



# Electrical & Instrumentation CAD (BEng Electrical Technology Module)

**This course is currently full to capacity but please email us at [flexible@lit.ie](mailto:flexible@lit.ie) to be added to the waiting list.**

**Aims** To provide the learner with the ability to Design and Create Electrical, Instrumentation and Control drawings. Having successfully completed this module, the learner will be able to:

1. Explain the principles and conventions of engineering drawing practice and use engineering diagrams as a means of engineering communication.
2. Describe the requirements applicable to engineering drawing and a variety of electrical and instrumentation graphical symbols relevant to standards.
3. Design and interpret Electrical, Process and Instrumentation drawings.
4. Produce detailed drawings of electrical panels and instrumentation plant layout.
5. Create engineering documentation for Industrial Electrical and Instrumentation project.
6. Design and create motor control circuit drawings.

**Entry Requirements** There are no formal entry requirements to take this module, however these are not introductory level modules and some familiarity with the area as well as a level of independent study would be expected for exam success. **Content** Graphic symbols to IEC standard, Software Programming, Schematic Wiring, Creating Panel Layouts from Schematic Lists, Automation Tools Updating Schematics from Spreadsheets, Using PLC I/O Modules, Produce an engineering P and ID for plant instrumentation. **Examinations** Each taught module has a programme of continuous assessment worth 50% and a final exam worth 50%. It is necessary to pass both elements to achieve an award in the module. Students not registered on the Degree may receive an LIT Subject Certificate on successful completion of the module upon request. Students registered for the Degree will receive ECTS credits for each group of modules successfully completed. Accumulation of 60 credits will lead to the Degree Award. **Duration** 12 weeks, 1 evening per week Monday from 7.00pm to 10.00pm Commencing Monday 22nd January 2018 **Award:** Students not registered on the Degree may, upon request, receive an LIT Subject Certificate (Level 7, 5 Credits) on successful completion of the module. Students registered for the Degree will receive ECTS credits for each group of modules successfully completed. Accumulation of 60 credits will lead to the Degree Award.

**Department:** Electrical & Electronic Engineering

**Campus:** LIT Moylish

**Level:** 7

**Duration:** 12 Weeks

12 weeks, 1 evening per week

Wednesday from 7.00pm to 10.00pm

Commencing Wednesday 24th January 2018

**Course Location:**LIT Moylish Campus  
**Application Deadline:**12th January 2018

### **Entry Requirements:**

There are no formal entry requirements to take this module, however these are not introductory level modules and some familiarity with the area as well as a level of independent study would be expected for exam success.

Weeks

### **Course Fees:**

€575

### **Contact:**

#### **Further Information**

Contact: Flexible Learning Office

Tel: 061 293802.

Email: [Flexible@lit.ie](mailto:Flexible@lit.ie)