



# Birla Vishvakarma Mahavidyalaya

An Autonomous Institution

(Managed by Charutar Vidya Mandal)



## A list of POC (Proof of Concept) Supported in FY – 2018-2019

Quarter – 3 FY- 2018-2019

Date: 21/12/2018

Sr. No	Project Title	Branch	Fund Approved (Rs.)
1	Pavement Maintenance Management System for State Highway – 151 <b>Student Leader – Karan Dadhania</b>	Civil	35000/-
2	Experiment study on light gauge steel section <b>Student Leader – Padariya Mansukhbhai</b>	Structure	14000/-
3	Eyeball Controlled Wheelchair <b>Student Leader – Megharth Lakhataria</b>	IT	15000/-
4	Interior Designing through Augmented Reality <b>Student Leader – Purvang Jadav</b>	IT	7000/-
5	Motion Control in Mixed Reality <b>Student Leader – Dhvanit Trivedi</b>	IT	30000/-
6	Smart Farm <b>Student Leader – Bhairavi Vaidya</b>	IT	8100/-
7	RUN-A-WAY <b>Student Leader – Aditya Nair</b>	EC	20000/-
8	Analysis of ECG signals for various heart diseases <b>Student Leader – Rohan Mehta</b>	EC	9000/-
9	Distributed Deep Learning Using Cloud <b>Student Leader – Kalyani Bhatt</b>	EC	25000/-
10	Gesture to voice conversation for a dumb people <b>Student Leader – Parth Makwana</b>	Electronics	10000/-
11	Design and Simulation of shunt active filter using fuzzy logic control <b>Student Leader – Divyesh Harwani</b>	Electrical	40000/-
12	Develop the hexapod robot with trajectory planning <b>Student Leader – Sanjay Shankhat</b>	Mechanical	27000/-
13	Design and Develop a Controller for Scorbot-Er Vplus Robot Integrated with Vision Control System for Object Sorting Application <b>Student Leader – Sagar Soni</b>	Mechanical	50000/-
<b>Total</b>			<b>2,90,100/-</b>



# Birla Vishvakarma Mahavidyalaya

An Autonomous Institution

(Managed by Charutar Vidya Mandal)



Quarter – 4- FY- 2018-2019

Date: 30/3/2019

Sr. No.	Name	Branch	Fund Approved (Rs.)
1	IoT Enabled environment monitoring system <b>Student Leader</b> – Dhvani Agrawal	EC	30000/-
2	Dust Soaker -the ultimate way to dust the duster <b>Student Leader</b> – Vedant Dokania	EC	25000/-
3	Bamboo-steel composite reinforced concrete structure <b>Student Leader</b> – Uday Kanjariya	Civil	13490/-
4	Wearable gestural controlled smart jacket(6th Sense) <b>Student Leader</b> – Arth Shah	Electronics	13000/-
5	Investigation of Biomimetic caudal fin shapes for optimal propulsive efficiency & its application to observation class robots <b>Student Leader</b> – Jaydeep Rathava	Mechanical	19540/-
6	Increasing the strength to weight ratio of All Terrain Vehicle(ATV) <b>Student Leader</b> – Vineet Agarwal	Production	150000/-
7	Power Train <b>Student Leader</b> – Shubham Samudre	Production	140000/-
8	Flying Military Tank (FMT) <b>Student Leader</b> – Part Kchhdiya	Electronics	6500/-
9	Designing of Optimum Suspension System for Off-Road Terrains <b>Student Leader</b> – Nirav Kotak	Production	120000/-
10	Designing the Steering system for greater stability and Brake System for shortest Stopping distance <b>Student Leader</b> – Jaydeep Rathva	Production	130000/-
11	Wideband Antenna for Mobile Communication <b>Student Leader</b> – Inderjeet Sehra	EC	45000/-
12	Wideband Antenna for biomedical application <b>Student Leader</b> – Saundarya Jain	EC	45000/-
13	Smart irrigation, crop protection and development <b>Student Leader</b> – vanaraj khistareeya	EC	25000/-
14	Versatile Multipurpose Drone <b>Student Leader</b> – Rutvik Patel	EC	185000/-
15	Smart Women Safety Belt <b>Student Leader</b> – Shreya Jarsania	EC	25000/-
16	Design and Implementation of 3-Dimensional Printer Using Solid works <b>Student Leader</b> – Shubh Majumdarr	EC	150000/-
17	Smart parking system <b>Student Leader</b> – Shreyans Patel	EC	160000/-
18	Modern Scrolling LED Notice Board	EC	50000/-

Page 2 of 6

**P.O Box No: 20, Vallabh Vidyanagar, Gujarat – 388120**

**Ph. No: (O) (02692) 230104, (P) (02692) 236672**

**Fax No.: (02692)230762**

**Visit us: [www.bvmengineering.ac.in](http://www.bvmengineering.ac.in)**

**Email: [principal@bvmengineering.ac.in](mailto:principal@bvmengineering.ac.in)**



# Birla Vishvakarma Mahavidyalaya

An Autonomous Institution

(Managed by Charutar Vidya Mandal)



	<b>Student Leader – Jenish Radadiya</b>		
19	To design and fabricate foot operated double die paper bowl making machine <b>Student Leader – Raj Dhameliya</b>	Mechanical	13300/-
20	Design and Development of Ornithopter with flapping mechanism having third DOF. <b>Student Leader – Jayendra Jadav</b>	Mechanical	15000/-
<b>Total</b>			<b>1,37,0830/-</b>

## A list of POC (Proof of Concept) Supported in FY – 2019-2020

Quarter – 2- FY- 2019-2020

Date: 13/09/2019

Sr. No.	Project Title	Branch	Fund Approved (Rs.)
1	Universal Wireless Electric Vehicle Charger <b>Student Leader – Devansh Parikh</b>	Electrical	60346/-
2	Number plate Recognition System on detecting over speed <b>Student Leader – Parth Sheth</b>	EC	18000/-
3	Universal smart energy saving system <b>Student Leader – Avi Patel</b>	EC	10350/-
4	Development of 14 DOF biped Robot with passive TOE Joint <b>Student Leader – Twinkalben Padhiyar</b>	Mechanical	30000/-
5	Inverse kinematics and trajectory planning of 5- DOF Industrial Robot <b>Student Leader – Rajsinh Jhala</b>	Mechanical	31000/-
6	Six wheeled, IOT based Rover <b>Student Leader – Hussain Badri</b>	Mechanical	44000/-
7	Painting Robot <b>Student Leader – Vrushal Vara</b>	Mechanical	39000/-
8	Quadruped Robot (IOT based) <b>Student Leader – Sanjay Arjanbhai</b>	Mechanical	75425/-
9	Development of compliant joint for a full size humanoid Robot <b>Student Leader – Vishnu A Nair</b>	Mechanical	16750/-
10	Automatic Solar panel cleaner <b>Student Leader – Nilay Panchal</b>	Mechanical	6000/-
<b>Total</b>			<b>3,30,871/-</b>



# Birla Vishvakarma Mahavidyalaya

An Autonomous Institution

(Managed by Charutar Vidya Mandal)



Quarter – 4- FY- 2019-2020

Date: 07/02/2020

Sr. No	Project Title	Branch	Fund Approved (Rs.)
1	Gesture controlled Assistance <b>Student Leader</b> – Alkesh Panchal	Electronics	29,000/-
2	Indoor positioning system using UWB <b>Student Leader</b> – Bharat Suthar	Electronics	66,000/-
3	Smart glasses for displaying body parameters during medical surgery. <b>Student Leader</b> – Krushil R. Mehta	EC	21,000/-
4	Mycobacterium Detection using UNET Model for Tuberculosis Diagnosis <b>Student Leader</b> –Dhruvi Ka Patel	Computer	20,000/-
5	Seedling trays seed sawing machine <b>Student Leader</b> – Rohan Gosar	Mechanical	27,780/-
6	Smart foundry feasibility and implementation aspects incast iron foundry <b>Student Leader</b> – Harshkumar Ashokbhai Patel	Production	25,050/-
7	Economical evaluation of rap material in base layers of flexible Pavement <b>Student Leader</b> – Ajaykumar Sejvani	Civil	51,000/-
8	Analysis of traffic flow characteristics at signalized intersections under mixed traffic conditions. <b>Student Leader</b> – Ishil Choksi	Civil	11,200/-
<b>Total</b>			<b>2,76,030/-</b>

## A list of POC (Proof of Concept) Supported in FY – 2020-2021

Quarter – 3- FY- 2020-2021

Date: 07/11/2020

Sr. No	Project Title	Branch	Fund Approved (Rs.)
1	Smart Industrial Automation System using Industry 4.0 <b>Student Leader-</b> Vrushal Vara	EL	35648/-
2	wireless network application in industrial iot <b>Student Leader-</b> Shashank pandya	EL	31000/-
3	Night Vision enable corona patients attending robot	EC	48200/-

Page 4 of 6

**P.O Box No: 20, Vallabh Vidyanagar, Gujarat – 388120**

**Ph. No: (O) (02692) 230104, (P) (02692) 236672**

**Fax No.: (02692)230762**

**Visit us: [www.bvmengineering.ac.in](http://www.bvmengineering.ac.in)**

**Email: [principal@bvmengineering.ac.in](mailto:principal@bvmengineering.ac.in)**



# Birla Vishvakarma Mahavidyalaya

An Autonomous Institution

(Managed by Charutar Vidya Mandal)



	<b>Student Leader- Rutvik Shaileshbhai Vasani</b>		
4	Obstacle detection and accident prevention system using LIDAR and IR camera. <b>Student Leader- Chintan Prajapati</b>	EC	44750/-
5	Thermography for monitoring public places with IoT Integration <b>Student Leader- Rohit Shah</b>	EC	70000/-
6	AI Enabled Wearable for Primary Education using Human Gesture Recognition <b>Student Leader- Dhvani Trivedi</b>	EC	48600/-
7	Resistive based solar cooking <b>Student Leader- Maharshi Sanjay Vora</b>	EC	192580/-
8	Automatic Hand Sanitizer Machine <b>Student Leader- Ayush Prajapati</b>	EC	54550/-
9	Virtual Ecommerce Platform <b>Student Leader- Ankit Kaushik</b>	IT	79000/-
<b>Total</b>			<b>6,04,328/-</b>

Quarter – 4- FY- 2020-2021

Date: 09/01/2021

Sr. No.	Project Title	Branch	Fund Approved (Rs.)
1	Monitoring and control of Induction Motor with the help of Variable Frequency Drive and PLC <b>Student Leader- Deepali Harishkumar</b>	Electrical	85609/-
2	Conditioning monitoring of motor with the help of variable frequency drive and Plc <b>Student Leader- Lovesh Roay</b>	Electrical	135355/-
3	Development of UV-C Disinfecting Robot <b>Student Leader- Shahil Vaghela</b>	Mechanical	129700/-
4	Development of topologically ordered open cell Porous foam using 3D Printing <b>Student Leader- Piyush Prajapati</b>	Production	12750/-
5	Safety and labour management of construction workers using deep learning and RFID <b>Student Leader- Rahul N Bhesaniya</b>	Civil	26,410/-
6	Sustainable activated carbon prepared from sucrose for removal of pharmaceutical compounds from the effluent <b>Student Leader- Vandana Katariya</b>	Civil	41,359/-
7	Study of 3D Printable Concrete Parameters <b>Student Leader- Mrunali Vasava</b>	Civil	82,091
8	Solid waste management using Hydrothermal carbonization <b>Student Leader- Waseem Raja</b>	Civil	92,100/-



# Birla Vishvakarma Mahavidyalaya

An Autonomous Institution

(Managed by Charutar Vidya Mandal)



**Total**

**6,05,374/-**

## A list of POC (Proof of Concept) Supported in FY – 2021-2022

**Quarter – 2- FY- 2021-2022**

**Date: 18/09/2021**

Sr. No	Project Title	Branch	Fund Approved (Rs.)
1	Experimental study on performance of covid waste for developing concrete of next generation <b>Student Leader – Shrey Rana</b>	Civil	91,720/-
<b>Total</b>			<b>91,720/-</b>

**Quarter – 2- FY- 2021-2022**

**Date: 25/09/2021**

Sr. No	Project Title	Branch	Fund Approved (Rs.)
1	Pneumatic Object and Transport System <b>Student Leader – Ishan Gupta</b>	Production	117760/-
2	Development of a working model of IOT based Automated Guided Vehicle System <b>Student Leader – Mayank Shiyaniya</b>	Production	12191/-
3	Cooperative Drone <b>Student Leader – Dipak Bapodra</b>	Mechanical	129095/-
<b>Total</b>			<b>2,59,046/-</b>