Ultra-Thin personalized PEEK crowns

for caries, MIH-hypomineralized, dentinogenesis imperfecta, and other sensitive cases in teeth

Intermediate Course 2h – online + Hands-on



Dental crowns are fundamental for structural teeth protection, chewing function, face biomechanical function, aesthetics, caries management, sensitivity protection, teeth with structural imperfections and other anomalies' protection and restoration, and... much more.

Filipe Samuel Silva

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Materials for analysis and hand's-on: PEEK. Types: Customized; <u>2 h course</u>, crowns protocol placement (virtual demonstration and in-situ placement): Price: 150 €/attendant - minimum 20 attendants (includes Small kit/attendant)(see details below). Kit's are sent previously by regular mail.

| | Subject | Content | Theoretical contents | Materials and tests/equipments | Applications |
|-----------|-----------------------------------|---|---|--|--|
| 40 min | PEEK crowns vs SS crowns | Theoretical and test results on videos and clinical cases | Test results and videos of: Mechanical resistance, Thickness, Perforation (tensile/compression), Wear, Fatigue/Durability, Flexibility, Adhesion, Crown placement, Geometrical fitting, Occlusion with simultaneous several crown's placement; Caries clinical cases crowns placement, MIH clinical cases; Anterior teeth with MicroZr™ crowns clinical cases; Posterior teeth with MicroPk™ crowns clinical cases; | PowerPoint presentation | Crowns for children. Caries clinical cases crowns placement MIH clinical cases Posterior teeth (MicroPk™ crowns clinical cases) Anterior teeth (MicroZr™ crowns clinical cases) |
| 10 min | The digital flow | Theoretical | Intra-oral scanners – relevant aspects; Important parameters; other aspects to consider on children digital tooth scanning | | Crowns for children |
| 20 min | | Hands-on | | Scanning test on mandible model with intra- oral scanner- online demonstration | Mandible for crowns stl file preparation |
| 30 min | MicroPk™ pediatric protocol | Theoretical | Main suggested applications; The digital protocol and important protocol steps; The Crowns placement protocol; Errors to avoid. | | Crowns for children |
| 20 min | | Hands-on | | Application of crowns on tooth models following the protocol – online demonstration and in-situ local application | crowns for children |

Small Kit

PEEK Personalized Crowns – From ultra-thin to other material choices, Properties and Applications



Universidade do Minho Escola de Engenharia





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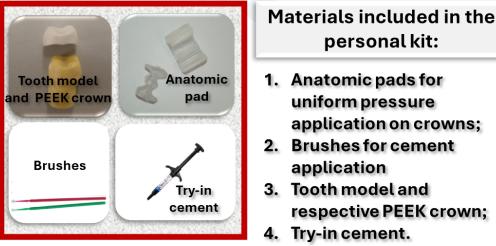
Filipe Samuel Silva

Full Professor at Minho University, Portugal Mechanical Engineering Department PhD in Mechanical Engineering PORTUGAL Ranked among the 2% of most influential scientists in the world in biomedical materials and processes (Elsevier, Stanford University, USA)(2021, 2022, 2023, 2024)



SMALL Kit and Materials for hands-on virtual training

course



personal kit: 1. Anatomic pads for uniform pressure application on crowns; 2. Brushes for cement

application

3. Tooth model and respective PEEK crown; 4. Try-in cement.

Published more than 390 research projects (>10M€); > 25 PhD students (7 dental field; H index: 45; Citations: > 8250; Pl of more than 20 research projects (>10M€); > 25 PhD students (7 dental doctors); 5 World patents; R&D with Research Centers, Universities, Dental Clinics, Companies, from EUA, Brasil, Portugal, Netherlands, Finland, Germany, Belgium, Switzerland, Romenia, Turkey, Italy, France, Estonia, Austria, Australia, India, ...: CEO of Extreme Materials-Dental Solutions (www.extremater.com): Scopus Author ID: 26029207600; orcid.org/0000-0003-3596-3328

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