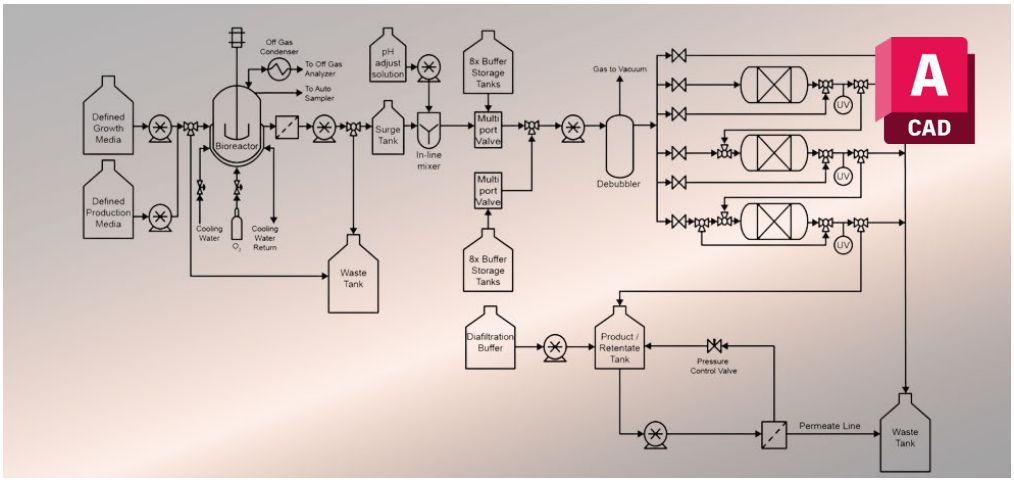
# Creating P&IDs using AutoCAD

## Training course outline

A Piping and Instrumentation Diagram (P&ID) shows the piping and related components of a physical process flow.

This course teaches how to produce P&IDs using AutoCAD.




### Course summary

There are two variants of this course:

- Course for newcomers to AutoCAD.
  Teaches the AutoCAD basics required, then covers everything you need to produce P&IDs. All techniques taught in this course can be carried out using AutoCAD LT.
- Course for existing AutoCAD users.
  Begins with a brief revision of the key AutoCAD techniques you'll use, then focusses on techniques for producing P&IDs. Additional sessions cover the creation of complex re-useable content (dynamic blocks), and the dynamic linking of Excel data are included. Some of the topics taught in this course require full AutoCAD.

*This course can be adapted to focus on the production of Process Flow Diagrams (PFDs), rather than P&IDs.*

### Duration

Both courses are of duration 1 day.

### Prerequisites

For the 'newcomers' course, the only prerequisite is that you're a competent computer using, familiar with using other applications and carry out standard tasks intuitively.

For the course for existing AutoCAD users, you should be familiar with the fundamentals of AutoCAD, i.e. have attended AutoCAD Essentials training or have equivalent knowledge through other means.

### In-class or live online

You can attend in-person at our centres, or participate live online from your place of work or home.

To read about our approach to online training, see armada.co.uk/liveonline.

### General information

Armada is a long-standing Autodesk authorised Training Centre (ATC), and our courses are accredited by Autodesk.

Courses are hosted by Autodesk Certified Instructors (ACIs) with vast experience of using the application professionally.

Whilst attending training at our centres, you'll have the use of a computer running licensed software to practice the techniques taught.

Refreshments and lunch are provided.

Course fees can be paid by card or bank transfer. We accept purchase orders from UK-registered companies and public sector organisations.

### Course certificate

You'll receive an e-certificate confirming successful completion of an accredited *Creating P&IDs using AutoCAD* course.

### After course support

Following training, you're entitled to 30 days' email support from your trainer.

### Further information

See: armada.co.uk/course/autocad-pid.

### Course syllabus

See over.

AUTODESK Authorised Training Centre armada

# Course syllabus

## Course for newcomers to AutoCAD

| Session | Topics |
|---|---|
| **AutoCAD Basics** | Navigating the AutoCAD environment<br><br>Introduction to the basic Drawing tools. Lines, Polylines, Arcs and Circles<br><br>Introduction to the basic Modify tools. Moving, Copying, Rotating and Scaling of objects<br><br>Introduction to Layers in the AutoCAD environment |
| **Introduction to Process Diagrams** | What is a Process Diagram?<br><br>Piping and Instrumentation Diagram (P&IDs)<br><br>Process Flow Diagrams (PFDs) |
| **Creating simple re-useable content (blocks)** | |
| **Sharing blocks between drawings** | |
| **Placing re-useable content and lines to create a P&ID/PFD** | |
| **Annotations and tables** | |
| **Creating a drawing border** | |
| **Printing and output** | |

## Course for existing AutoCAD users

| Session | Topics |
|---|---|
| **Overview of relevant AutoCAD methods** | Basic Drawing tools, Modify tools, Layers |
| **Introduction to Process Diagrams** | What is a Process Diagram?<br><br>Piping and Instrumentation Diagram (P&IDs)<br><br>Process Flow Diagrams (PFDs) |
| **Creating simple reuseable content (blocks)** | |
| **Creating complex reuseable content (dynamic blocks)** | |
| **Sharing blocks between drawings** | |
| **Placing re-useable content and lines to create a P&ID/PFD** | |
| **Annotations and tables** | |
| **Linking Excel data with an AutoCAD drawing** | |
| **Creating a drawing border** | |
| **Printing and output** | |