



# Basic Digital Dentistry

# Is this course for you?

This course is ideal for dentists seeking to transition into the world of Digital Dentistry.

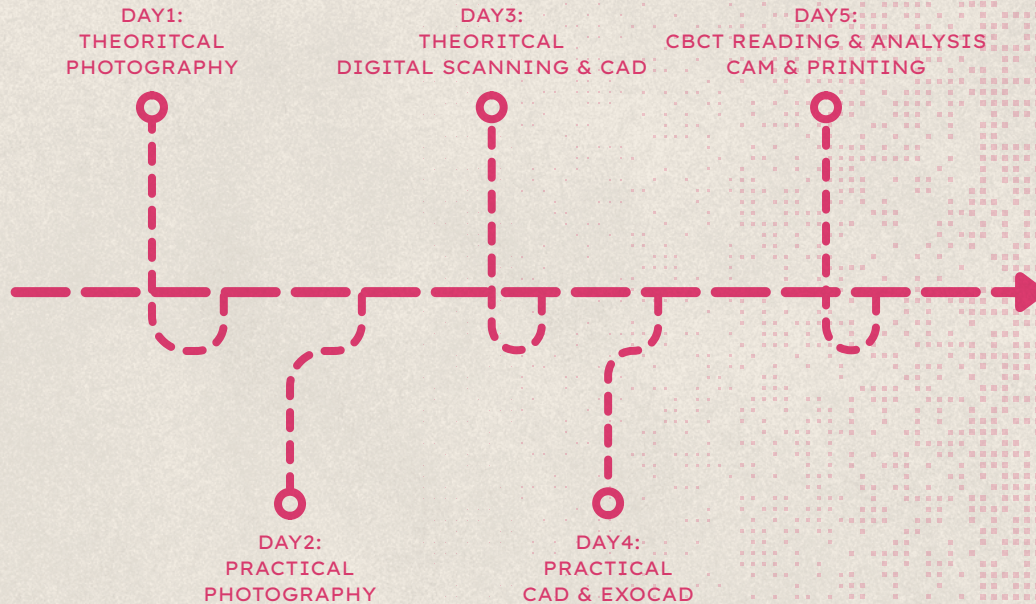
You will gain comprehensive knowledge starting from dental photography and scanning, progressing through the design phase using the industry-standard software, Exocad.

Additionally, you will learn how to interpret and analyze CBCT images, ultimately leading to the final step of CAM and 3D printing.

Each module will be divided into two stages: theoretical and practical, ensuring an in-depth learning experience that combines foundational knowledge with hands-on application.



# Course Timeline





DR DINA MOSTAFA

## Part 1:

# Dental Photography



# DAY 1

## THEORITICAL : FUNDAMENTALS OF DENTAL PHOTOGRAPHY

### 1. Photography Fundamentals & Camera Knowledge:

- Introduction to Photography History
- Camera Body & Camera Settings
- DSLR vs Mirrorless
- Photo Composition & Rule of Thirds
- Dental Photography Misconceptions

### 2. Macro Techniques, Image Quality, and Lighting:

- Macro Lens
- Super Macro Technique & Extension Tube
- Picture Sharpness & Details
- The Lighting System (Types, Brands, Techniques)
- Photography Accessories & Modifiers

### 3. Clinical Photography Protocols & Tools:

- Patient vs Operator Positioning
- DSD Photography Protocol
- Standardization in Dental Photography
- Smartphone Dental Photography Tips & Tricks
- Cross Polarizing Filters for DSLR, Mobile Photography & Shade Selection



## DAY 2

### PRACTICAL: ON PATIENTS AND EDITING SOFTWARES

- You will practice capturing Intra-Oral and Extra-Oral photographs of patients using both Smartphones and DSLR Cameras, mastering techniques to produce clear, professional clinical images.
- You will also work hands-on with Editing Software like Adobe Photoshop and Smartphone Applications to correct colors, enhance details, and create aesthetic, high-quality case presentations.







DR ABD ELRAHMAN

## Part 2: Scanning & CAD

# DAY 3

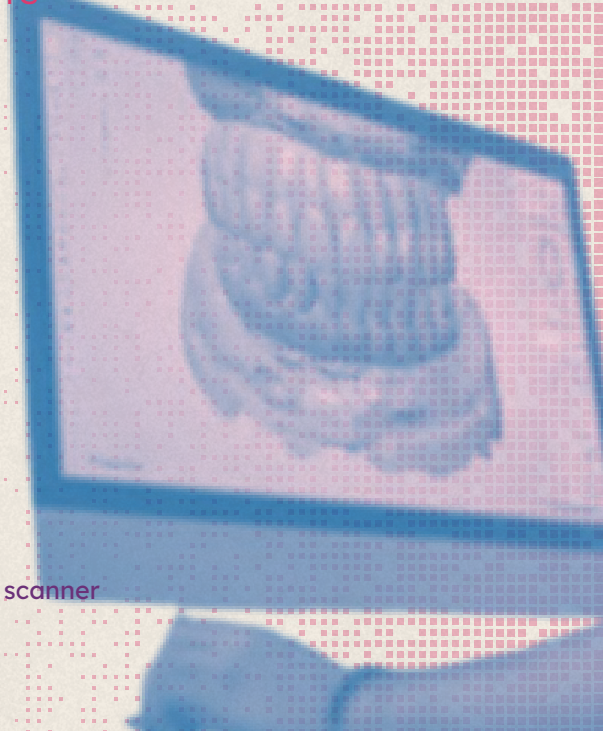
## THEORITCAL: DIGITAL DENTISTRY OVERVIEW & CONCEPTS

### Digital Overview:

- Introduction to digital dentistry and digital scanning
- Differences between conventional and digital workflows
- Digital impressions:
  - Scanning technologies and related concepts
  - Direct and indirect scanning methods
  - Accuracy of digital impressions

### Intraoral scanners:

- What intraoral scanners are and how they work
- How to operate intraoral scanners
- Intraoral scanner software
- Scanned file extensions
- Importing scanned files into different design software
- Live demo and hands-on practice: each participant uses an intraoral scanner





# DAY 3

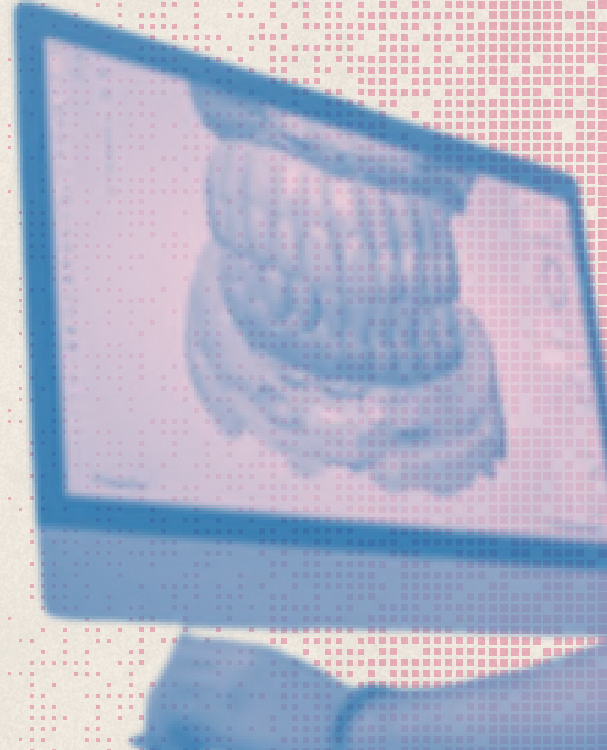
## CONT. CAD & EXOCAD BASICS

### CAD/CAM Systems Overview & Setup

- Phases and components of CAD/CAM systems
- Applications of CAD/CAM technology in dental fields
- Overview of common CAD/CAM systems, focusing on EXOCAD
- EXOCAD setup and software introduction
- EXOCAD Database (DB) features

### Digital Design of Dental Prostheses

- Anatomical crown design
- Anatomical pontic design
- Detecting finish line dilemmas
- Designing crown bottoms
- Correct tooth placement
- Anatomy of anterior and posterior teeth



# DAY 4

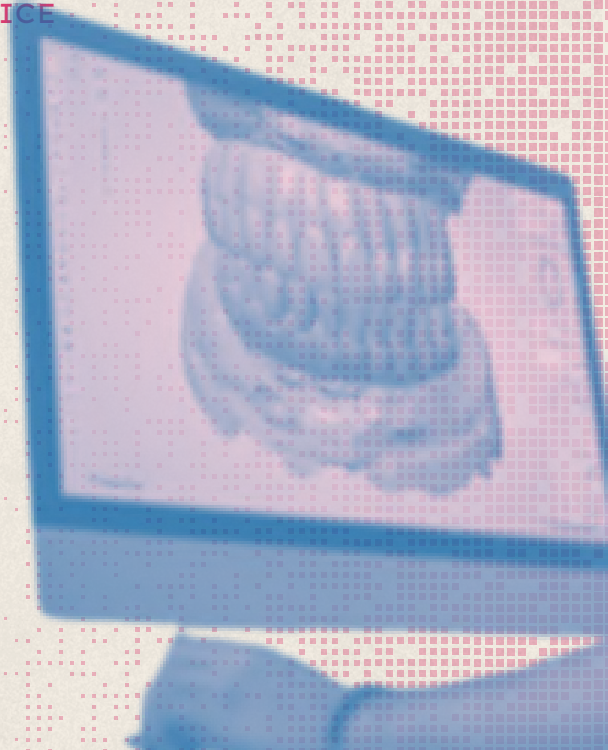
## PRACTICAL: DESIGNING PRINCIPLES & EXOCAD PRACTICE

### EXOCAD Designs:

- Bridge
- Veneers
- Mockup
- Inlays
- Onlays
- Overlays
- Anatomical wax-up
- Implants

### Principles of Digital Dental Designing for Dental Prostheses:

- Contact areas dilemma
- Curve of Spee and Curve of Wilson
- Considerations about occlusion during designing different scenarios
- How to construct healthy connectors







DR AYA AHMED



DR NADA ZIDAN



DR MOHAMMED NOUR

# Part 3:

## **CBCT & CAM**

# DAY 5

## PRACTICAL: DESIGNING PRINCIPLES & EXOCAD PRACTICE

### CBCT:

- Different between CT and CBCT
- CBCT in dental field
- Digital interpretation of CBCT on mobile and laptop free software
- Basic anatomy revealed on CBCT

### Printing:

- 3D printing in dental field
- Different printer types from basic to advanced
- Art and science of 3D printing

### Workshop:

- CBCT software application
- 3D printing on CHITUBOX software





# Are you Ready?



DR AYA AHMED



DR NADA ZIDAN



DR MOHAMMED NOUR



DR ABD ELRAHMAN



DR DINA MOSTAFA

Basic Digital Dentistry