

O/o The Secretary.
TTWREI Society
Gurukulam
Masabtank, Hyderabad

Procdgs.RC.No.C /306818/RDC/ 2021

Dt.15.03.2021

Sub: TTWREIS - RDC: Conducting the IoT training for (4) days (2-DayBoot camp on Internet of Things(IoT) and 24Hrs.Hackathon) to the selected III year Computer Science students of TTWRDCs at SPARK by the M/s SMART BRIDGE, Hyderabad 18.03.2021 to 21.03.2021- Instructions to the Principals of TTWRDCs under KU, OU and TU to select the (7) Computer Science III year students from each institution - Reg

Ref: 1. Proposal received from the the M/s SMART BRIDGE, Hyderabad
2. Instructions of the Secretary, TTWREIS.

With reference to the subject, the Gurukulam has decided to conduct the IoT training for (4) days (2-DayBoot camp on Internet of Things(IoT) and 24Hrs.Hackathon) to the selected (105) III year Computer Science students of TTWRDCs under KU, OU and TU in collaboration with the M/s SMART BRIDGE, Hyderabad.

Details of the Program:

This program has been designed to introduce latest technologies to students in learning by doing environment. The program will provide awareness on internet of things (IoT) and its applications in various business sectors. Its learning & project building event will be in following format.

Program Schedule: (4) days (2 days boot camp + 2 days 24Hrs.Hackathon)

2-Day Boot camp on Internet of Things(IoT):

During the 2-Day boot camp students will be introduced to IoT, Arduino Board, Programming, Sensors & Actuators, Blue tooth communication, Mobile app development, data exchange between device & mobile app etc. The boot camp is a hands-on program supported by mentors.

The following subject/topics will be taught to the students by the program managers during the 2 days boot camp.

Module	Content	Day
Module1	Introduction to Internet of Things (IoT)	Day1
	IoT Applications & projects	
	IoT Architecture & Deployment models	
	Building Blocks of IoT	
	IoT Software & Hardware Frameworks	
	Technical Architecture of few IoT Applications	
Module2	Introduction to open Hardware platforms	Day1
	Introduction to Arduino UNO development board	
	Working with Digital I/O's	
	Working with Analog I/O's	

	Integrate Digital and analog I/O with Arduino UNO	
Module3	Integration of Sensors and Actuators	Day2
	Working with DHT 11 Sensor	
	Working with Ultrasonic Sensor	
	Working with Servo Motor	
Module4	Introduction to Bluetooth Communication	
	Configure Bluetooth module using AT commands	
	Introduction to MIT App inventor	
	Build a Mobile app to send and receive data from IoT Device	
	Build Smart Home Application	
24Hrs. Hackathon		Day 3& Day4

24Hrs.Hackathon

To hands-on learning, the student team will develop various IoT Projects using the hardware provided to them. They will build a working prototype of project idea and present it to the jury panel. Top teams will be finalized by the jury on the last day of hackathon to present them awards.

The following Projects will be done by the students during the 24 Hrs Hackthon.

S.No.	Project Title
1	Smart Home using IoT
2	Smart Medicine Reminder for Elderly people
3	IoT based Irrigation System
4	Fire Detection and Alerting System
5	Smart Kitchen using IoT
6	Pollution Monitoring System
7	Smart StreetLights
8	Water Level Monitoring and Controlling System
9	Bluetooth enabled RC Car
10	Gas Leakage Monitoring System for Industries
11	Intelligent Cargo Management System
12	Smart Waste Management System
13	Smart Health Monitoring System
14	Smart Vehicle Tracking System
15	Water Quality Monitoring and Alerting system
16	Plant with emotions :IoT enabled plant
17	Smart Sprinkler system for Golf Course
18	RFID based Smart Industries
19	Smart Poultry Farms
20	Smart Parking base don IoT
21	Smart Animal Farm based on IoT
22	Fire detection ROBO for industries
23	Smart Water management system
24	Smart Notice board
25	Gesture Controlled ROBO

The best three teams who show excellence in the program will be awarded with cash prize of Rs :5000/- Rs : 3000/- and Rs: 2000 /- respectively.

In this regard, the Principals TTWRDCs under KU, OU and TU are here by informed to select the (7) III year meritorious computer science students who are good at C- language and send the students to the SPARK, Nagaram to participate in the program. The principals can met the TA and incidental charges for the students initially from the imprest amount and later it can be reimbursed from the H.O on submission of original bills.

Instructions:

- i) The program is scheduled from 18.03.2021 to 21.03.2021
- ii) The students must report the SPARK, Nagaram on 17.03.2021 by evening.
- iii) The Students should bring the dresses, bedding material and meals plate along with them.
- iv) As the program is conducted for the men and women students, proper behavior is expected from the men students.
- v) The SAMS attendance of the students must be sent to the SPARK, Nagaram for the (4) days program.

The Principal, SPARK, Nagaram is here by informed to arrange the accommodation and food to all the participants, conduct program successfully and submit the compliance. The RC (Hyd & Rangareddy) is directed to monitor the program to make it a grand success.

(This has got note approval of the Secretary, TTWREIS)


Dy. Secretary
(Degree Colleges)

To

The Principals of TTWRDCs under KU, TG & OU.

Copy to the Principal, SPARK, Nagaram

Copy to RCs of the TTWREIS for information.

Copy to the JS/ Dy. Secretary (Acad. and Admn.) of this Society for information.

INVITATION

Procdgs.RC.No.C /306818/RDC/ 2021

Dt.19.03.2021

Sub: TTWREIS - RDC: Conducting the IoT training for (4) days (2-Day Boot camp on Internet of Things(IoT) and 24Hrs.Hackathon) to the selected III year Computer Science students of TTWRDCs at SPARK by the M/s SMART BRIDGE, Hyderabad 18.03.2021 to 21.03.2021- Instructions to the Principals of TTWRDCs under KU, OU and TU to select the (7) Computer Science III year students from each institution - Reg

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Program Schedule: From 18.03.2021 to 21.03.2021(2 days boot camp + 2 days 24 Hrs. Hackathon)

S.No	Date & Time	Program	Remarks
1	18.03.2021 from 9.00 am to 5.00 pm	Boot camp	Resource persons will conduct the classes
2	19.03.2021 from 9.00 am to 5.00 pm	Boot camp	
3	20.03.2021 from 11.00 am to 21.03.2021 11.00 am	24Hrs.Hackathon	The students will develop the projects
4	21.03.2021 From 12.00 pm to 2.00 pm	Valedictory	

The best three teams which perform excellent in the program will be awarded with a cash prize of Rs: 5000/- Rs: 3000/- and Rs: 2000 /- respectively.

Valedictory: 21.03.2021 Time: 12.00 pm to 2.00 pm.

In this regard, the officers of the Gurukulam, RCs of TTWREIS and Principals of TTWRDCs are requested to attend the program on valedictory day and make the program a grand success.


Dy. Secretary
(Degree Colleges)

To
All the Officers of Gurukulam.
The Principals of TTWRDCs.
Copy to Peshi Secretary, TTWREIS
Copy to Peshi Additional Secretary, TTWREIS