

# Information Brochure



**INNOVATION - If there is a better solution find it**

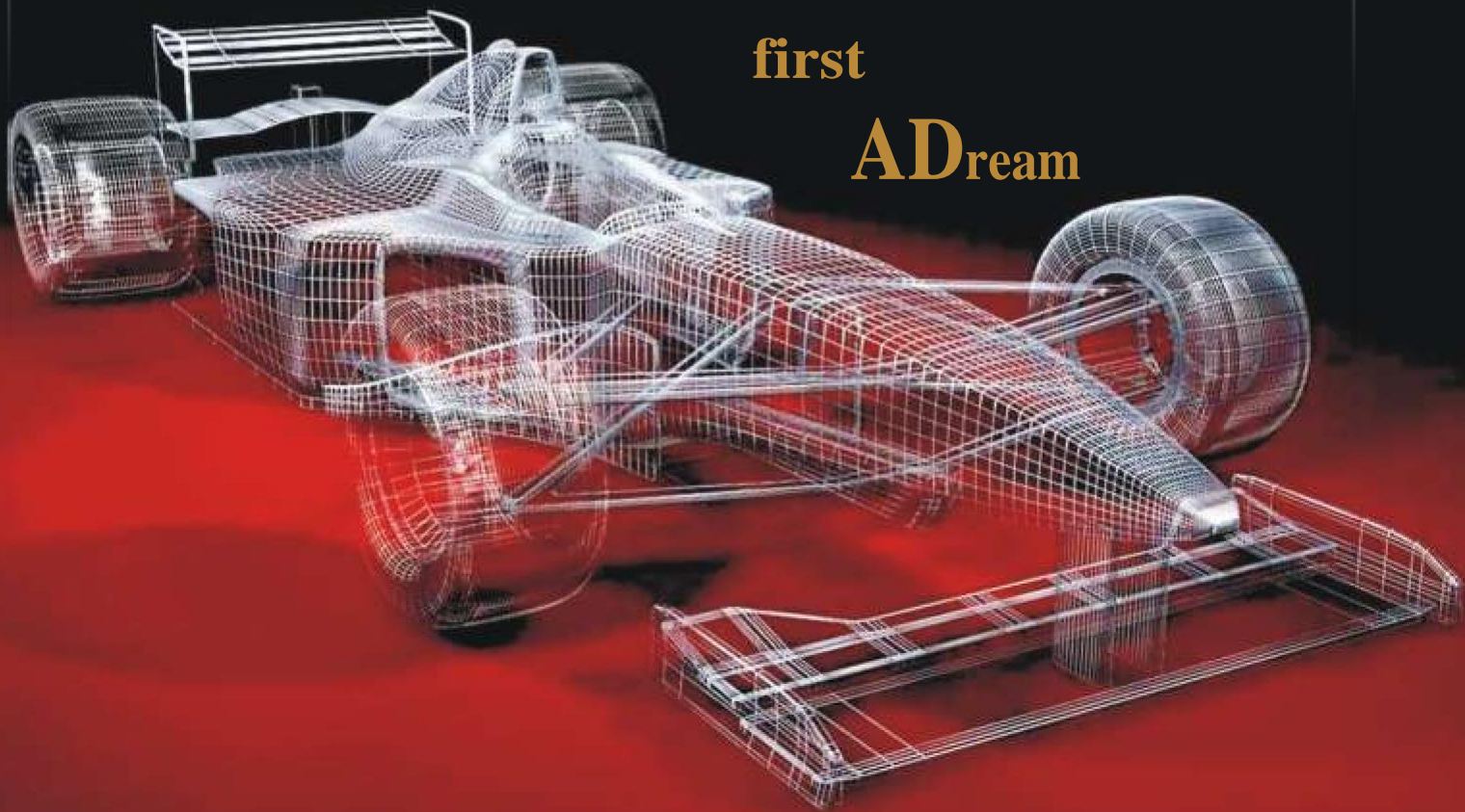


**Pandit Deendayal Upadhyaya Innovation & Incubation Center  
Guru Jambheshwar University of Science & Technology  
Hisar - 125001 (Haryana)**

TechnocratsExceptionalCitiz  
enExemplary  
HumanbeingExtraordinaire  
GoestheExtramile,always

**Nothinghappens**

**first**  
**ADream**



**Director**  
Prof.VishalGulati

**DeputyDirector**  
Prof.SureshKumar

**DeputyDirector**  
Prof.MunishGupta

**DeputyDirector**  
Dr. Sumit Saroha

**Contactus:**

**PanditDeendayalUpadhyayaInnovation&IncubationCenter**(underRUSA2.0,MinistryofEducation,Govt.ofIndia)

**GuruJambheshwarUniversityofScience&Technology,Hisar-**

**125001ContactNumber:+91-1662-263692**

**Email:directorpduic@gmail.com,pduic@gjust.org**



## Vice-Chancellor's Message

M e s s a g e

It is a matter of great pleasure that Pt. Deendayal Upadhyaya Innovation & Incubation Centre established at Guru Jambheshwar University of Science & Technology, Hisar, Haryana in 2018 with financial support from Ministry of Human Resources & Development (MHRD), Government of India, under RUSA 2.0 is providing a platform and financial support to young innovators for their innovation.

At same time it has state of the art building, co-working space, very good prototyping laboratory and workshop. It provides our budding engineers, students and young innovators to incubate novel ideas and develop them into useful products for the benefit of the society.

I encourage students to submit innovative project ideas and start-ups with Industry tie-ups. It will not only give a good training and employment opportunities for the University students but at the same time will also help to create entrepreneurs.

I also encourage all the Faculty members of the University for mentoring the dedicated and motivated students in consultation with professional/industry experts for developing Innovative ideas/products at Pt. Deendayal Upadhyaya Innovation and Incubation Centre, GJUS&T, Hisar.

I appreciate the entire PDUIIC team for their dedicated efforts towards innovation and product development.

Prof. Narsi Ram Bishnoi



## Director's Message

Pandit Deendayal Upadhyaya Innovation & Incubation Centre was established in Gurukulambheshwar University of Science & Technology, Hisar, Haryana in 2018 which serves as a platform for students, engineers, young innovators, entrepreneurs and faculty members for incubating novel ideas and helps them in producing novel products through expert guidance of mentors as well as linkage and tie-ups with Industry experts. Innovative ideas through projects are invited for developing Prototypes/Startups/Novel Hand-held Devices/Point-of-Care Devices/Entrepreneurships from individual or groups of National & International repute in thematic areas of Agricultural Sciences, Business Management, Engineering, AI, IOT & Robotics, Life Sciences, Pharmaceutical Sciences, Physical Sciences, Medical Sciences & Yoga Sciences for the benefit of the Society. MOUs have also been signed with Industry Experts for developing AI & IOT based novel products and for undertaking real time and virtual training program in Robotics. PDUIC offers tremendous opportunities by providing infrastructure /ICT facilities, consumables, working space of laboratories and workshop facilities to Young Innovators and engineers for conceiving novel ideas and converting them into innovative products useful for the society. PDUIC is in the process to establish labs in the domain of AI/ML, IOT, Additive Manufacturing, Data Analytics, Robotics, Prototyping etc. in the field of engineering, science and management.

A course of Skill and Innovation labs started in each UG/PG program to sensitize the students towards skill and Innovation. Students will be able to understand and identify research areas in their field, work as a team towards creative thinking, learning by doing itself and propose a novel idea/modified technique/new interpretation.

I anticipate from all Faculty members of GJUS&T, Hisar to motivate young students of the University for participating and incubating novel ideas through projects. Outcome of project is expected towards concept testing of Innovative Ideas which lead to product development/software/application having some sort of societal relevance. Level of Innovations should be focused towards commercialization/start-up/entrepreneurship.

Prof. Vishal Gulati

# About the University



Guru Jambheshwar University of Science and Technology, Hisar started its journey on October 20, 1995 under Haryana State Legislative Act No. 17 of 1995 at Hisar, Haryana State of India to impart education on the frontiers of Technology, Pharmacy, Environmental Studies, Non-conventional Energy Sources, Mass Media and Management Studies.

Today the university is rock standing on three hundred seventy two acres of lush green land with 18 Teaching Departments classified in 10 Faculties for coordinated teaching in particular and effective governance in general. The University at present offers 58 Regular Programmes on Campus including B.Tech, M.Tech, B.Pharm, M.Pharm, B.Physiotherapy, M.Physiotherapy, M.Sc, M.B.A, M.Com and M.C.A. etc. with Ph.D. degree programme in all the Departments. The University also offer 17 Programmes through Distance Mode. These Distance Education Programmes stand approved by the joint committee of UGC, AICTE and DEC. Further, affiliated college of Hisar district from this University offers bachelor and Master degrees in Engineering, Management, Architecture, Physiotherapy, Pharmacy, Law, Arts, Commerce, Science and Sport etc.

The University is recognized by the University Grants Commission (UGC) under Section 2(f) for recognition of degrees on 11.1.1996 and under section 12(B) of the UGC Act to be eligible for central assistance on 7.2.1997. The University has been accredited „A“ Grade by NAAC, in 2002 and re-accredited as grade `A` with CGPA 3.26, in 2009. Thereafter, it has been also accredited with CGPA 3.28 from 10.12.2014 to 09.12.2019 and further extended upto 09.12.2021.

# About the Center



Pandit Deendayal Upadhyaya Innovation & Incubation Centre (PDUIC) was established in Guru Jambheshwar University of Science & Technology, Hisar, Haryana in 2018 and was formally Digitally Launched by the Hon'ble Prime Minister Sh. Narendra Modi on 3rd February, 2019 from Sher-e-Kashmir International Convention Centre, Srinagar under the scheme of RUSA 2.0, MHRD, Government of India, New Delhi simultaneously in Twenty six States, one Union Territory and Fifty one aspirational districts of the entire nation with budget outlay of Fifteen Crores.

PDUIC aims to become a hub of innovative and startup activities in the state of Haryana and will put sincere efforts in realizing the slogan of "Make in India" of Central Government. It facilitates the dream of prospective Young Innovators from conceiving the idea to technological development/inventions. It serves to coordinate and promote Incubation and Innovation driven activities for budding entrepreneurs. It provides a platform to the Young Innovators for achieving their goal towards self-realization by strengthening Startups in thematic areas of National concern. It shares its resources including space and infrastructure, access to business support services, mentoring, training programs to enhance the skills of entrepreneurs and seed funds. The scope of support is broad-based, and covers technologies developed wholly at the Institute or partly through collaboration elsewhere, as well as external startups with which members are associated as consultants or mentors.

# Preamble

## Vision

To be a leading Centre of Innovation and Incubation, where young minds have access to technological assistance with multidisciplinary approach for transforming innovative ideas into viable business propositions.

## Mission

- To motivate, build and promote creative thinking for generating innovative ideas.
- To facilitate for transforming innovative ideas into entrepreneurs by providing technical, financial and infrastructural facilities.
- To create an environment that facilitates and empowers Young Innovators to apply their entrepreneurship skills to develop solutions with high social impact through academia.

## Objectives

- To develop a critical mass of motivated students & faculties with entrepreneurial orientation & skills.
- To build infrastructure support for Innovation and early stage Enterprise development and enabling access to Resources and Facilities at the university.
- To enhance In-House competency development to serve potential and early stage Entrepreneurs and Student Innovators at the university.
- To strengthen the Inter-Departmental, Inter-Institutional and Industrial linkage, Incubators and other Ecosystems at different levels to improve employability.
- To develop overseas collaborations with Top ranked institutions of the world to provide global exposure and mentoring by International faculty and innovators for improving employability.

## Supports

- **Developing Innovation and Entrepreneurial mindset**  
PDUIC facilitates the dream of prospective Young Innovators from conceiving the idea to technological development by coordinating and promoting Incubation and Innovation driven activities for achieving their goal towards start-ups in the areas of National concern.
- **Infrastructure/Lab Support**  
PDUIC provides its resources including space and infrastructure/Labs/ICTs upport to Young Innovators/Professionals during

their project work. It provides mentors from Industry, University as well as successful local entrepreneurs, technical, management and legal support to the young entrepreneurs who have just begun to take-off.

## **Financial Assistance**

- For converting their innovative ideas into product development.
- In terms of stipend for these selected innovative projects.
- For skill development by conducting internship/Training/Workshops/Seminars/Hackathon modules etc.
- For Industrial and educational visits.
- Seed funds for establishing Start-up Cell/Companies.

## **Innovative Projects**

- Projects are invited in thematic areas of Agricultural Sciences, Business Management, Engineering, AI, IOT & Robotics, Life Sciences, Pharmaceutical Sciences, Physical Sciences, Medical Sciences & Yoga Sciences.
- Projects are open to UG/PG/PhD students (both ongoing and graduated) of GJUS&T, Hisar, faculty members of GJUS&T, Hisar and Industry Experts/Professionals from outside the University GJUS&, Hisar.
- Projects are provided funding assistance for stipend, consumables, equipments, contingency, industrial visit and for developing prototypes/product/devices; mentoring support; access to GJUS&T infrastructure and labs; allocation of office/residential space; IP Management, legal and accounting assistance; seed funding for startups.

## **Steering Committee**

- Hon'ble, Vice-Chancellor (In Chair)
- Registrar
- Director, PDUIC
- RUSA 2.0 Coordinator
- Dean, FET
- Director, HSB
- Chairperson, CSE
- Chairperson, Data Science
- Chairperson, Food Tech
- Director, CIL
- Coordinator, Patent Cell
- Prof. H. C. Garg



- Prof. Anjan Baral
- Prof. Munish Gupta

## Innovation Ecosystem

PDUII Chasset up a conducive ecosystem for the startup culture to flourish with the best infrastructure, innovative projects, training/internship programs, entrepreneur/star tupevents and mentorship.

Grants have been utilized for construction of building, for funding of innovative projects, for conducting Internship/training, for Industrial visits, for organizing different events like Hackathon, workshops, seminars, for distributing stipend to young innovators and for establishment of lab setc.

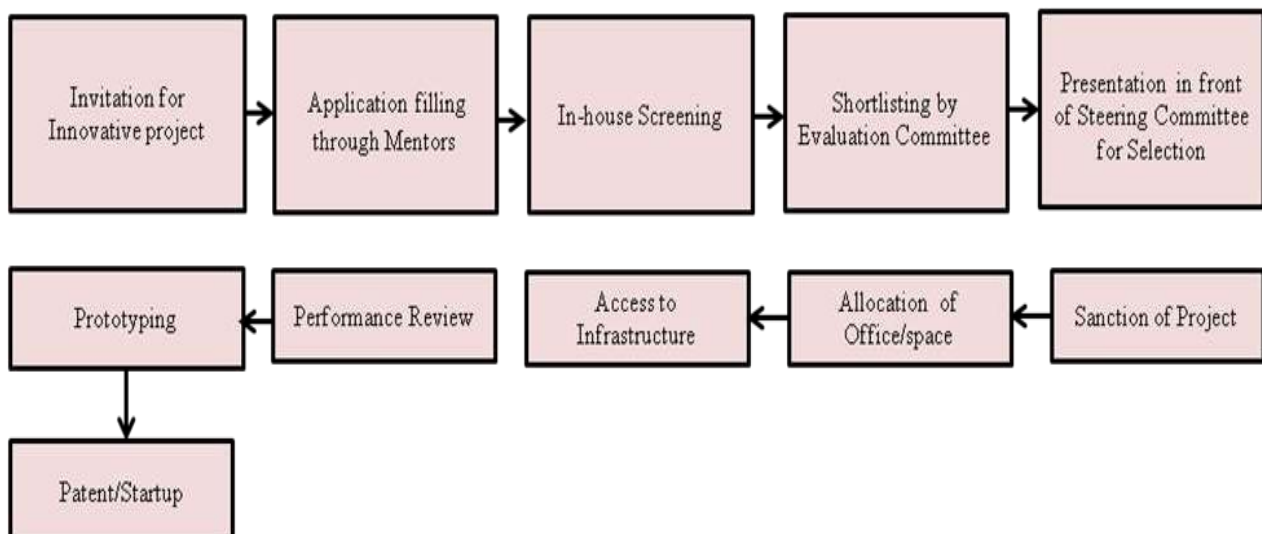
PDUIIC, indeed takes pride in the shaping of young Innovators through the paradigm shift towards Innovation and skill development. A course „Skill and innovation lab“ is a part of curriculum in Engineering UG/PG program to sensitize the students towards skill and Innovation. Innovative projects issued under PDUIIC are focused on multi-disciplinary idea formation and have an outcome in the form of product development/Patent/Startups. An IIC has also been constituted under Ministry of Education’s Innovation cell, which is committed to organize events /activities as per guidelines of MoE’s Innovation cell.

### Key Parameter Indicators for Innovative Ecosystem

- **Developing an Innovative and Entrepreneurial Mind-set**
  - ✓ Conducted events related to Innovative and Entrepreneurial
  - ✓ Participation/Representation in events organized by external Institutions
- **Teaching and Learning related to (I&E) & IPR**
  - ✓ Offered academic courses related to (I&E) & IPR
  - ✓ Conducted skill development/employment generating training programmes
  - ✓ Conducted Faculty training programme of I&E and IPR
- **Dedicated Infrastructure & Facilities to Promote I&E**
  - ✓ Existence of Co-working space/work-stations for students
  - ✓ Existence of Innovation and Incubation Center
  - ✓ Active Ideas/Innovation centric student clubs
  - ✓ Existence of dedicated infrastructures and facilities
  - ✓ Existence of IPR Cell/Patent Facilitation
  - ✓ Mentors to support and to establish I&E eco-system

- **Generation of Innovations/Ideas**
  - ✓ Innovative projects registered with Incubation center and provided with financial support
  - ✓ Number of awards won by the student and faculty innovations at State/National/International Level in I&E related events
- **Ventures Established & Recognitions Received**
  - ✓ Number of Startups/Entrepreneurial Ventures started by students/faculties/Staff/Alumni and facilitated under Incubation Center
- **Intellectual Property (IP) and Commercialization**
  - ✓ Patents Filed & Published
  - ✓ Patents held by Pre-Incubated Innovations/Incubated Startups
- **Budget towards I&E Activities**
  - ✓ Annual budget on promoting and supporting I&E activities
  - ✓ Amount spent on events conducted and participation in events conducted by external organizations
  - ✓ Expenses incurred in the establishment, maintenance and operation of Incubation infrastructure, seed fund/grant disbursed to innovation/entrepreneurial ventures
- **Participation in I&E Initiative of MOE**
  - ✓ Adopted National Innovation and Start-up Policy
  - ✓ Established Institution's Innovation Council (IIC)
  - ✓ Trained Innovation Ambassadors
  - ✓ Facilitated registration of Start-ups/Technologies developed in YUKTI

## Incubation Process



# Activities

## Collaboration

Name of Collaborated Agency	Period of Collaboration/Date of MOU	Activities to be carried out during Collaboration Period	Funds Allocated (Rs.)
M/s Preltex Solutions Private Limited	02 years 03 Feb. 2020	Innovation Consultancy Services and Skill development services	5,40,000/-+ free training
M/s Deep Leads Innovation Private Limited, Mumbai	02 years 03 Feb. 2020	IOT based product development and Skill Development Services	21,20,000+ Travel
M/s Bug2Debug	02 years 03 Feb. 2020	Sanjeevni platform to connect hospitals and the patients together	6,50,000
M/s MTAB Technology Center, Chennai	02 years 03 Feb. 2020	Training on Robotics	5,60,500 including 18% GST
M/s Actfuse Noida	02 years 03 Feb. 2020	IOT Based patient tracking and Monitoring System	23,40,000+ taxes

## Workshop/Seminars

Topic	Date
Workshop on "Entrepreneurship and Innovation as Career Opportunity"	14.01.2022
Webinar on "My Story - Motivational Session by Successful Entrepreneur/Startup Founder"	14.12.2021
Webinar on "Startup Ecosystem & Business Incubators"	22.11.2021
Webinar on "Innovation, Incubation and Startup: A Roadmap"	18.11.2021
Workshop on "Entrepreneurship and Innovation as Career Opportunity"	27.10.2021
One day workshop cum exhibition on Aatm Nirbhar Haryana	06.09.2021
Four weeks Training cum Internship by Engineering Staff College of India (ESCI), Hyderabad	21.06.2021 - 17.07.2021

<b>Topic</b>	<b>Date</b>
IoTWebinarsandPythonTrainingbyM/sPreltexSolutionsPvt.Ltd.	01.06.2020-30.06.2020
SmartIndiaHackathon	28.06.2020
PersonalityDevelopmentandSelf-ManagementProgram	11.06.2020-13.06.2020
MachineLearningusingPythonLanguage,AutomationandRoboticsbyEngineeringStaffCollegeofIndia(ESCI),Hyderabad	01.07.2019-09.08.2019
Hands-onWorkshopcumCompetitionon"LineFollowerRobot"	05.04.2019-08.04.2019
Workshopon"InnovativeIdeas"	17.12.2018
Hands-onWorkshopon"FamiliarizationwithElectronicComponents&DesignofPowerCircuit"	31.10.2018
Hands-onWorkshopon"SensorInterfacingwithArduino"	20.04.2018-21.04.2018
Hands-onWorkshopon"ElectronicCircuitsDesignonPCB"	19.04.2018-20.04.2018
Workshopon"ArduinoBoardandApplications"	20.03.2018
Workshopon"ComputerHardware"	15.02.2018
EntrepreneurshipClubpresentSAMVAD:EntrepreneurSuccessStory	07.05.2022
EntrepreneurshipClubpresentsTALASH:IdeaPitchingCompetitionFromIdeaToRealityThink.Create.Scale	22.04.2022
EntrepreneurshipClubpresentTALASH:IdeaPitchingCompetitionFromIdeaToReality	21.01.2022
EntrepreneurshipClubpresentSAMVAD:SuccessStoryofanEntrepreneur	22.12.2021
EntrepreneurshipClubpresentsTALASH:IdeaPitchingCompetitionFromIdeaToRealityThink.Create.Scale.	08.12.2021
EntrepreneurshipClubpresentSAMVAD:EntrepreneurSuccessStory	16.11.2021
SSBCLUB(InteractionwithgroupcaptionRajeshSharmaaboutSSB)	06.11.2021
EntrepreneurshipClubpresentsTALASH:IdeaPitchingCompetitionFromIdeaToRealityThink.Create.Scale	25.10.2021
EntrepreneurshipClubpresentSAMVAD:EntrepreneurSuccessStory	12.10.2021
Webinaron"EffectiveResumeBuilding"byMr.RichikSinhaRayunderUDBHAVANATalkShow	23.09.2021

# Sanctioned Innovative Projects

## Sanctioned Innovative Projects

### 2019-2020

1. Cost-effective Multifunctional Prosthesis for disabled persons.
2. Crime Investigation Management Tool
3. Hybrid Electrical Bicycle
4. Visualization of Blind Person and Classification of Human Physiology
5. Fabrication of nano composites coatings for applications in orthopedic implants.
6. Voice controlled Home Automation System.
7. Pet Bottle Bricks
8. AI, IOT based Product Development
9. IOT based Patient tracking and Monitoring System
10. Analog and Basic Circuit Design ..... Python etc.
11. Innovative proposal for Training Program entitled "Robotics Training"
12. Innovative proposal for Startup entitled "Sanjeevni"
13. Chat Bot for a Grocery store and stock analyzer

### 2020-2021

14. Indigenous Development of Bridgman setup for Synthesis of Laser Crystals
15. Aatm Nirbhar Teaching Platform
16. Multifunctional Prosthesis Wheel Chair for disabled persons

### 2021-2022

17. Development of low cost, self-healing antimicrobial nanogel based patch/bandages for wound healing.
18. Development of Novel, low cost antimicrobial Nanomaterial for Application in Hospital clothing/ Medical textiles viz. Mask, PPE material, Bed sheets, Pillow covers, Blankets, cloth privacy curtains etc. to prevent Hospital acquired infection (HAI)/ Nosocomial Infection.

### 2022-2023

19. SWAN-System for water analyzing & Nurturing.

# ProjectsPosters

## Cost-effectiveMultifunctionalProsthesisforDisabledPersons



ProstheticHandwithCircuitry



Custom(UserSpecific)

## CrimeInvestigationmanagementTool



## ElectricalHybridBicycle



## **IOTBasedIntelligentHomeAutomation,MovementSensor System**



**Home Automation Module**



**Movement Sensor Module**



**Rolling Shutter Module**



**Multi-Language Agriculture Automation**

## **IOTbasedvendingMachine and3Dprinter**



**IOT Based 3-D Printer**



**IOT Based Vending Machine**