



No.: GTU/CiC3/DRDO_ROBOTICS_Challenge'18/ 8126

Date: 7th Nov, 2017

Circular

To,
Principals/Directors of Colleges affiliated to GTU

DRDO Robotics and Unmanned Systems Exposition (DRUSE) is designed to serve as an open platform to popularize and synergize the national talent in the areas of robotics amongst students for conceptualization, design & development of unmanned systems for defense applications.

(Link : <https://rac.gov.in/druse/>)

Objective of DRUSE

DRDO Robotics and Unmanned Systems Exposition (DRUSE) is designed to serve as an open platform to popularize and synergize the national talent in the areas of robotics amongst Students for conceptualization, design & development of Unmanned Systems for defense applications. It aims primarily:

- **To provide nationwide platform for participants to show case their best**
- To educate community about the **importance of Robotics** in today's scenario and popularize the field and related technologies for defense applications
- **To encourage innovative ideas and indigenous efforts**
- Opportunity to learn and assess current **national status and potentials in the field of Robotics specifically related to the defense applications**
- Identify technology gaps and infrastructure for indigenous **development of Robotic systems for defense application**

Theme

- Mountain Climbing Robot
- Mobility in Snow Bound Area
- Soldier Assistance vehicle
- Casualty Evacuation
- Exoskeleton
- Surveillance of a Ship
- Self-Concealing UGV
- Mobility of UGV over land, air and water
- Underwater Survey System
- Surveillance in Multi-storey building
- Battlefield debris clearance
- Mine detection and clearance

Note :

- **At least 3 Member are Mandatory in Team**
- **Registration Fee of Rs 500/- on DRDO Portal**

Registration Link for DRUSE'18: <https://rac.gov.in/druse/index/registerform> **Last Date : 15th Dec 2017**

Contact: Raj Hakani (Asst. Prof) ap_raj@gtu.edu.in, cic3@gtu.edu.in Tel: +91-79-26316006

Sd/-
Registrar



GUJARAT TECHNOLOGICAL UNIVERSITY

(Established Under Gujarat Act No.: 20 of 2007)

ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી

(ગુજરાત અધિનિયમ ક્રમાંક : ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

Brochure of DRUSE Competition

Schedule

Registration opens	14 Oct 2017
Last date for submission of proposals	15 Dec 2017
1st level screening results	31 Jan 2018
Zonal level screening	24 Mar to 15 Apr 2018
Zonal level results	16 Apr 2018
National level screening	10 May 2018
Award ceremony	11 May 2018



DRDO Labs working on
Robotics & Unmanned Systems
ADF, CAIR, CVRDE, NSTL, R&DE (E), VRDE



Defence Research & Development Organisation

Research & Development
Establishment (Engineering), Kales,
Alandi Road, Dighi, Pune - 411015,
Maharashtra, India Fax: +91-020-27041009
Email: director@rde.drdo.in

DRUSE

DRDO Robotics & Unmanned Systems Exposition

for Indian Engineering students



The challenge begins.....

14th October 2017

As a part of Diamond Jubilee Celebrations



For details refer website: <https://rac.gov.in/druse>
Web portal designed & developed by RAC, Delhi

About DRUSE

Defence Research and Development Organization (DRDO) aims to harness the multifaceted talent available in the country on Robotics and Unmanned systems to create a platform for the development of futuristic defence systems. The objective of this exposition is to identify and subsequently nurture novel ideas in different parts of our country.

Let us all join together and contribute in this nationwide effort to develop future unmanned defence systems

Who can participate

Any Indian Engineering students currently pursuing UG or PG courses in IITs/NITs/IISc or from college /Institute/university recognized by AICTE/NAAC.

Motivation & Incentive

- Award & prize money
 - 1st Prize ₹ 1.5 Lakh
 - 2nd Prize ₹ 1.0 Lakh
 - 3rd Prize ₹ 0.5 Lakh
- National level recognition & visibility for all participants
- Possibility to work with DRDO on cutting edge technologies



Themes

The theme based Exposition is aimed to harness the potential ideas/concepts/technologies in any form (nascent, under development or developed) available nationwide with Students. The proposed themes are as follows:

- Mountain Climbing Robot
- Mobility in Snow bound Area
- Soldier Assistance vehicle
- Casualty Evacuation
- Exoskeleton
- Surveillance of a Ship
- Self-Concealing UGV
- Mobility on water, land and air
- Underwater Survey system
- Surveillance in Multi Storey building
- Battlefield debris clearance
- Mine detection and clearance
- Robotic Assistive Device for divyang persons
- Any other defence applications for Robotics and Unmanned Systems not covered above



What can be exhibited

- Innovative ideas
- concepts through graphics
- Concepts/technologies depicted through 2D/3D models
- Simulation or Animation
- Concept paper presentation
- Mock up/working models
- Prototype
- Posters



Screening of Proposals

The zonal level of screening shall be carried out at zonal centres shown below :

Zone	States included in the zone
North	J&K, Himachal Pradesh, Delhi, Chandigarh, Haryana, Punjab, Uttar Pradesh, Uttarakhand,
South	Andhra Pradesh, Kerala, Tamil Nadu, Karnataka, Telangana, Andaman & Nicobar Islands, Puducherry, Lakshadweep
North-East	Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Arunachal Pradesh
East	Bihar, Odisha, West Bengal, Jharkhand
West	Dadra Nagar & Haveli, Rajasthan, Daman & Diu, Gujrat,
Central	Madhya Pradesh, Chhattisgarh, Goa, Maharashtra

The national level screening shall be carried out at DRDO Hqr, DRDO Bhavan, New Delhi.



Winners of : ICT Enabled University Award E-India - 2009 ❖ Manthan Award - 2009 ❖ GESIA Award - 2011
❖ Digital Learning WES - 2011 Award ❖ AIMS International Innovative University Award - 2013

Chandkheda : Nr. Campus of Vishwakarma Government Engineering College, Sabarmati - Koba Highway, Nr. Visat Three Roads, Chandkheda, Ahmedabad - 382 424, Gujarat, India Ph. : 079 - 232 67 500
Ahmedabad : 2nd Floor, ACPC Building, L. D. College of Engineering Campus, Navrangpura, Ahmedabad, (Gujarat) India - 380 015. Phone : + 91 - 79 - 26 300 499 / 599 Fax : + 91 - 79 - 26 30 1500
Gandhinagar : K-6 Circle, E-4 Electronic Estate G.I.D.C., Nr. Government Polytechnic, Sector-26, Gandhinagar - 382 028 Gujarat.
e-mail : info@gtu.ac.in URL : www.gtu.ac.in