Dentistry 4.0: The Digital Revolution of Artificial Intelligence, Mixed Reality and Robotics



From passive Full-Arch impressions to Mixed Reality surgery: master AI and definitive 3D printing

Francesco Mangano DDS, PhD

This advanced course by **Dr. Francesco Mangano** guides professionals through the entire **digital dental ecosystem**, from the basics of intraoral scanning to the frontiers of Artificial Intelligence, **Mixed Reality** and **chairside 3D printing**, transforming the most complex procedures into everyday operating standards.

Why enroll? The fundamental value of the course

Mastery of the Digital Workflow

Learn to bridge the gap between owning a tool and mastering a workflow that ensures excellent results. Understand the invisible limits of technology, such as stretching in complex impressions and congruence errors in full-arch rehabilitations.

Integrated Cutting-Edge Technologies

Master AI, Mixed Reality and chairside 3D printing in a coherent ecosystem. Integrate automated diagnostic software, surgical holograms and hybrid composite materials to elevate the precision and efficiency of your practice.

Predictable and Sustainable Results

Acquire evidence-based protocols to drastically reduce chair time and eliminate clinical uncertainty. Transform digital technologies into everyday operating standards with stable and predictable long-term results.

What makes this course different

Owning the technology vs Mastering the workflow

This course teaches clinicians to distinguish what is technically available from what is *clinically effective and sustainable*. Clear criteria guide the choice between milling and 3D printing, between see-through and pass-through systems, and between dynamic navigation and traditional guided surgery.

Main Clinical Focus

- Manage stretching, drifting and congruence in full-arch impressions on implants
- Integrate AI into the diagnostic workflow for segmentation and automated planning
- Apply surgical holograms with see-through devices in the operating room
- Choose the correct construction technology between milling, SLA, DLP and laser sintering

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Course content at a glance

1. Digital impressions on full-arch implants
2. Artificial intelligence in dentistry
3. Virtual and Mixed Reality in dentistry
4. Mixed Reality in implantology
5. 3D printing and laser sintering
6. Chairside 3D Printing and innovative materials
7. Continuous Scan Strategy
8. Implant planning and AI workflow

FULL CONTENT: 9 hours of training

The course includes 8 complete video lessons with step-by-step commented clinical cases—from intraoral scanning to holographic surgery, with particular attention to chairside protocols and the management of additive and subtractive production technologies.

Who this course is for

Dentists and implant surgeons who want to evolve their clinical practice toward an advanced integrated workflow for:

- [ ] Maximizing practice efficiency by reducing chair time
- [ ] Managing full-arch rehabilitations with a systematic and predictable digital approach
- [ ] Integrating AI and dynamic navigation to elevate procedural precision
- [ ] Producing certified definitive restorations directly in the practice with 3D printing
- [ ] Improving patient engagement by showing the future smile in real time

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Technical specifications

Course details

- **Language:** Italian
- **Total duration:** 9 hours
- **Video lessons:** 8 total (with commented clinical cases)
- **Clinical content:** Full-arch impressions, diagnostic AI, Mixed Reality, chairside 3D printing, hybrid composite materials

Categories and Access

- **Main category:** Digital Implantology
- **Subcategories:** Artificial Intelligence · Mixed Reality · 3D Printing · Chairside Manufacturing

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> "The transition from analog to digital dentistry is no longer an option. The real challenge is not owning the devices, but mastering the workflow that turns technology into excellent everyday results."
>
> — Dr. Francesco Mangano

This course provides what clinicians need most: **a complete and manageable digital ecosystem**. By focusing on workflow mastery rather than the mere use of tools, Dr. Mangano provides a framework that eliminates clinical uncertainty, reduces management costs and brings the most innovative results directly to the chair.

It is not about adopting more technologies—it is about making them work together in the right way, every day, for every patient.