

Minutes of the meeting
Organized for building
“ROBOCON-2016”
(GTU Mentor's Team)

Date: 13th OCT, 2015 Time: 12:00 pm onwards

A meeting for building GTU team ROBOCON-2016 was organized on 13th OCT, 2015 at 12:00 pm in Room No.131, CiC3, ROBOCON, ACPC Building, Navarangpura, Ahmedabad - 380015 where following faculty members were present.

Sr. No	Name of faculty	Institute
1.	Dr. Mihir Shah	GEC - Modasa & CiC3 adviser
2.	Prof. Raj Hakani	Gujarat Technological University
3.	Prof. Krutika Paradkar	Gujarat Technological University
4.	Prof. Tosha Shukla	Gujarat Technological University
5.	Prof. Rutika Ghariya	Gujarat Technological University
6.	Prof. Mitesh Solanki	Gujarat Technological University
7.	Prof. Hemal Nayak	Gujarat Technological University
8.	Prof. Ankit Patel	Universal College of Engg. & Tech.
9.	Prof. Bhushan Mehta	L.J Institute of Engg. & Tech.
10.	Dr. Hitesh B. Shah	G H Patel College of Engg. & Tech
11.	Prof. Pratik Gohel	Gandhinagar Institute of Technology
12.	Prof. Devendra Parmar	G H Gardi College of Engg & Technology
13.	Prof. Y. D. Vora	LD College of Engg. & Tech
14.	Dr. Satyadev Vyas	Ahmedabad Institute of Technology
15.	Prof. Satish Bhatti	Vadodara Institute of Engineering
16.	Prof. Saurin Sheth	GCET
17.	Prof. Umang Modi	SAL Technical Campus
18.	Prof. Viridi Gurpitsingh	Alpha College of Engineering and Technology
19.	Prof. Manthan Upadhyay	Gandhinagar Institute of Technology
20.	Prof. Dhaval Patel	Gandhinagar Institute of Technology
21.	Prof. Ashish Pandya	Gandhinagar Institute of Technology
22.	Prof. Aneri Pandya	Alpha College of Engineering and Technology
23.	Prof. Parth Gajjar	Silver Oak College of Engineering and Technology
24.	Prof. Utkarsh Patel	Silver Oak College of Engineering and Technology
25.	Prof. Manish Parmar	VGEC, Chandkheda
26.	Prof. Meet Shah	L.J Institute of Engg. & Tech.
27.	Mr. Urvish Gohil	SCET, Surat
28.	Prof. Ravi BUTANI	Marwadi Education Foundation

Prof. Raj Hakani welcomed faculty members on behalf of GTU and narrated those events which created an opportunity for GTU colleges to build a University team. He explained about ROBOCON Contest, Rules & Regulation, Game Field Area, Design Criteria and Specification of ROBOTS, Tasks and Scoring Points.

Discussions during Meeting

All Faculties gave their introduction, expatiation, and how they can mentor GTU - ROBOCON Team.

In the beginning of the meeting there was a formal introduction of all the faculties present.

- 1) Prof. Y.D Vora Sir gave his esteemed views on design engineering and said that he will look out the designing aspects
- 2) Bhushan Mehta: L.J college of engg. he will help in purchase & procurement and mechanical aspects of the event.
- 3) Aneri mam: Alpha college of Engg. her domain expertise is in embedded and shall contribute in programming domain
- 4) Gurpreet singh: Expertise on mechanical and shall contribute in mechanical design
- 5) Prof. Devendra Parmar has expertise in CAD/CAM and shall contribute in Design and planning of event
- 6) Hitesh shah has expertise in mechatronics and Adaptive control system had been a part of robocon team earlier.
- 7) Saurin seth has expertise on machine design and has represented himself at various national and international workshops. he is also coordinating with the robotics clubs.
- 8) Utkarsh Patel: has expertise on photonics and embedded
- 9) Dhaval patel: GIT has expertise on robotics and can help us in structure element for mechatronics
- 10) Manthan : GIT expertise on: Mechatronics and can help us in kinematics and dynamics of the system
- 11) Pratik patel: GIT dept head in techfests
- 12) Dr. satyadev vyas: AIT is basically a C.E person but can mentor students from all domains since his team had already participated at robocon and had qualified till semifinals

Discussed topic

- Team for Design Part, Student Selection criteria, Core technical faculty member, material procurement, Programming.
- Selection based on their interest, challenging task, their potential , virtual thinking or written test, Personal Interview
- take all information from student (like interest, past work, zonal competition etc.)
- Student selection based on branches (design team, Circuit and programming)
- Rules and Regulation for mentors as well as for Students

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Suggestions from faculty members for finalizing process to select students from various colleges as GTU team members were invited. After discussion, it was decided that colleges which have signed MOA with GTU will submit list of 10 students from their college for GTU team. They will be given various tasks related to this project and based on their active involvement, and consistent performance, final team will be decided.

A suggestion was made that following qualities should be looked by institute faculty while deciding 10 students from their institute for GTU team.

1. 3 students with EC, Electronics & Electrical background
2. 2 students with Computer & IT background
3. 4 student with interest and knowledge of Design, and Analysis, Mechanical, Mechatronics background.
4. 1 student with Management & Presentation

Faculties decided to send names of 10 students from their colleges as soon as possible but not later than 23th OCT, 2015. Students of 5th semester should be given preference but at the same time 7th semester students included as well.

Technical topics related renewable energy source, polygon of robot, specifications were discussed and as all faculties were not aware about the rule book of ABU ROBOCON - 2016, they were informed to download it from ABU-ROBOCON website and faculties said that they will study it thoroughly and further discussion can be made through google groups.

In order to kick off this team, it was suggested to have a joint meeting/brainstorming of all GTU student team members and faculties on 31th OCT, 2015 (Saturday) at Room 131, ACPC Building, Navrangpura, Ahmedabad. It was suggested to invite experts from following topics to conduct a challenging during this full day gathering –

- Design Concept of Robot
- Virtual Thinking
- Renewable Energy Source

It was decided to make a Google group as well as whatsapp group of faculties and GTU student team members to share information and updates to avoid frequent in person meetings.

At the end of the meeting Prof. Raj Hakani thanked everyone for joining this meeting and wished everyone a great learning experience. He mentioned that all required resources for this competition will be provided by the University and now it is our faculties' responsibility to put in some extra hours to do some development and motivation and mentoring of student team.



GUJARAT TECHNOLOGICAL UNIVERSITY

(Established by Government of Gujarat under Gujarat Act No.: 20 of 2007)

ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી

(ગુજરાત સરકારના ગુજરાત અધિનિયમ ક્રમાંક : ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

No.: GTU/ROBOCON 2016 / ૧૭૮૩

Date: 16th OCTOBER, 2015

To,
Director/Principal
GTU affiliated colleges

MOA for ROBOCON 2016 competition.

Gujarat Technological University has decided to build GTU team who can represent GTU in ROBOCON 2016 Competition. GTU is thinking to create a consortium of student representatives from various colleges for the above cause to build a university level team. The college who believes in co-creation based innovation and technology development will become a part of the above consortium by signing the MOA.

The agreed institution will nominate the best student representative/s to be part of University team. University and the Advisor/Mentor Appointed by the university will finally decide the team members who will represent the university team based on their contribution, performance and relevance.

While a central team will be constituted to look after the task step by step the teams at various college levels may work with micro assignments as their academic or hobby projects. College authorities of respective institutes will facilitate this process via their existing infrastructure.

GTU affiliated institutes who are willing to be a part of this consortium and sign the MoA are invited.

I/C 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*

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Memorandum of Association for GTU Robocon 2016 TEAM

GTU has been pioneering in bringing intervention and sphere heading best practices which have been attempted at various college levels. University believes that given a support system at central level, infusing better resource capital, extending superior hand holding facility and bootstrapping complimentary skill sets of various teams and their members these students can outperform any other team at national and international level. Such arguments were well appreciated by highest authority at GTU and further steps are being initiated to galvanize the spirit and deliver a far reaching impact.

Recently the faculties from GTU affiliated Engineering Colleges came together to discuss how to take part as university in Robocon 2016 competitions.

G.T.U. has taken an initiative to form a team for the ROBOCON 2016 , also known as GTU ROBOCON 2016 TEAM . It is Robotic competitions which focus on good engineering practice, Robo - design and education of the participating students.

Need of the consortium:

University authorities has considered the inputs from various stake holders and mainly students and thinking to create a consortium of student representatives from various colleges for the above cause to build a university level team. GTU being affiliate type University the team will represent GTU who might belong to various different colleges and work in Synchronization. Since years passionate students have been putting their own resources in case of need to participate in the above activities. Despite the best input sometimes the resource requirement and mainly the quality mentoring has been a challenge for performing up to the mark. Sometimes the participation fees and the transaction cost required for making a Robots(one manual & one autonomous Robot) & arena is much beyond the capacity of facing possible support from the college and/or any sponsoring organization. Based on the various norms and requirements set by the ROBOCON organizing institution like MIT PUNE requires real time development . The cost of creating step by step product remains challenging for the students to achieve in limited time of their academic schedule at their own college level. Hereby we believe that by banking upon complementary strengths and resource possessed by various departments at various affiliated colleges our students representing university team comprising best students from interested colleges can harness their full potential and uplift the benchmark of their earlier performance individually. The consortium will be formed by colleges who are interested to be the part of university team for any one or more national and international events. The consortium will be shared by the vice chancellor of GTU and will have suitable representation from participating affiliated institute. The colleges who believes in co-creation based innovation and technology development will become a part of the above consortium by signing the MOA.

Deliverables desired from the MOA:

1. The agreed institution will nominate the best student representative/s to be part of University team - GTU ROBOCON 2016 TEAM . University and the Advisor/Mentor Appointed

by the university will finally decide the team members who will represent the university team based on their contribution, performance and relevance.

2. University will put the resource required for GTU ROBOCON 2016 TEAM and bring in mentors to build the capacity of students.
3. The constituent colleges of the consortium agrees to provide their lab infrastructure if required when their students may do some of the micro assignments of the entire project at their respective institutes during their academic process.
4. Based on the accessibility and maximum lab resource availability one of the college will host the central team by providing access of the lab/workshop infrastructure or potential intellectual input for helping the university team to achieve in designing the desired Robots
5. Financial resources will be contributed or channelized through university. The students who are part of the team may suggest requirements and required support which will be mobilized by university authority.
6. While a central team will be constituted to look after the task step by step the teams at various college levels may work with micro assignments as their academic or hobby projects. College authorities of respective institutes will facilitate this process via their existing infrastructure.
7. Various competitions do not mandate a college and its affiliating university to participate separately in same edition of same competition. In some cases even the university team is not encouraged but individual colleges are encouraged to participate. A college will be a part of a consortium of specific competition if it agrees by nominating their students as a part of university team than that nominated students cannot participate in alternative team individually . However in some more competition if the college send its own team to participate for that event or that project, that particular college will be a part of the consortium for that competition but students must be different in both the teams .
8. The MOA will stand valid for particular ROBOCON 2016 . It can be renewed every season by submitting a letter to suitable authority at university with due sign from college authority.
9. University want to make this project a huge co-creation based Robotic technology development. GTU Robo Research Group and other initiatives of GTU will facilitate workshops for ideation, design, Technology Development and mentoring as suggested and co-ordinated by the university team participating for the Event. This will ensure huge number of students of related branches participate in this huge co-creation . The Institutes/Students which may not be the part of MOA may wish to contribute in this decentralized development process and that will be welcomed.
10. For any possible dialogues to enhance the mutual co-operation between the college teams will be appreciated to be channelized by bringing the University team or its advisors/Mentors/Competent authorities in confidence.

11. The colleges contribution to this massive mission and their respective departments, guides and students at various stages having significant contribution will be felicitated during GTU Innovation Sankul day and/or suitable occasions. The advisory team will benchmark the innovative contribution of all the departments being a part of MOA or others and recommend for appreciation at university level.
12. University will take care of the entire cost and facilitate the process supervised by suitable authority.
13. The college will nominate the faculty related to workshop or the laboratory/s which are going to be used occasionally in decentralized mode as the nominated contact person for general communication who will be in touch with university team for any support or suggestions.
14. Though this MOA has been designed for GTU ROBOCON 2016 TEAM which is going to be held at MIT , Pune in March 2016 similar MOA's can be designed and signed for other such competitions as per the advice of the chairperson of the consortium.

Hereby we agree to sign the above MOA to facilitate the desired cause with noble Academic intention.

Nominated Faculty

Principal

Trustee (if Any)