

Electrical Principles & Troubleshooting

This course equips the learner with the knowledge, skill and competence in the principles underpinning the functioning and troubleshooting of electrical circuits to understand and work safely with electric circuits.



For more information and to apply, visit
www.celtec.ie/ept

Course Learnings



Electrical Principles

Develop a thorough understanding of electrical theory by studying conductors, insulators, electrical quantities, circuit laws, and the behaviour of components in both DC and AC circuits.



Circuit Analysis and Calculations

Apply electrical principles to calculate voltage, current, resistance, power, and other circuit characteristics using established electrical laws and formulas.



Circuit Construction and Interpretation

Construct basic electrical circuits while developing the ability to read, interpret, and produce electrical circuit diagrams accurately.



Electrical Testing and Diagnostics

Use electrical test instruments to measure circuit performance, interpret test results, and diagnose faults using a logical and systematic troubleshooting approach.



Practical Troubleshooting Skills

Build practical competence by identifying, analysing, and resolving electrical circuit malfunctions safely through hands-on exercises using industrial electrical equipment.



APPLY

www.fetchcourses.ie

AT A GLANCE



DURATION

7 Non-Consecutive
Classroom Days



LOCATION

CELTEC, Celbridge, Co.
Kildare, W23 HCK2



DELIVERY

Classroom Based



SUITABILITY

Those in employment in the
Kildare and Wicklow regions



COST

This course is partially funded
under the Skills To Advance
initiative for eligible applicants



COURSE REQUIREMENT

Applicants must have prior
technical experience or
knowledge and/or exposure to
an industrial electrical
environment and ideally
completed the Industrial
Electrical Safety and Systems
Course



CERTIFICATION

QQI Level 6 Minor Award in
Electrical Principles (6N2049)