



# CPD diploma in professional engineering & biopharmaceutical operations

## Duration

12 months

## Award

Successful participants will receive a CPD Diploma in Professional Engineering from Technological University Dublin (TU Dublin), which is worth 30 ECTS credits at Level 9 on the National Framework of Qualifications (NFQ).

## Programme overview

The CPD Diploma in Professional Engineering & Biopharmaceutical Operations is a new 12-month programme, developed in collaboration with NIBRT (National Institute for Bioprocessing Research and Training), for engineers who are committed to developing their competences as a professional and seeking an introduction to the world of Biopharmaceutical Operations. The programme is accredited by Technological University Dublin (TU Dublin) as a Level 9 programme worth 30 ECTS upon completion.

This new programme is a variant of the Engineers Ireland's long running CPD Diploma in Professional Engineering programme with the addition of a module focussing on Biopharmaceutical Operations. This Biopharmaceutical

Operations module will cover such topics as Cleanroom Operations, Facility Design as well as Upstream and Downstream Processing. Training days relating to this module will be delivered at NIBRT's state of art bioprocessing facility in Foster's Ave, Mount Merrion, Blackrock, Co. Dublin.

The remaining modules of the programme; Engineering Project Management, Effective Leadership: Analysis to Action, Finance, Risk Analysis, Advanced Presentation Skills and Team Project will be delivered in Engineers Ireland's training facility in 22 Clyde Road, Ballsbridge, Dublin 4.

## Programme structure

The CPD Diploma programme is delivered on a part-time basis involving classroom and lab sessions, project work, assignments, research and workplace mentoring. The major building blocks en route to high-level engineering competence are covered across five core modules over a 12-month period.

These five core modules are delivered via 11 module components (dates listed below) which are supplemented with pre and post component assignments. The programme is rounded out by the inclusion of a team project (explained in more detail below) that spans the duration of the programme.

## Entry requirements

Applicants are required to have a minimum of three years' relevant work experience in an engineering-led environment and to be in relevant full-time or part-time employment. All applicants should hold a minimum qualification of an NFQ Level 8 Honours Degree in Engineering (or equivalent).

## Team project

The CPD Diploma Team Project involves teams of participants choosing a real-world challenge from one of their organisations and presenting a project solution / recommendation based on team research and analysis.

This team project develops the skills of research and enquiry to enable learners to generate, evaluate and select ideas which demonstrate the role of a professional engineer in business and strategy formulation. Each project team will have an industry expert assigned to their project who will act as a supervisor to guide each team through the process.

This module concludes with an opportunity for each group to present a business case for their project solution/recommendation to a panel of personnel from Engineers Ireland, TU Dublin and selected industry experts.

## Programme module components

Module codes and titles	Module components	ECTS Credits
<b>PPP1:</b> Engineering project management	<ul style="list-style-type: none"> <li>- Project management 1</li> <li>- Project management 2</li> </ul>	<b>5 ECTS</b>
<b>PPP2:</b> Effective leadership: Analysis to action	<ul style="list-style-type: none"> <li>- Statistical analysis</li> <li>- Leadership &amp; management skills</li> <li>- Negotiation &amp; influencing skills</li> </ul>	<b>5 ECTS</b>
<b>PPP3a:</b> Overview of biopharmaceutical operations	<ul style="list-style-type: none"> <li>- Cleanroom Operations</li> <li>- Upstream Processing</li> <li>- Downstream Processing</li> <li>- Facility Design</li> </ul>	<b>5 ECTS</b>
<b>PPP 4:</b> Finance, risk analysis and advanced presentation skills	<ul style="list-style-type: none"> <li>- Communication and presentation skills</li> <li>- Finance for professional engineers</li> <li>- Risk Management</li> </ul>	<b>5 ECTS</b>
<b>PPP 5:</b> Strategic execution - Team project	<ul style="list-style-type: none"> <li>- Research &amp; analysis</li> <li>- Self-directed teamwork</li> <li>- Final project paper and presentation</li> </ul>	<b>10 ECTS</b>

To view **full details** including entry requirements, **please go to:**



[engineersireland.ie/cpddiploma](http://engineersireland.ie/cpddiploma)



+353 1 665 1305



[cpdtraining@engineersireland.ie](mailto:cpdtraining@engineersireland.ie)