Objectives

- Understand the scientific principles and material properties of IPS e.max Zirconia and IPS e.max Ceram Art.
- Develop confidence when working with zirconia in the pre-sintered state.
- Understand techniques for refining morphology, surface texture and characterisation, prior to sintering.
- Improve polishing protocols to achieve optimal restorative aesthetics and surface quality.
- Evaluate Ivoclar bonding solutions for zirconia-to-titanium restorations and compare them with current workflows.
- Identify common processing errors and implement strategies to prevent and correct them.
- Optimise Ivoclar IPS e.max Zirconia design and manufacturing strategies within the laboratory workflow.
- Develop practical IPS e.max Ceram Art application skills appropriate to individual experience levels.
- Develop the ability to perform routine PM7 maintenance procedures, identify common sources of machine and milling errors and implement preventative maintenance strategies.
- Enhance the consistency, predictability and efficiency of restorative production within the laboratory.
- Optimise milling strategies for IPS e.max materials.

Learning Outcomes

- Describe the scientific principles, composition, properties and clinical indications of IPS e.max Zirconia and IPS e.max Ceram Art.
- Modify, refine and characterise zirconia restorations in the pre-sintered stage, including optimisation of morphology, surface texture and anatomical form.
- Apply IPS e.max Ceram Art techniques appropriate to their level of experience, ranging from fundamental staining and layering procedures through to advanced aesthetic layering, characterisation and surface enhancement techniques.
- Select and implement appropriate sintering, glazing and polishing protocols to achieve optimal restorative aesthetics, surface quality and clinical performance.
- Evaluate and select suitable bonding protocols and materials for zirconia-to-titanium restorations, including comparison of current workflows with alternative Ivoclar solutions.
- Optimise manufacturing strategies to improve efficiency, predictability and restorative outcomes within the laboratory workflow.
- Perform routine PM7 maintenance procedures, identify common causes of milling issues, implement preventative maintenance measures and apply troubleshooting techniques to minimise equipment downtime.
- Apply evidence-based decision-making when selecting materials, processing protocols and laboratory workflows to achieve consistent, high-quality restorative results.