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I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY JALANDHAR, KAPURTHALA
Office of Corporate Relations & Alumni

Ref. No. IKGPTU/CRA/ 20.....

Dated 19/06/23.....

**Directors/Principals/Incharge
All the University Campuses & Affiliated Colleges
I K Gujral Punjab Technical University**

Sub: **Bharath Cycle Design Challenge (BCDC)**

Sir/Madam

The Bharath Cycle Design Challenge (BCDC) is an initiative to encourage innovation and creativity in the design and making of bicycles. The challenge seeks to promote sustainable transportation and provide solutions to the challenges faced by the public in India. The competition invites student teams to design a Cycle that is affordable, eco-friendly, and suits the needs of the Indian market.

The competition involves two basic themes which are design and prototyping of Commute & Cargo Cycle with subcategory of EV/Non EV. **The sample bill of material is attached.**

The workflow of competition follows a four stage process which are as follows :

1. Concept Development (June 03 – July 15, 2023)
2. Prototyping (Aug 01, 2023)
3. Testing and Evaluation (Sept 01 – Sept 30, 2023)
4. Grand Finale with showcasing of prototype on the occasion of Gandhi Jayanti on 2nd October at AICTE HQ.

Registration: Interested students may participate through the following registration form :

<https://forms.gle/BdGh38zvoZN13Ktp6>

You are requested to please direct the Training & Placement Officer of your Colleges and Institutions to circulate the information to all the concerned students.

For further details and calendar of the events you may visit @ www.aicte-india.org

With profound regards,


Deputy Director
(Corporate Relations & Alumni)

“Propelling Punjab to a prosperous Knowledge Society”

I.K. Gujral Punjab Technical University

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E-mail : placements.ptu@gmail.com **Website :** www.ptu.ac.in

Sample Bill of Materials (BOM)

(For a Commute or Cargo Cycle typically includes the various components and parts required to build the bicycle)

General list of items:

Frame:

- Bicycle frame (usually made of steel or aluminium)
- Fork (with or without suspension)
- Seat post
- Handlebars
- Stem

Drivetrain:

- Crank set (including chain rings)
- Bottom bracket
- Chain
- Cassette or freewheel
- Rear derailleur
- Front derailleur (optional, depending on the drivetrain setup)
- Shifters (usually integrated with the brake levers)

Wheels and Tires:

- Front wheel (rim, hub, spokes, axle)
- Rear wheel (rim, hub, spokes, axle)
- Tires and inner tubes

Brakes:

- Front and rear brake callipers
- Brake levers
- Brake cables

Cargo Components:

- Cargo box or platform (usually made of wood or metal)
- Racks or supports for the cargo box

- Straps or tie-downs for securing the cargo

Miscellaneous

Components: ● Headset

- Pedals

- Saddle

- Grips or handlebar

tape ● Reflectors and

lights ● Fenders

(optional)

- Kickstand

- Battery/Solar panel (For EV)

- Motor/Associated
Components (For EV)