Mission

"Groom Thinking Aeronautical Engineers"

Core Values

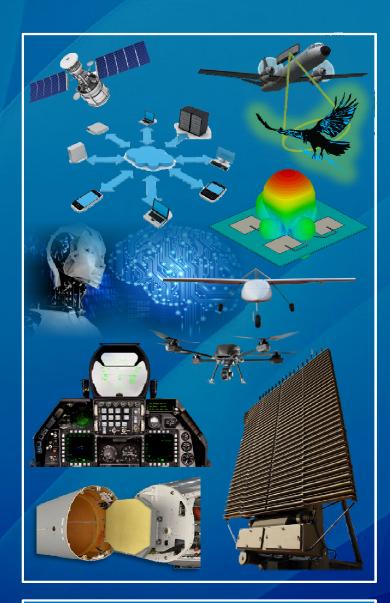
"Cognition, Excellence, Commitment"

College of Aeronautical Engineering (CAE) has a vision to be a center of excellence for engineering education and research in Aeronautical Engineering. Professional Continuing Education department regularly conducts short courses with collaboration of Avionics department.

Short Courses (Duration: 03 days)

- Advance Radar Signal Processing
- Advance Computing Architecture
- Application of Software Defined Radios
- Introduction to AESA Radar
- Microwave Circuit Design
- Avionics System Integration
- Information Security
 Fundamentals
- Flight Dynamics of Control
- Antenna Design





Department of Avionics Engineering

College of Aeronautical Engineering,
PAF Academy Asghar Khan, Risalpur, Pakistan

Contact: +92-923-631391-7 Ext 7625
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Department of Avionics Engineering

College of
Aeronautical
Engineering

National University of Sciences and Technology (NUST)



COLLEGE OF AERONAUTICAL ENGINEERING

Why Join Us?

- NUST ranks 51st in Top 100 universities under 50 years Category, the only Pakistani university to find a place in the QS top 500 ranking
- CAE is the Pioneer of Avionics Engineering in Pakistan
- ISO 9001: 2015 certified
- An illustrious history of producing top quality aeronautical engineers for 5 decades
- · Highly qualified faculty, with a rich field and research experience
- **Expertise in diverse research areas**
- **Excellent lab facilities**
- Strong industry linkages
- · Opportunity to work on aircraft systems design
- Availability of hostels for male and female students
- Bright career opportunities

Admissions Open:

- March-April every year (BE, MS & PhD) September-October every year (BE & PhD)

Commencement of Classes:

- April (BE & PhD only)
- September (BE, MS & PhD)

Main Research Areas (BE, MS & PhD)

Avionics Systems Design, Radar Systems, Radar Signal Processing, Antenna Design, Controls, Electromagnetics, Power Electronics, Analog / Digital Communications, Embedded Systems, Artificial Intelligence, Computer Vision, Microelectronics, Wireless Sensor Networks, Information Security

Major Laboratories

- Radar Lab
- Communications Lab
- Controls Lab
- Avionics Systems Design Lab
- **Basic Circuits Lab**
- Electrical Machines Lab
- Antenna Lab
- Microwave Lab
- Aerospace Vehicle Design Lab
- Digital and Embedded Systems Lab
- **PCB Prototyping Lab**
- **Digital Signals Processing Lab**
- Advanced Design System Lab.

Eligibility Criteria for BE

- Minimum 12 years of education with Physics, Chemistry and Mathematics in Secondary and Higher Secondary School (last four years of education)
- Minimum 60% marks in HSSC and SSC
- Equivalence Certificate from IBCC in case of 'O', 'A' Level or equivalent certificates
- SAT subject test (Physics, Chemistry and Mathematics - Level II) with score of 550 or above in each subject and qualified in last two years (Foreign students only)
- Overall IELTS score of 5.5 or above, obtained during last two years (Foreign students only)

BE Program Overview

Typical Duration : 4 years

Coursework : 134 credit hrs

Please visit www.nust.edu.pk for admissions requirements for BE, MS and PhD programs.

Eligibility Criteria for MS

- Minimum 16 years of education with 04 years of study in Electrical / Electronics / Telecom / Avionics Engineering after HSSC / FSc / 12 grade or equivalent
- Minimum 2.0 out of 4 CGPA or 55% marks in terminal
- BE degree should be internationally recognized for admission in MS program
- Minimum score of 50 in GAT (general), (taken within last two years computed from start of course) by NTS Pakistan, or following valid GRE scores at start of course conducted by ETS USA,

Quantitative 151/170 Verbal 146/170 **Analytical Writing** 3.5/6.0

MS Program Overview

Typical Duration : 2 years

: 24 credit hrs Coursework Research Work : 06 credit hrs

Opportunity to carry out research in aerospace technologies

Eligibility Criteria for PhD

- Internationally recognized MS / M Phil / Equivalent degree obtained after 18 years of education in Avionics / Computer / Electrical / Electronics / Mechatronics / Robotics engineering
- MS degree should be with minimum of 30 credit hrs out of which 6 credit hrs of thesis/research
- Minimum 3.0 out of 4 CGPA or 60% marks in terminal
- Valid GRE scores or GAT (Electrical) by NTS with minimum 60% marks. GRE requirement is as follows;

Quantitative 151/170 Verbal 146/170 **Analytical Writing** 3.5/6.0

PhD Program Overview

 Typical Duration : 4 years

06 Courses in 1st year : 18 credit hrs

Research work : 2nd year onwards