DRONACHARYA
College of Engineering

INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)

SPARK INNOVATION CONTEST

Last Date for Submission Project :
28th February, 2021

- Competition for all Undergraduate Students
- Students should cover all aspects of their project given in format and they can add extra sheets also to explain their project.
- A team should have minimum 4 students and 1 mentor (faculty).
- A student can be a part of multiple teams and a team can submit multiple projects.
- A student can submit their project in the given format at pooja.sharma@ggnindia.dronacharya.info
- Selected projects will be submitted in National Innovation Contest.
- No submission will be considered after last date.

Faculty Co-ordinator : Prof. Pooja Sharma
(M. No.: 9818644355)

Theme of Project :

Healthcare & Biomedical devices.| Agriculture & Rural Development. |Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology. |Food Processing. | Robotics and Drones. |Waste management. | Clean & Potable water. |Renewable and affordable Energy. | IoT based technologies (e.g. Security & Surveillance systems etc) | ICT, cyber physical systems, Block chain, Cognitive computing, Cloud computing, AI & ML.

DRONACHARYA College of Engineering

INSTITUTION'S INNOVATION COUNCIL (Ministry of HRD Initiative)

Institution's Innovation Council
Project Submission Form

PART A: Idea/PoC (Product/Service/Process)

Team Details

Team Lead:

Name		Email	Contact no.

Team Members Details:

Sr. No.	Name	Email	Contact no.

Add more fields if required

Mentor

Sr. No.	Name	Email	Contact no.

Add more fields if required

Institute Name and Address:

Name of the Idea/Proof of Concept (PoC)	
Theme	…… *Chose most appropriate theme (max 2) from* ***Annexure 1***
Define the problem & relevance to today's market/society/industry need *(Max 100 words)*	
Propose the solution to Problem Identified *(Max 100 words)*	
Describe the product/process/ service and write how it is innovative / unique. *(Max 100 words)*	

How is your proposed product/ process/service being different/ better from a similar product/ process/ service, if any, in the market *(Max 100 words)*	
If your Idea is technology based, then specify the TRL Level (Technology Readiness Level) and Expecting the features of Idea/PoC. ***Note:*** *For the Idea level, TRL 0 – 2 is expected.* *For the PoC level, TRL 3 is expected.* *(Max 100 words)* *Chose most appropriate TRL level from* ***Annexure 1***	
	Feasibility of Idea/PoC solution (SMART) *(Check the appropriateness of the Idea/PoC)* *(Max 50 words for each from a-e)*
(a) Specific- Specify the features of Innovative Idea/PoC.	
(b) Measurable- Mention the approach to convert idea/PoC to Prototype/Innovation with milestones.	
(c) Attainable- Explain how you are going to achieve the prototype development objective with the available resources at your disposal.	
(d) Realistic- what kind of skillset of team and resources required to achieve the goal in specific time period?	

(e) Timeline- Develop a timeline against the milestones for taking Idea/PoC to Prototype Development and (or) Commercial level/start-up stage.	
Applicability of Solution 10 Marks *(Max 50 words for each from a-e)*	
(a) **Usability:** what is the usability of your innovation. *(Level of acceptance of innovation and its Features among target group)*	
(b) **Scalability:** how your innovation will be scalable at market level.	
(c) **Economic sustainability:** Explain the potential of innovation to become profitable or financially viable.	
(d) **Environment Sustainability:** How your innovation is environment friendly or address environmental problems.	
(e) Is there any Intellectual Property (IP) Component associated with innovation? if yes, explain.	
Define the potential market size (in terms of INR) and target customers. *(Max 100 words)*	

Annexure 1

Themes:

1. Healthcare & Biomedical devices.
2. Agriculture & Rural Development.
3. Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology.
4. Food Processing.
5. Robotics and Drones.
6. Waste management.
7. Clean & Potable water.
8. Renewable and affordable Energy.
9. IoT based technologies (e.g. Security & Surveillance systems etc)
10. ICT, cyber physical systems, Block chain, Cognitive computing, Cloud computing, AI & ML.

9 stages of TRL:

TRL 0 : Idea. Unproven concept, no testing has been performed.

TRL 1 : Basic research. Principles postulated observed but no experimental proof available.

TRL 2 : Technology formulation. Concept and application have been formulated.

TRL 3 : Applied research. First laboratory tests completed; proof of concept.

TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype).

TRL 5 : Large scale prototype tested in intended environment.

TRL 6 : Prototype system tested in intended environment close to expected performance.

TRL 7 : Demonstration system operating in operational environment at pre-commercial scale.

TRL 8 : First of a kind commercial system. Manufacturing issues solved.

TRL 9 : Full commercial application, technology available for consumers.

For any Query:

Write us at email: pooja.sharma@ggnindia.dronacharya.info with email subject line: "***Spark Innovation Contest Query".***

Spark Innovation Contest

Institution's Innovation Council (IIC)

Guideline and Evaluation Criteria Sheet for Project Submission

Project Title:			
Team Leader Name:		**Email:** **Contact no:**	
Mentor Name:		**Email:** **Contact no:**	
Project Type: *(can select multiple)* O Introduction of new or improved services O Introduction of new method of production/ process O Opening of new market O Exploration of a new source & supply O Reengineering/ organization of business management process.		**Theme Name***(Annexure 1)***:**	
Sl. No.	**Parameters**	**Total Marks**	**Marks Obtained**
1.	**Relevance of Problem & Solution**	**15 Marks**	
(a) Whether the identified problem really exists in Society/Market/ Industry?		*10 Marks*	
(b) "How big is the problem"? *(Low, Moderate, High)*		*5 Marks*	
2.	**Feasibility of solution (SMART)** *(Check the appropriateness of the proposed solution)*	**25 Marks**	
(a) Specific- How specifically the proposed solution resolves the identified problem.		*5 Marks*	
(b) Measurable- Whether **t**he proposed solution is measurable and step wise approach towards innovation is followed		*5 Marks*	
(c) Attainable- Clarity of team. Is the team competent enough to develop the solution and achieve its objectives?		*5 Marks*	
(d) Realistic- Given the resources available, how realistic is the team's approach to achieve the solution in time bound manner?		*5 Marks*	
(e) Timeline- How confident is the team with the proposed solution & timeline to complete the prototype (TRL 2 or TRL 3 in 2-3 months) *(refer Annexure 1)*		*5 Marks*	
3.	**Applicability of Solution**	**10 Marks**	
(a) Usability: Level of acceptance of Solution/Features among target group		*2 Marks*	
(b) Scalability: Adoption Potential of Solution as Business Model/Startup		*2 Marks*	
(c) Economic Sustainability: Potential of solution to Become profitable or financially viable		*2 Marks*	
(d) Environment Sustainability: Potential of solution to become environment friendly or address environment problems		*2 Marks*	
(e) Existence of Intellectual Property Component, if any?		*2 Marks*	
Total		**50 Marks**	