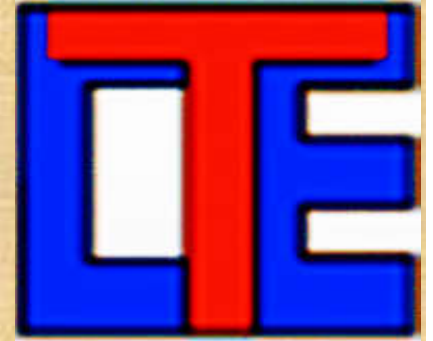# Government Polytechnic, Palanpur
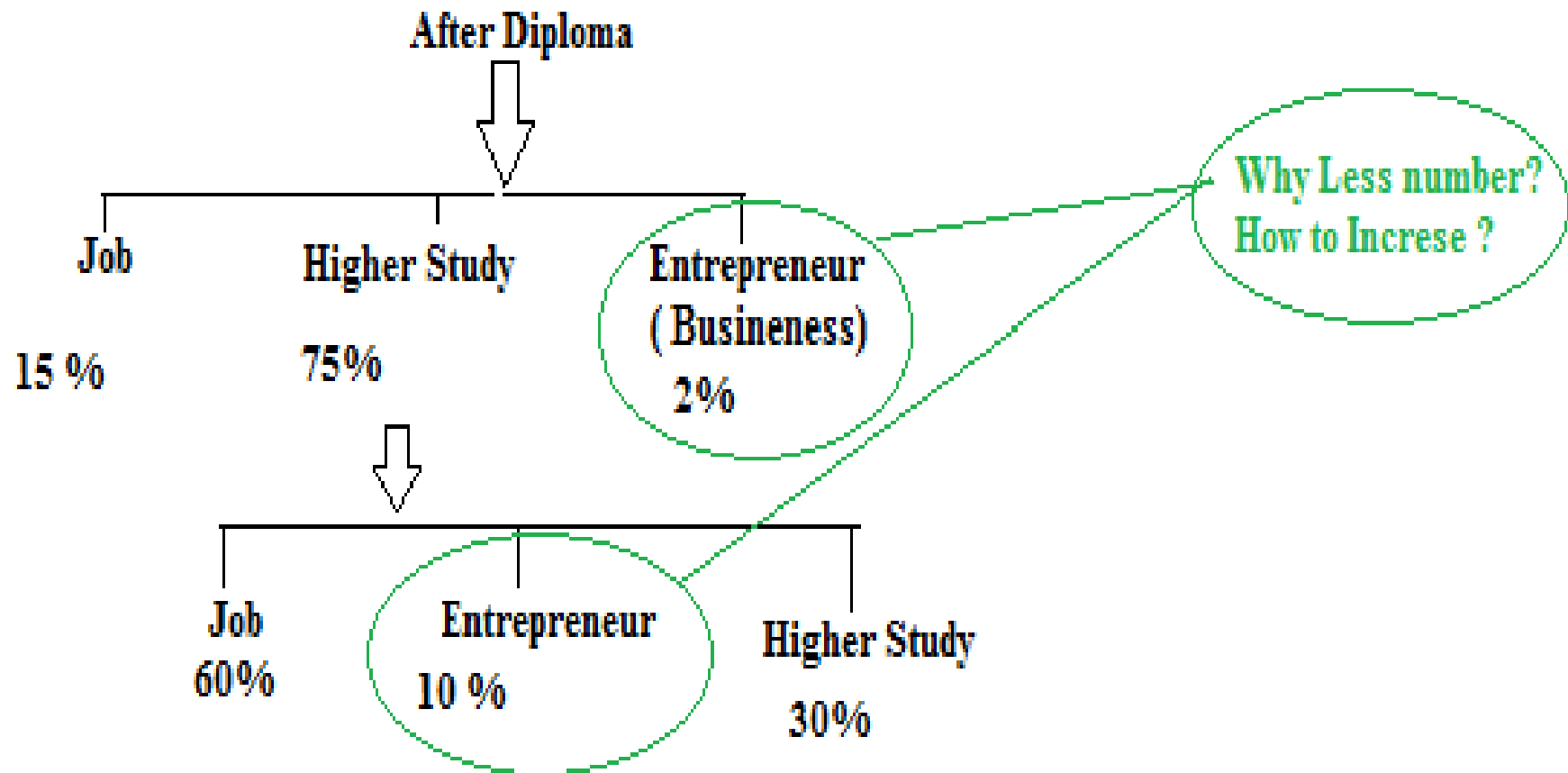
Student Start up and Innovation Policy

Mr. B M Patel
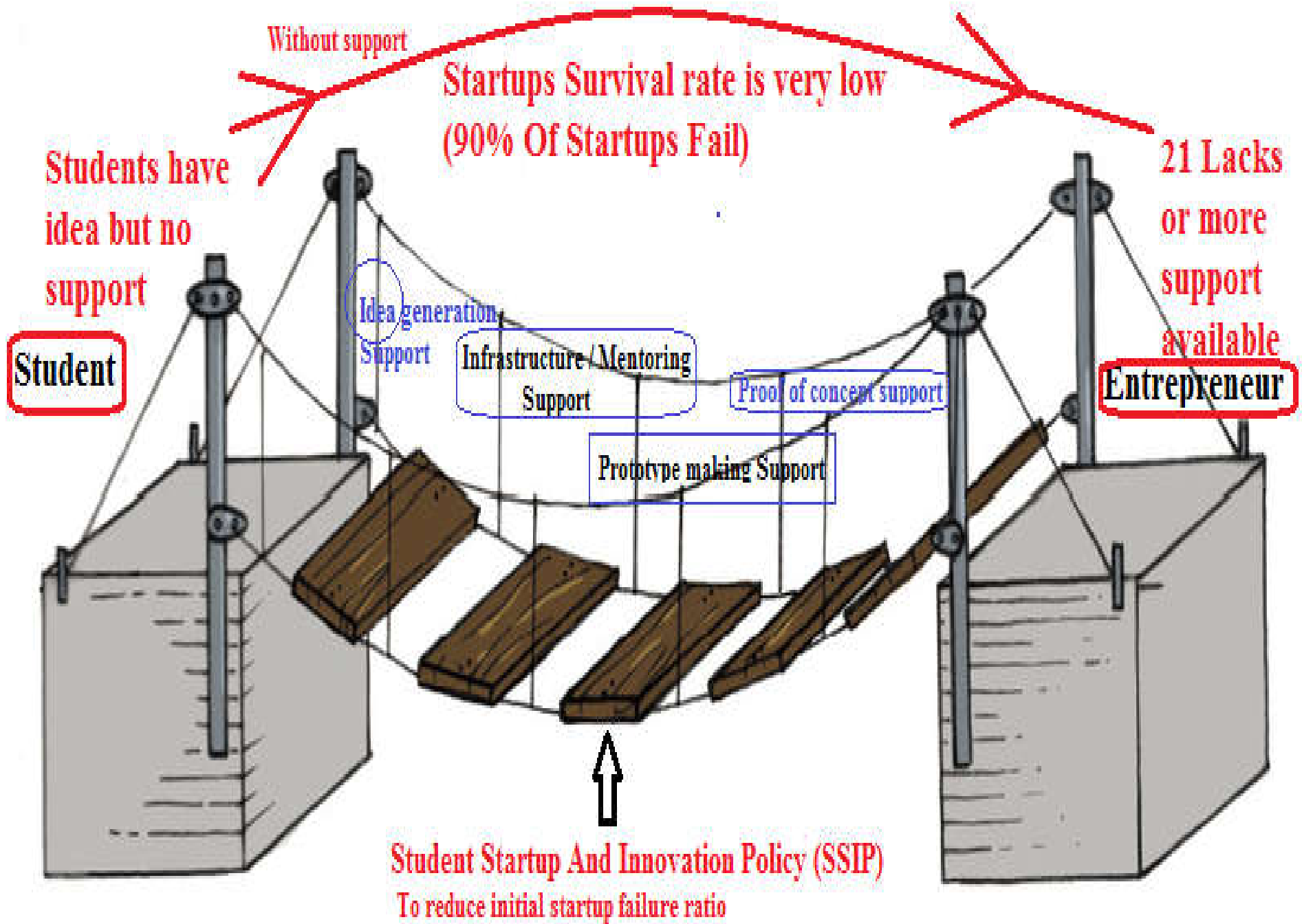**SSIP Coordinator**
G.P. Palanpur

Career options after Diploma

"Entrepreneur is made by working on self idea and processing it
and when it becomes simplified for society the person is turned into successful entrepreneur "

What is SSIP?

- **The idea was to motivate innovation among students and provide them with more skills rather than passing out with just a degree in hand.**

Without support

Startups Survival rate is very low
(90% Of Startups Fail)

Students have
idea but no
support

Student

21 Lacks
or more
support
available

Entrepreneur

Idea generation
Support

Infrastructure / Mentoring
Support

Proof of concept support

Prototype making Support

Student Startup And Innovation Policy (SSIP)
To reduce initial startup failure ratio

To nurture a start-up from pre incubation stage to a renowned company.

POLICY PERIOD
The initial period of the Student Startup & Innovation Policy shall be from the year 2017 to 2021.

- **Aim to create an environment that converts at least 1% graduates into job creators by innovation and allied means**

- **Support at least 1,000 student-led innovations per year and aim to file 1000 patents from universities in the state every year**

- **Harness 500 student startups in the next 5 years**

- **Build capacity for at least 200 educational institutes in the state in the next five years, to have a robust pre incubation support for student / alumni startups and Innovations**

- Support up-to 25,000 INR for filing IPR
- Support up-to 200,000 INR for POC support

- **Preincubation:**

  early stage support systems for the innovation & startup value chain that comprises an enabling environment to trigger creative ideas, hand-holding ideas at conceptualization stage, extending basic facility to test the ideas and validate its early users,

  Basic common working infrastructures, and access to existing resources before the innovation reaches an enterprise stage.

- **Innovation:**

  Conceptually, any innovation implies substantial improvement in the ways of doing things, producing goods or providing services.

  It may involve a new use of an existing resource or producing or delivering existing goods or services through new methods or new instruments/materials.

- **Startup:** Startup is an entity that develops a business model based on either product innovation or service innovation and makes it scalable and replicable so as to be self-reliant.

Ex.

Ola Cabs - They are currently competing with Uber

Zomato - one of the most successful food tech startups around.

Bolt- Bolt Red Streak is the world's first 'smart' mobile-phone charger for motorbikes. It has a unique detachable design to prevent theft and misuse of the device. It is a 2 A charger, which not only charges your mobile-phone fast, but also automatically tracks your entire ride on a route map, total distance, average speed etc using the Bolt Riders App.
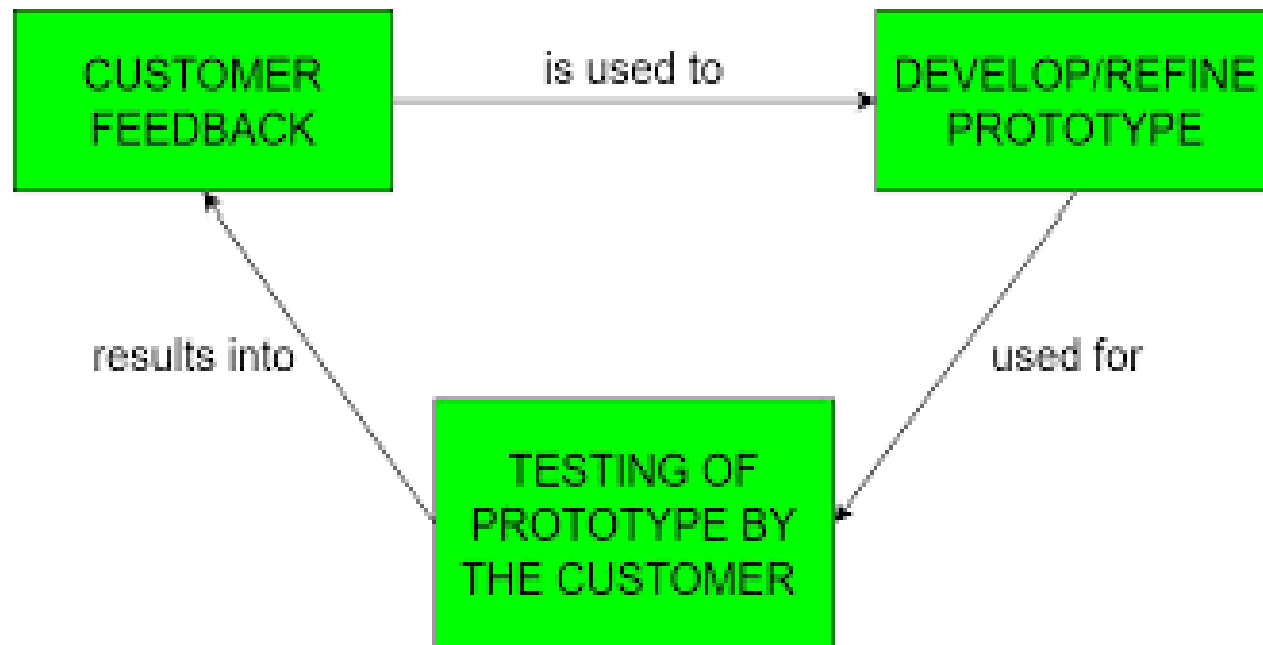
- **Proof-of-concept (POC) stage**: Proof-of-concept is the stage where the innovator / startup demonstrates a fundamental functioning demonstration of the idea / hypothesis / innovation.
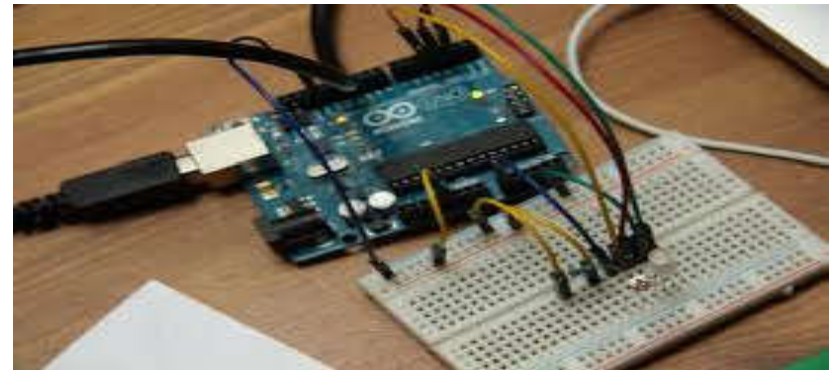
Ex.

For example, a working concept
Of an electrical device may be
constructed using a breadboard.

- **Prototype-stage**: A prototype-stage is a pre-production / pre-launch stage where the innovator / startup team has developed a basic minimum viable product (MVP) with most key features desired in the final product.

```
CUSTOMER          is used to         DEVELOP/REFINE
FEEDBACK          ──────────►        PROTOTYPE

results into                         used for

          TESTING OF
          PROTOTYPE BY
          THE CUSTOMER
```

Minimum viable product (MVP) is a product with just enough features to gather validated learning about the product (Ready for market) and its continued development.
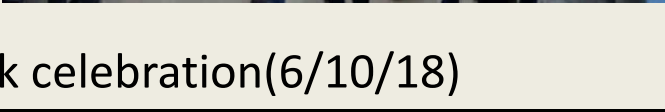
Educational institute level:

- A grant of up to Rs. 40 lakh to be disbursed to maximum 40 eligible institutes per year. At least 150 active students per annum are expected to participate at these institutes.

- Institute may extend the support for pre-incubation, prototyping development, patent filing, mentoring, events, activities, conferences, and exposure. Institutes receiving grant in a year may or may not receive the grant for the next year depending on activity level.

Internal Support system

			Work allocation	
1	Mr B M Patel	Elect.	• Event & Event content designing • IPR Policy implementation • Inviting Experts/innovators or startups	SSIP & IPR – Institute Coordinator
	Mr M J Dabgar	EC	• Event & Event content designing • Linkage with Industry • Project/Event / Experts data management	Member --SSIP & IPR Cell
3	Mr T P Purohit	Elect.	• Finance Management • Linkage with Industry	Member --SSIP & IPR Cell
	Mr Y T Rana	Civil	• SSIP State/National level Event participation • Students Data management	Member --SSIP & IPR Cell
5	Mr D D Panchal	Mech.	• In/out campus Event Management • Coordination with students • Alumni Data	Member --SSIP & IPR Cell
6	Mr V A Chauhan	IC	• In/out campus Event Management • Coordination with students • Alumni Data	Member --SSIP & IPR Cell

Culture Development in campus :To Change Mind Set (year,17-18)

SSIP Policy awareness campaign	• College level introductory lectures by college SSIP cell to all students(28/02/18)
	• SSIP Policy understanding from invited expert from nearby SSIP grantee college (GEC Patan)(05/01/2018)
	• Providing literature in local language
Event To Motivate Students	College level technical event (06/04/2018) • Project presentation • Idea/Poster presentation • On the spot event Visit: • State level Science fair visit (23/01/18) • Science city visit during world space week celebration(6/10/18)
	Seminar/workshop with title (Entrepreneurship and Innovation) • Innovation that impact lives in positive manner (28/02/2018) • Entrepreneurship camp by CED,Gujarat (10/09/18) • Entrepreneurship as a career option (07/03/2018) • Startup and IPR seminar at GEC Patan (17/02/2018)
	Interaction with Innovators (student) • Arduino controller for automation and apply in final year project(9/3/18) • Internet of things and its application (19/01/2019)

GPP students participation in State level Events

Event Name	No Team Registered	No. Team participated in round 1	No students
Hackathon-18 (12/03/2018)	3 (EE, IC)	1(EE)	3
Summer Innovation Challenge 18 (June-18)	2 (EE)	Not Selected	5
Hackathon-19 (Jan-19)	8 (EE-3,EC-1,IC-2,Mech-1,Civil-1)	3 (EE-2,EC-1)	9
Student Open Innovation Challenge-19 (march-june-19)	3 (EE-3)	Till registration is open	9

List of Problem Submitted by our institute for GIH-18-19

Sr	Branch	problem_id	name_industry	problem name	faculty
1	EE	GIH008	Getco 220 Kv Substation	Improvement in effectiveness of substation earthing	tejpal punmaram purohit
2	ME	GIH029	The Banaskantha District Cooperative Milk Producersâ€™ Union Limited, Palanpur	Effect of Cheese whey / Paneer whey	mr.d.d.panchal
3	ME	GIH030	The Banaskantha District Cooperative Milk Producersâ€™ Union Limited, Palanpur	Recycling/ reutilization of treated effluent	mr.d.d.panchal
4	ME	GIH031	The Banaskantha District Cooperative Milk Producersâ€™ Union Limited, Palanpur	To develope Userfriendly common MIS system.	mr.d.d.panchal
5	EC	GIH082	Bharat Sanchar Nigam Limited	Bts battery health monitoring system .	milav j. dabgar
6	EC	GIH083	Bharat Sanchar Nigam Limited	Drive Test Automatic Data Analysis and Report Generation	milav j. dabgar
7	EC	GIH084	Bharat Sanchar Nigam Limited	Mobile App for BTS O&M with Control	milav j. dabgar
8	EE	GIH088	Ugvcl Palanpur	Fault indication and sensing (location)	tejpal punmaram purohit
9	EE	GIH089	Ugvcl Palanpur	Harmonic sensing smart meter	tejpal punmaram purohit
10	IC	GIH159	Riya Cars Pvt Ltd.	Automatic car washing, cleaning and drying system	d j vaghela
11	IC	GIH160	Riya Cars Pvt Ltd.	Automatic Job-card preparation system	v a chauhan
12	Civil	GIH194	Vaibhav Cement Product	Reducing cost of cement product without affecting the strength of properties	y.t.rana

Technical events in campus

Experts interaction with students

Creating innovation pipeline

1. Sensitization

- To Change mind set
    - By Success stories
    - By Idea creation exercise
    - Parents meet
    - Pass-out students meets
    - make and earn in campus
- 1st year orientation program :
    - invite innovators and parents
- Seminar by innovators from industry/incubation center /academia
- Interaction with success students/young innovators

2. Idea

- Scouting the best idea
- Idea screening

3. Mentoring

- Development of strong internal mentoring system
- Building capability of faculty
- Relation development with near by institute /Industry (Design, Marketing, Technical, patent file ,Agriculture…)

Proto type making support	Patent filing support	Start-up support	Scale-up Support

Action plan to support innovators

Set up incubation center

1. Prepare Team
2. Space and connectivity
3. Attractive work place
4. Arrange resources
   - Internal Mentor
   - Industrial Mentor
   - IPR Mentor
   - Trainers/Innovators
3. Arrange industry linkages
   - Entrepreneur
   - Innovators
4. Alumni culture development

Activity and Execution

Activities keep incubator always charge
- Sensitization program
  (in campus & outside campus)
- Technical events
- Award distribution (in presence of parents)
- Training program
- Talk from experts
- Innovative product showcase
- Technology demonstration
- Mentor meets
- Visit (Developed Incubation center/industry R & D wing)

Sensitization program in GPP
25 students come forward with 10 ideas after program

1. For Mechanical 2nd and 4th sem students – 39 students remain present
2. For Electrical/EC/IC 2nd and 4th Sem Students- 42 (41Electrical,01-IC), Students remain present
3. For Civil 2nd and 4th Sem Students- Cancel due to absents of students

એગ્રીકલ્ચર ડ્રોન

Left column:

તમારા idea ને innovative કઇ છે.
... line follower SenSor and
Controlling via mobile phone/
Android phone.

તમારા idea / Project ની ... બુદ્ધિ...

તમને ... એન્જીનીયર / પ્રોજેક્ટ બનાવવા માટે
હું ... fuel વધુ બચાવી ...
→ અમારા આ પ્રોજેક્ટમાં Agricultural
... drone ...

Right column:

→ 20 V Brushless motor, 12 V DC pump
, structure (Hexagon), Lipo
Battery, SenSors etc

→ 30 ...

તમારા Guide નું નામ / m.no / DEPT
→ B.M. Patel
M.no :- 9726246059
DEPT :- ELECTRICAL
E.Mail :-

Team ની માહિતી.
→ Team leader :- ... - 3014
Team member - Jil , Sulim, Naitesh
branch :- Electrical
Enrollment No : 3038, 3022, 3511, 3033
Sem :- 2nd
DEP :- Electrical

Idea/ Project Selection Process

Process should complete within 15 days

Submission of Application by students to Departmental Coordinator

↓

Screening at Departmental level

Not Approved

Approve by: HOD, Mentor, Dept. Coordinator

↓ **Approved**

Screening at College Level

Not Approved

↓ **Approved**

Mentoring

Financial Assistance Dept. Coordinator & T P Purohit (EE Dept.)

↓

Monthaly Progress Report Submission & Registration for Technical Events (ex. Hackathon) By: Mentor & Departmental Coordinator

Project Completion

Up coming In campus Event

Sr. No.	Proposed Events	Proposed Date	Venue	Participants	Event coordinator
1	Project Demonstration	15/04/2019	New Building	**Final year students** and interested students from any semester/branch	V A Chauhan
2	Quiz		New Building	Any semester Students can take part	Y T Rana
3	Young Scientist or innovator (Idea Presentation by poster)		New Building	Any semester Students can take part	M J Dabgar
4	Start UP Story		New Building	Any semester Students can take part	B M Patel

Sr.No.	Intervention	Year – 1	Year – 2	Year – 3	Total
	4.5 Proposed budget including institute contribution, SSIP Grant and other sources:				
1	Developing Institute innovation and startup council/ecosystem/Cell	50000	100000	100000	250000
2	Developing pre-incubation process	50000	100000	100000	250000
3	Co-working space/Pre-incubation facility/Common Innovation Centre	50000	100000	100000	250000
4	Activity/Workshop/Conference/Capacity Building/Awareness program	100000	200000	225000	525000
5	Awards/Recognition/Exposure	30000	50000	55000	135000
6	Technology Platforms/ICT portals	50000	100000	100000	250000
7	Virtual Incubation/Mentoring and allied support	100000	200000	330000	630000
8	Proof of Concept (PoC) and Prototyping support	300000	500000	600000	1400000
9	Patent Filing support	100000	300000	400000	800000
10	Tinkering Lab/Fab Lab/Basic prototyping facility	100000	200000	300000	600000
11	Pedagogical Interventions/Courses/New Programs on Innovation and Entrepreneurship	20000	50000	70000	140000
12	Special Initiatives to promote student startups and innovations	20000	50000	50000	120000
13	Documentation/Publication/Dissemination	20000	30000	40000	90000
14	Any other/Administrative expenses	10000	20000	30000	60000
	Total	**1000000**	**2000000**	**2500000**	**5500000**

4.2	Three Year Action Plan to Support Student Innovation And Startups				
Sr.No.	Milestone	2018-19	2019-20	2020-21	Total
1	Total Number of Students to be Outreached and Sensitized	1000	1500	2000	4500
2	Total Number of Innovative Student Projects to be Supported	15	30	50	95
3	Total Number Innovations to be Supported at PoC Stage	1	2	3	6
4	Total Number of Patents to be Filed	2	3	5	10
5	Total Number of Student Start-ups to be Supported through interventions like:	4	8	12	24
	5.1 Incubation space & facilities	1	2	3	6
	5.2 Seed Funding	1	2	3	6
	5.3 Prototyping grant	1	2	3	6
	5.4 Faculty/ alumni/Expert/mentoring	1	2	3	6
6	Total Number of Workshops/Conferences/Seminars/Capacity Building Programs in SSIP Agenda (attach detail)	4	10	15	29

Thank you