

Module Synopsis and Duration for Professional Conversion Programme (PCP) and Rank-and-File (RnF) Place-and-Train for the Medical Technology Industry

No	Module Title	Duration (hr)	Outline
1	Follow Good Manufacturing Practices	8	Provides basic knowledge & skills to follow standard operating procedures & contamination control procedures, report and record abnormalities when carrying out their tasks in a manufacturing or process environment.
2	Apply Continuous Process Improvement Techniques	15	Covers skills and knowledge in applying continuous process improvement techniques and be able to put it into practice at their workplaces.
3	Apply Process Quality Control Techniques	30	Covers application of basic techniques for controlling the quality of materials and services in a process plant environment. Personnel are required to prepare to examine and assess quality; monitor and control quality; report on status of quality and perform quality housekeeping.
4	Operate in Controlled Clean Room Environment	40	Covers knowledge and skills in to operate in a clean room environment to initially prepare for work activity, to maintain the clean room environment in operation, and reinstate the clean room environment post operations.
5	Apply cGMP Requirements in the Workplace	30	Provides a good understanding of current Good Manufacturing Practices in the biomedical industry. It also covers essential knowledge and skills to ensure compliance to GMP requirements, good documentation practices and contamination control.
6	Apply Workplace Safety and Health Practices	9	Provides learners with skills and knowledge in applying WSH practices to ensure the safety of oneself and others at work.
7	Use Process Drawings, Diagrams, Schedules and Manuals	28	Provides learners with skills and knowledge to interpret technical process drawings, diagrams, process schedules and process operating manuals.
8	Apply Injection Moulding technology for Medical Devices	45	Provides a broad coverage of injection moulding technology for plastic components which include injection moulding machines, their set-up and operations and also introduce mould flow analysis to study the process effectiveness and quality of the finished parts.
9	Control and Operate Bio Manufacturing Process	45	Provides a broad coverage of the industrial processes in the bio manufacturing industry and how to control and operate them. It would include understanding the industrial controllers and learning to write control programs to operate the equipment.
10	Control Precision Machining for Medical Technology	45	Covers the typical machines and equipment use to fabricate precision components for the MedTech Industry. It will provide general coverage of the machines and equipment with practical hands-on sessions to program and operate them.

11	Design of Biomedical Devices	45	Covers the conceptualization to the development of design process, including translating needs into product specifications, analysing the functional decomposition of design, applying modelling skills and ergonomics to generate design concepts.
12	Manage Regulatory Requirements for Medical Devices	42	Provides knowledge of the industrial regulatory and quality issues and the requirements needed for certification which includes product safety, risk management, clinical trials, biocompatibility and its compliance with the safety standards.