



Presents



2017

Intercollege Technical Fest

MAKEATHON

Theme: Smart City

November 3rd and 4th, 2017

Welcome to the MAKEATHON

The Associated Students of all branches of Engineering at the Atria Institute of Technology have recognized the need to provide the real-life, application-based challenges to students interested in the field of Technology. For this reason, CODE is hosting the MAKEATHON for the first time in November 2017. This event provides students interested in Engineering related fields a hands-on opportunity to solve a real-world problem in a collaborative environment. Students are presented with a research-based challenge, and have a limited amount of time and resources to solve the challenge. By working in teams, students engage in an interdisciplinary sharing of knowledge in order to solve a time-sensitive case. During the competition, corporate representatives and graduate students act as mentors, providing feedback to students, and offering advice. Students from other universities are invited to compete to provide exposure to an innovative and collaborative environment and to foster bonds with students and organizations from other colleges.

Build your skills as an Engineer

Teamwork // Device Design // CAD // Fabrication // Public Speaking //
Time Management // Problem Solving // Networking // Much more...

About the MAKEATHON

MAKEATHON (the “Hackathon”) is administered by DexterIX, CODE on behalf of Atria Institute of Technology, Bangalore and its partners and sponsors. In 30 hours, many teams from the various colleges across the city will brainstorm, design, or CAD a device under material and functional constraints. At the seven hour mark, teams will present preliminary designs to a panel of judges who will deliberate and examine teams that will move on to device fabrication. These teams will utilize the rest of the period to construct their designs from a variety of materials and methods. All teams will prepare a final presentation to be delivered to the panel of judges as well as the rest of the students that will cover design motivations, device functionality, impact on the field or on client needs, as well as other device- and field-related information. There will be one grand prize winner chosen from the many teams sent to production and one runner-up winner chosen from the remaining teams based on final presentations. Though engineering students are the target demographic, undergraduates from other fields are also encouraged to participate.

Condensed Approach

The MAKEATHON forces participants to undergo month’s worth of design process in the course of a few hours. This condensed approach enables the Makers to push themselves to the limit and see how far they can go.

Excellence and Professionalism

Compete to become one of the top teams to enter the production stage and demonstrate your ability to bring a design from concept to realization. This competition offers a unique opportunity to demonstrate your abilities to corporate and industry representatives.

Rules and Regulations

MAKEATHON is a two day event which tests the mettle of a modern day student and also makes them realize their potential. A theme is incorporated for the MAKEATHON. Major industrial and environmental problems regarding the theme will be given to the brightest young minds with a fresh perspective on various problems, which can lead to further brainstorming and implementation.

By entering the MAKEATHON, participants agree to abide by these rules and decisions of the organizers and the judges, as further defined below. You also agree to comply with all applicable laws.

1. Purpose:

The MAKEATHON is an opportunity for individuals to submit a SUBMISSION (hereinafter defined) that has the potential to help come up with ideas where we make living smarter in the most cost efficient and productive way.

2. Theme: The general theme is SMART CITY.

(1) Smart Grid (2) Smart Health (3) Smart Environment (4) Smart Transportation
A city which is facing numerous problems forms the basis of the theme to work on. The teams have to crack ideas so that the city is made smarter, inclusive and most of the problems faced are solved through technology. Having an imaginary city named **Dexterica** where resources are limited.

3. Format:

MAKEATHON is a two day event that will stretch for a continues 30hr working period. The event begins on November 3rd, 2017, at 9:00am and ends on November 4th, 2017 at 3:00pm or at the conclusion of the judging period.

4. Parameters and Domains:

Teams will be given domains respective to their branch. They need to formulate a unique problem statement associated with the theme and in accordance to the domain and submit at the time of registration, for which the participants have to find a solution and demonstrate it as a working prototype or a project during the MAKEATHON period.

- The Domains for the following branches are:

Computer Science & Engineering	<ul style="list-style-type: none"> • IoT • Web Development • App Development • Security and Cryptography • Artificial Intelligence • Databases
Information Science & Engineering	<ul style="list-style-type: none"> • IoT • Web Development • App Development • Security and Cryptography • Artificial Intelligence • Databases
Electronics & Communication Engineering	<ul style="list-style-type: none"> • IoT • Automation • Artificial Intelligence • Robotics • Cyborgs
Civil Engineering	<ul style="list-style-type: none"> • Stability of High Rise Buildings • Intelligent Transport System • Advanced Earthquake Resistant Techniques • Environment Friendly Building Techniques • Automation in Traffic Control • Waste Management
Mechanical Engineering	<ul style="list-style-type: none"> • Automation Solutions for an Assembly Process • Product Improvement • Infrastructure or Machinery Improvement • Process Improvement • Hybrid Bikes • Bottleneck Process

5. End Result: A model (prototype) and a Paper Presentation which supports sustainable living (eco-friendly) by providing solutions through technology.

6. Eligibility:

- The event is open to all students across various branches of engineering and technology. The specifics will be mailed to the participants after registration.
- The branches that can mainly participate are: CSE, ISE, ECE, Mechanical and Civil. Students of MCA can also participate.

7. The Entry Period, Event dates and Participation options:

- Registration to participate in the MAKEATHON begins on October 24th, 2017 and ends on the earlier of October 31st, 2017.
- The MAKEATHON venue is the **Atria Institute of Technology, Bangalore.**
- Proper college ID cards must be provided on the day of the event.
- Participants can enter the MAKEATHON by signing up at www.dexterix.com (the “Website”). All entrants will receive a confirmation email/message.

8. How to Participate:

- An Eligible Entrant must register for the MAKEATHON during the Entry Period, at (www.dexterix.com). Once registered, the money will not be refunded.
- Registration fee: **₹1,500/- per team (a team of three) and ₹600/- per head.**
- Online payment through the Website.

9. Teams:

- Participants must work on a team of three people, with each participant meeting the requirements of an Eligible Entrant and being registered. For greater certainty, individuals may not work on multiple teams.
- If it is discovered that a participant is found to have acted contrary to this rule, then (in the sole and absolute discretion of the organizers) he/she and his/her team(s) (if applicable) may be disqualified from the MAKEATHON and corresponding SUBMISSIONS (as set out below) may be subject to disqualification.

10. MAKEATHON Details:

- During the MAKETHON period, all Eligible Teams are invited to create and demonstrate a submission (“SUBMISSIONS”).
- Eligible Teams may work on their SUBMISSIONS at any time throughout the MAKEATHON period.
- All participants will be responsible for their own transportation to the MAKEATHON venue and all other costs/expenses for the duration of the MAKEATHON Period.
- The routes and timings can be viewed at www.dexterix.com on the day before the event.
- Breaks will be provided to the participants for refreshment and food, which will be arranged at the venue.
- Accommodation will be provided at the MAKEATHON venue.
- Hospitality and Security of the participant teams or individuals (he/she) will be taken care with utmost priority by the organizers of MAKEATHON.
- The Eligible Teams will not be allowed to leave the MAKEATHON venue before the MAKEATHON period ends unless and until serious situations arise.
- Participants can bring essential components. It is recommended to bring the programmable circuit board like arduino, raspberry pi or anything the student is comfortable with. Laptops are compulsory. Components that are needed for the particular problem statement (SUBMISSION) can be requested to purchase at the time of registration.
- Basic Stationary required for completing the SUBMISSION will be provided to all the Eligible Teams.
- All Eligible Teams will be required to provide their own computer/laptops with Solidworks, AutoCad or whichever CAD software the team is comfortable with installed. CAD licenses will NOT be provided.
- While contact with professionals and mentors at the event is highly encouraged, contacting professionals outside of the event for design ideas and help will disqualify a team.
- Each team must submit the abstracts within the stipulated time and penalty will be given if delayed. Plagiarism will be taken very seriously and can lead to disqualification.
- There will be respective checkpoints throughout the event to ensure that the teams are progressing well and to make judging effective.
- The winning teams will be provided with cash prizes. All participants will be provided with certificates.

11. Submission Requirements:

- By submitting a SUBMISSION, each participant agrees that the SUBMISSION (and each individual component thereof) complies with all conditions stated in these rules.
- Submitted SUBMISSIONS must never have been previously published, exhibited publicly, or selected as a winner in any other contest. All proprietary code used in the Submissions submitted must be developed during the MAKEATHON Period.

12. Prizes and Certification:

- Prize Pool up to ₹20,000/-
- Merit and Participation Certificates will be given.

13. Judgment and Selection Process:

- A panel of judges appointed by the organizers (the "Judges") will be in charge of reviewing all SUBMISSIONS deemed eligible.
- Evaluation is based on:
 - Authenticity
 - Novelty
 - General Design
 - Social Relevance

• **Judging Criteria:**

SECTION	DESCRIPTION	SCORING		
Impact	Does the product create value for the user? Does it satisfy a need or fix an existing issue?	0-10		
		0-3	4-7	8-10
		Application has no relevance to fixing any issue or has very little relevance to making the city smarter and Eco-friendly.	Application is generally relevant and satisfies user's needs in making the city smarter and Eco-friendly.	Great application that is highly relevant exceeds user's needs and creates additional value.
Innovation	Is the product unique? Is it built on an existing application?	0-10		
		0-3	4-7	8-10
		Concept of application is not unique or the application is slightly improved over existing applications.	A new approach to an existing application or adds new layers of creativity or data use to existing applications.	The application is a truly unique idea that has not been seen on the market before.
Functionality	Is the product functional as intended by design?	0-5		
		0-2	3	4-5
		Application is not complete or has limited functionality (either because of stability or completion).	Application generally works, but is not fully functional or completed.	Application is fully functional and complete.
User Experience	How good is the overall experience of a person using the product? Is it simple to use, intuitive, and visually pleasing?	0-5		
		0-2	3	4-5
		Difficult to navigate or lacking visual appeal.	Looks good. Main features were easy to find, some features were too hidden.	Looks great. Navigation is easy and intuitive.
Presentation	Can the team explain the submission clearly? Do they have a concise and easy to follow presentation?	0-5		
		0-2	3	4-5
		Presentation is confusing.	Presentation lacks some elements of style and clarity.	Presentation is clear, concise and pleasing.

14. General Conditions:

- By entering the MAKEATHON, each participant agrees to the use of his/her SUBMISSION, along with his/her name, address, voice, statements about the MAKEATHON and/or photograph or other likeness without further notice or compensation, in any publicity or advertisement carried out by the Organizers in any manner whatsoever, including print, broadcast or the internet.
- Each participant further grants to the organizers the right to record and/or photograph the participant during the MAKEATHON Period and the right to use any such recordings and photographs, without further notice or compensation in any publicity or advertisement carried out by the Organizers in any manner whatsoever, including print, broadcast or the internet.
- The organizers will not be liable for:
 - (i) any failure of the Website before, during or after the MAKEATHON Period;
 - (ii) for any technical malfunction or other problems relating to the telephone network or lines, computer on-line systems, servers, access providers, computer equipment or software;
 - (iii) the failure of any entry to be received for any reason, including, but not limited to, technical problems or traffic congestion on the internet or at any website or for any entry to be deemed inadmissible during Phase 1;
 - (iv) any injury or damage to a participant's or any other person's computer related to or resulting from participating or downloading any material in the MAKEATHON;
 - (v) any illness, injury, sleep deprivation, stress related illness/injury or any other illness/injury of any kind claimed to be caused by or related to a participant's entry or participation in this MAKEATHON; and/or
 - (vi) any combination of the above.
- The Organizers reserve the right, in their sole and absolute discretion, and without prior notice, to adjust any of the dates and/or timeframes stipulated in these Rules, to the extent necessary, for purposes of verifying compliance by any participant or Submission with these Rules, or as a result of technical problems, or in light of any other circumstances which, in the opinion of the Organizers, in their sole and absolute discretion, affect the proper administration of the MAKEATHON as contemplated in these Rules. The Organizers further reserve the right, in their sole and absolute discretion, and without prior notice, to terminate or cancel the MAKEATHON or any part thereof.

15. Event Timeline:

Day 1: 3rd November 2017

- 9:00am – Inauguration
- 10:30am - General instructions and commencement of the event
- 12:00pm - Preparations and submission of abstracts
- 1:30pm - Lunch break
- 3:30pm – Submission of the 7th hour report
- 5:00pm – Dispersal of teams
- 5:30pm – Snacks and refreshment break
- 7:00pm – Submission of the 11th hour report
- 8:00pm – Dinner break

Day 2: 4th November 2017

- 8:00am – Submission of the 20th hour report
- 10:00am – Breakfast Break
- 12:00pm – Submission of 24th hour report
- 1:00pm – Lunch Break
- 2:00pm – Presentation
- 3:00pm – Results, Distribution of prizes and Vote of Thanks

16. If there are any queries, kindly contact us or send us an email.

- Mail ID: support@dexterix.com
- Visit our Website: www.dexterix.com
- Get more updates about MAKEATHON on Social Media:
 - <http://www.facebook.com/code.ait/>
 - <http://twitter.com/DexteriX2k17/>
 - <http://www.instagram.com/dexterix2k17/>

17. Event Coordinators:

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