

YUGAM 2020

NATIONAL INNOVATION & TECH EXPO (NITE)

Concept Note

Yugam 2020 takes great pride in conducting **National Innovation & Tech Expo (NITE)**, a **National level project presentation** where inquisitive and innovative minds converge to bring out futuristic and groundbreaking projects. With 150+ Teams expected to take part, this project presentation strives to divulge unconventionality and novelty. The event primarily focuses on inventive and experimental projects from major domains such as IT, Electronics, Mechanics, Textile and Life Sciences to solve notable real time problems of industries and society. The event aims to forge a single avenue for ideas across the nation to create a young engineering community for sharing knowledge, expertise and skill.

Come, be a part of this contemporary tech fest and unleash the technocrat in you!

THEME :

All of us like a smart person, don't we? It is time we make machines smart too. Therefore it isn't surprising that the word like 'smart' city, 'smart' watches, 'smart' appliances are trending now. Our theme is also based on this new fad that has been making waves. The sub domains that we are primarily focusing on are:

- **Smart city :**

A Smart city relies heavily on the deployment of technology. Different combinations of technological infrastructure interact to form the array of Smart City technologies with varying levels of interaction between human and technological systems. We'll be focusing on transportation, buildings, utilities, environment, infrastructure, public services and similar arenas. This category might also include monitoring and managing traffic, transportation system, water supply networks, waste management, crime detection, information systems, schools libraries hospitals and other community services, climate change, economic restructuring, online retail and entertainment, aging population and urban population growth, other utilities etc.

- **Smart Industry:**

Smart industry is a technology-driven approach that utilizes Internet-connected machinery to monitor the production process. The goal of smart manufacturing is to identify opportunities for automating operations and use data analytics to improve manufacturing performance. The trending topics in this domain are additive manufacturing, composite materials, advanced mobile devices, improved IOT platform, human-machine interface, authentication and fraud detection, smart sensors, augmented reality and wearables, data visualization and triggered real time training and much more.

- **Smart Lifescience :**

The life sciences ecosystem needs to be highly efficient and fully connected from production to distribution in order to stay competitive and relevant. Smart life science also includes biocomputers, biocontrol, bioengineering, bioelectronics, biomaterials, biomedical science, biomonitoring, biopolymer, kinesiology, medical devices and much more.

OUTCOMES :

- To develop and hone the various skills of students by testing their technical expertise, knack for innovation, flair for managing time effectively and ability to work as a team
- Holistic development will be imparted to students by bringing out collaboration between engineering subjects and their applications, presentation of knowledge, error analysis, development and manufacturing based optimization and customer based optimization.
- To create a platform for ideas from various colleges and institutions across India thereby creating a knowledge sharing bridge among these institutions.
- To analyze industry requirements and find a suitable market for the project using incubator techniques.

The teams that break into the top 5 will be incubated in **RiG-crew of technocrats, researchers and executors, KCIRI - Research Body of Kumaraguru Institutions** for 3 months and their project will be carried forward to **FORGE – Innovation Incubator** for market scale.

EVENT FLOW :

The project presentation will take place in 3 rounds.

ROUND 1 - Submission of application

Round 1 will require participants to fill the application form with the necessary details. A team can consist of 3-5 students across different branches. Team members can be in their first/sophomore/pre-final/final year. Every team should have a staff to mentor and guide them. The project name/idea and the domain under which it falls should be specified very clearly. Teams should mention their project type(hardware or software). Also an abstract of the project(max. ___ words) should be submitted along with the application form.

ROUND 2 – Video presentation

Round 2 for the shortlisted teams will take place exactly a week before the final event. Teams will be required to submit a video of the project that should encompass the introduction of team members, explain the idea or need for such a project and the workflow of the project as a live demo.

ROUND 3 – Live Presentation and exhibition round.

The last and final round will happen during Yugam 2020 and the winner will be decided by two different panels of judges. Visitors' poll will also be taken into consideration. Scroll down for more details.

RUBRICS :

Criteria	Description	Points	Weightage
Technology	Does the project make effective and appropriate use of the major features of its chosen platform(s)? Were there significant platform features or even platforms the project could have benefitted from but failed to utilize?	20	40%
	Does the project include innovations in technical design and/or implementation?	10	
	Does the project include innovations in user experience?	5	
	Does the project have a professional degree of production in terms of performance, user interface, visuals, and audio?	5	
Diversity Inclusion, & Accessibility	Does the team adequately address how the needs of all users with regards to gender, ethnicity, disability segment, or other diverse characteristics were considered to make their project inclusive and accessible?	10	20%
	Does the team leverage external reviews for their project such as customer surveys, focus groups, beta testers, subject-matter experts, or potential investors? Are review participants representative of the entire intended user base?	5	
	Has the project been tested for accessibility to ensure that it is usable by everyone?	5	

Innovation	Does the project create a new category of product or service?	5	15%
	Does the project clearly and meaningfully innovate beyond existing products or services?	10	
Concept	Does the project have a clear target market or audience?	5	15%
	Does the project address a clear need, problem, or opportunity and is the solution clearly explained?	5	
	Is the project's purpose and basic functionality easily understood?	5	
Feasibility	Does the team have a credible plan for getting their project to market in terms of business model, any required partnerships, or other factors?	5	10%
	Does the project have a reasonable chance of success in its appropriate market given the team's existing plan?	5	

CONTENT AND TECHNICAL REQUIREMENTS :

In addition, all entries must meet the following requirements for the Live Presentation, Project Proposal, Software, and Hardware.

Software Instructions:

The Live Presentation is a three-minute PowerPoint overview of your team and project accompanied by a live stage demonstration of your project. This presentation should explain your project and your team.

1. You are responsible for arriving with your Hardware working / software installed for the demonstration.
2. Your presentation must clearly address each of the Judging Criteria outlined above.
3. The project you demonstrate must be fully functional and implemented.
4. At the end of your presentation, the judges will have ten minutes to ask you questions.

Software (if your project works in software)

We need to be able to use your app in order to judge it! The Software is defined as an installable and usable software project in the appropriate format for your chosen platform(s).

Software must meet the following requirements:

Windows: A standard SETUP.EXE or .MSI Windows Setup application to install your app on a Windows PC. If your project is a Universal Windows Platform (UWP) App, submit it as an .appx app package file with all associated files required for installation, including the PowerShell script; you must also sign the app package by following the instructions given here.

Mobile Device: A standard setup file for deployment to Windows Phone, iOS or Android devices. If your project includes an embedded component, then you must submit a console application that simulates the data flow and interaction between your app and the embedded device. The console application must be submitted as an *.exe. In all cases, you may submit any or all of your files compressed in a ZIP file.

1. Your software must be in one of the following formats for installation depending on its platform.
2. If your solution uses Artificial Intelligence or Machine Learning you may be asked to provide an anonymized dataset sample that will factor into judging at the event as a condition of attending the Regional Final.
3. The app executable must be no more than 3GB.
4. If your app includes and/or requires an external device, touchscreen/slate capabilities, Mixed Reality, you must include this as a requirement in the Software Instructions document.
5. The instructions must be submitted as either a document in .DOC, .DOCX, .PDF, .PPT, or .TXT file formats or a graphic image as a .JPG file.
6. It must list all requirements for using the app such as Kinect, webcams, Mixed Reality devices an internet connection, Xbox game controllers, guest account login/password, or anything else that a judge must have to use your software.

Presentation Video(before 1week of event day)

The Presentation Video is a video recording of your Live Presentation and must abide by the same requirements as the Live Presentation except that there will be no questions from the judges. In addition:

1. Your video must be submitted in WMV or MP4 formats and must be compressed to a file of no more than 1GB.
2. Your video must simulate the experience of a judge viewing a Live Presentation.
3. It must be no longer than three minutes in duration.

ELIGIBILITY CRITERIA :

- Students from the field of science and technology (pursuing B.E/B.Tech) from all over India are eligible to participate.
- Preferences will be given to clarity, scale of impact and complexity of the ideas.

PRIZE MONEY:

Winner (3) - 50,000/-

Runner (3) - 25,000/-

Short prize - 5000 x 5 = 25,000/- (Based on Categories like Best Idea, Prototype etc.)