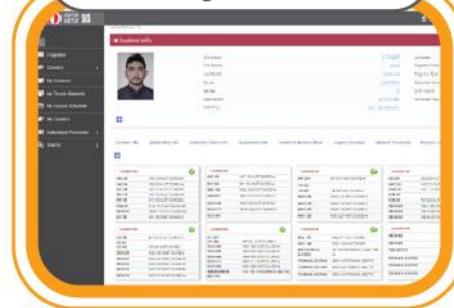
ALUMNI SYSTEM



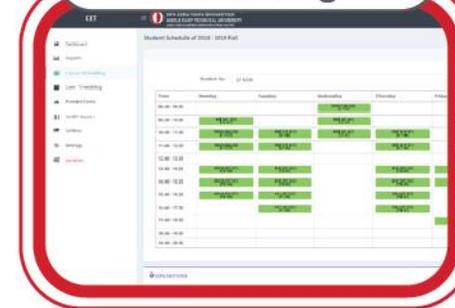
Student Internship Management System



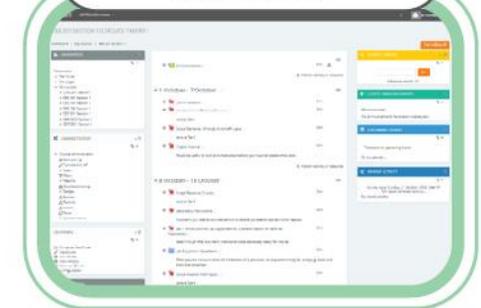
Student Information System



Course & Exam Timetabling



Digital Classroom



- 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:**

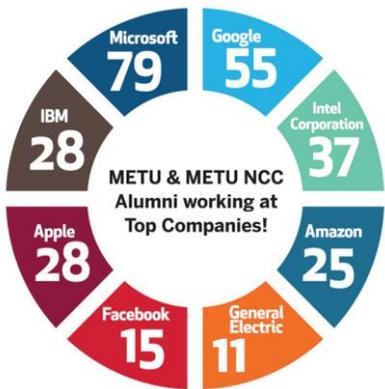
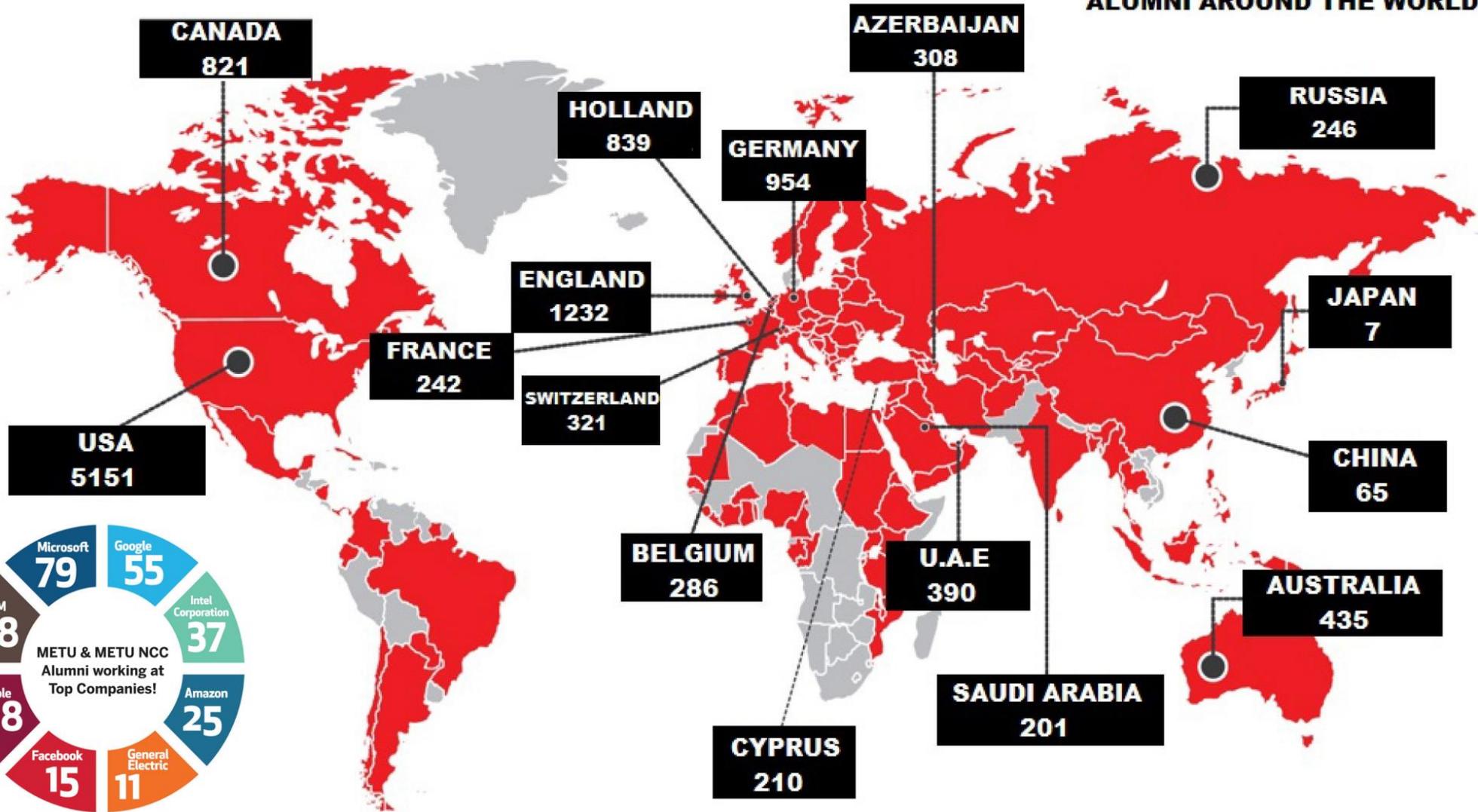
- ✓ **Neither success, nor motivation can prevail in isolation**
- ✓ **Work hard to be successful, which will motivate you to work hard to be even more successful**



Globally



ALUMNI AROUND THE WORLD



SUMMARY

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