## **GUJARAT TECHNOLOGICAL UNIVERSITY**

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

# જરાત ટેકનોલોજીકલ યુનિવર્સિટી

(ગુજરાત અધિનિયમ ક્રમાંક: ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

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: <a href="https://rac.gov.in/druse/">https://rac.gov.in/druse/</a>)

#### **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

Last Date: 15th Dec 2017 **Registration Link for DRUSE'18**: https://rac.gov.in/druse/index/registerform Contact: Raj Hakani (Asst. Prof) ap\_raj@gtu.edu.in, cic3@gtu.edu.in Tel: +91-79-26316006

> Sd/-Registrar

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.



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#### **Brochure of DRUSE Competition**

#### Schedule



Registration opens	14 Oct 201
Last date for submission	15 Dec 201
of proposals	

1st level screening results 31 Jan 2018

Zonal level screening 15 Apr 2018

Zonal level results 16 Apr 2018

National level screening 10 May 2018

Award ceremony 11 May 2018



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



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



Defence Research & Development Organisation

Research & Development Extablishment (Engineers), Kalas, Alandi Rood, Dighi, Puna - 411015. Makanashtra, India

Fax: +91-023-27044009



for Indian Engineering students



The challenge begins.....

14th October 2017

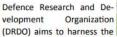
As a part of Diamond Jubilee Celebrations

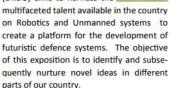


Screening of Proposals

North

#### About DRUSE





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

  - 2nd Prize 19 1 0 Lakh
  - 3rd Prize 2 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
- 10. Surveillance in Multi Storey building
- 11. Battlefield debris clearance
- 12. Mine detection and clearance
- 13. Robotic Assistive Device for divyang persons 14. 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**





South Andhra Pradesh, Kerala, Tamil Nadu, Karnataka, Telangana, Andaman & Nicobar Islands Puducherry, Lakshadweep

The zonal level of screening shall be carried

States included in the zone

Uttar Pradesh, Uttarakhand,

J&K, Himachal Pradesh, Delhi,

Chandigarh, Haryana, Punjab,

out at zonal centres shown below:

Manipur, Meghalaya, North-Assam, Mizoram, Nagaland, Sikkim, Trip-East ura, Arunachal Pradesh

East Bihar, Odisha, West Bengal, Jharkhand

West Dadra Nagar & Haveli, Rajasthan, Daman & Dlu, Gujrat,

Central Madhya Pradesh, Chhattisgarh, Goa. Maharashtra

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



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Chandkheda

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