**2025 IEEE University of Leicester Student Branch Circuit Design Contest (CDC’25)**

### ****Overview****

Organized by the ​****IEEE University of Leicester Student Branch Circuit Design Contest Executive Committee (CDCEC)****, the ​****CDC’25**** is an international competition fostering innovation and collaboration in circuit design. Co-sponsored by leading IEEE societies and industry partners, this contest invites undergraduate and postgraduate students worldwide to tackle real-world engineering challenges using electronics, embedded systems, and circuit design. Participants gain hands-on experience, expand their professional networks, and compete for prestigious awards.

### **​**Key Dates****

* ​****Official Launch****: April 1, 2025
* ​****Registration Deadline****: May 14, 2025
* ​****Preliminary Review Submission****: May 15, 2025
* ​****Final Submission Deadline****: July 4, 2025
* ​****Awards Ceremony****: July 15, 2025

### **​**Prizes****

* ​****First Prize****: £150 + IEEE Certificate + Intelligent Gift
* ​****Second Prize****: £50 + IEEE Certificate + Intelligent Gift
* ​****Industry Award****: £50 + IEEE Certificate + Intelligent Gift
* ​****Best Innovation Award****: £50 + IEEE Certificate + Intelligent Gift
* ​****Woman-in-Electronics (WiE) Award****: £50 + IEEE Certificate + Intelligent Gift
  + *Open to female IEEE Student Members demonstrating technical leadership.*
* ​****PowerLeicester Award****: £50 + IEEE Certificate + Intelligent Gift
  + *Requires ≥75% of team members to be IEEE PELS members.*

### **​**Eligibility Criteria****

​****Affiliation****:

* + Open to undergraduates (UG) and postgraduates (PG) enrolled in 2024–2025 at:
    - University of Leicester (School of Engineering, UK)
    - Dalian Leicester Institute (China)

​****IEEE Membership****:

* + ≥50% of team members must be IEEE Student Members.
  + Team leader must be an IEEE Student Member affiliated with their university’s IEEE branch.

​****Team Composition****:

* + ​****Size****: 2–4 students (each participant can join only one team).
  + ​****Cross-Campus Requirement****: At least 2 members from different campuses (e.g., UK and China).
  + ​****Gender Diversity****: ≥1 female member (UG or PG).
  + ​****Senior Member Limit****: ≤1 postgraduate as mentor/team member.

### **​**Registration & Team Formation****

* ​****How to Register****:
  + Submit a team registration form (template provided) via email to ​****cy118@student.le.ac.uk**** by May 14, 2025.
  + Use the subject line: *“Hardware Contest Information of Participating Team”*.
* ​****Team Formation****:
  + Self-organize or use the ​****IEEE Student Branch website**** (http://www.uolieee.org) to connect with peers.
  + Fill out the participant form for assistance from CDCEC in team matching.

### **​**Contest Rules****

​****Design Scope****:

* + Focus on analog/digital circuits, embedded systems, or mixed-signal solutions (e.g., sensors, power electronics).
  + ​****EDA Tool****: EasyEDA (mandatory for PCB design; free download: EasyEDA).

​****Requirements****:

* + Submit a ​****working prototype**** or ​****verified simulation**** with documentation.
  + ​****Budget****: ≤$200 per project.
  + ​****Originality****: Designs must be student-developed, not reused from prior projects.

​****Open-Source Principle****:

* + All finalists must publish schematics, PCB layouts, code, and documentation as open-source.

### **​**Submission Materials****

* ​****Preliminary Review (May 15, 2025)****:
  + Proposal including project plan, functional description, innovation highlights, component list, cost breakdown, progress report, and references.
* ​****Final Submission (July 4, 2025)****:
  + 100-word abstract, block diagrams, schematics, technical report (2–4 pages), 3-minute demo video (with IEEE/EasyEDA logos), prototype/simulation results, and source code.

### **​**Contest Phases****

​****Phase 1: Registration (April 7 – May 14, 2025)****

* + Promotional events, team formation, and submission of registration forms.

​****Phase 2: Preliminary Review (May 15 – July 4, 2025)****

* + Submit proposals for technical feasibility and innovation evaluation.
  + ​****Reimbursement****:
    - ＄200 for finalists to cover project expenses.

​****Phase 3: Finals & Awards (July 15, 2025)****

* + Global finals at the University of Leicester.
  + Live prototype demonstrations and prize announcements.

### **​**Judging Criteria****

* ​****Innovation****: 35 points
* ​****Functionality****: 45 points
* ​****Cost Efficiency****: 15 points
* ​****Progress****: 15 points

### **​**Contact Information****

* ​****General Queries****:
  + Mr. Chen Yao (CDCEC Chair): cy118@student.le.ac.uk
* ​****Regional Coordinators****:
  + ​****UK Campus****: Mr. Qianrui Liu (ql156@leicester.ac.uk)
  + ​****China Campus****: Mr. Xiang Liu (xl408@student.le.ac.uk)
* ​****Website****: UOL IEEE Student Branch