



ProMedAcademy
SURGICAL EDUCATION

CADAVERIC SURGICAL SKILLS COURSE

PRIMARY TOTAL KNEE REPLACEMENT

Surgical Skills Workshop for Practicing
Orthopaedic Surgeons



COURSE DATE

5 December 2026

VENUE

Prince Sultan Military Medical City
Simulation Center

Full-Day Program

Fresh-Frozen Cadaveric Lab

1 Faculty : 2 Participants

Draft agenda | Faculty names to be confirmed



COURSE OVERVIEW

Precision, repetition and faculty-guided practice.

This full-day cadaveric workshop is designed for practicing orthopaedic surgeons seeking to refine and expand their technical skills in Primary Total Knee Replacement. Focused lectures are paired with extensive hands-on laboratory sessions so participants can revisit foundational principles, apply contemporary techniques and receive real-time faculty feedback in a controlled learning environment.

Course at a glance

DATE

5 December 2026

VENUE

PSMMC Simulation Center

FORMAT

Lectures, case discussion, cadaveric laboratory and panel sessions

AUDIENCE

Practicing orthopaedic surgeons

ACCREDITATION

CME/CPD application submitted; hours to be confirmed

Learning outcomes

01

Anatomy & preoperative planning

Identify key bony and soft-tissue landmarks, interpret radiographic parameters and build a structured implant and alignment plan.

02

Core surgical technique

Execute exposure, tibial and femoral resections, trial reduction, gap assessment, soft-tissue balancing, cementing, patellar work and layered closure.

03

Decision-making & complications

Recognise common intraoperative problems and apply practical strategies for component revision, bone deficiency, malalignment and soft-tissue compromise.

04

Technology & innovation

Discuss robotic assistance, computer navigation, patient-specific instrumentation and the selection of mechanical, kinematic or functional alignment strategies.



07:00 - 13:05

Morning program

All sessions take place in the cadaveric laboratory unless otherwise noted. Times are indicative and may be adjusted by the course directors.

TIME	SESSION	FORMAT
07:00 - 07:30 30 min	Registration & Welcome Coffee	Networking
07:30 - 08:00 30 min	Welcome Address & Course Overview	Lecture
08:00 - 08:30 30 min	Surgical Anatomy of the Knee: Landmarks & Pitfalls	Lecture / Q&A
08:30 - 09:00 30 min	Knee Biomechanics & Alignment Philosophies: Mechanical vs. Kinematic vs. Functional	Lecture
09:00 - 09:30 30 min	Preoperative Planning, Radiographic Assessment & Implant Selection	Lecture / Case Discussion
09:30 - 09:45 15 min	Coffee Break	Break
09:45 - 11:15 90 min	Cadaveric Lab - Module 1: Exposure, Tibial & Femoral Bone Preparation	Hands-On Lab
11:15 - 11:35 20 min	Module 1 Debrief: Cutting Errors, Rotational Alignment & Common Pitfalls	Debrief / Discussion
11:35 - 13:05 90 min	Cadaveric Lab - Module 2: Trial Reduction, Gap Balancing & Soft Tissue Management	Hands-On Lab

 Hands-On Lab  Lecture  Break  Debrief



13:05 - 17:50

Afternoon program

The afternoon combines implantation practice, complication management, emerging technology and perioperative optimisation.

TIME	SESSION	FORMAT
13:05 - 13:50 45 min	Lunch & Invited Faculty Presentation: Outcomes Data in Primary TKR - What the Evidence Shows	Lecture / Networking
13:50 - 14:20 30 min	Periprosthetic Joint Infection: Prevention, Diagnosis & Management	Lecture
14:20 - 15:50 90 min	Cadaveric Lab - Module 3: Final Implantation, Cementing Technique & Closure	Hands-On Lab
15:50 - 16:05 15 min	Coffee Break	Break
16:05 - 16:35 30 min	Complications Panel: Intraoperative & Early Postoperative Recognition, Avoidance & Salvage	Panel Discussion
16:35 - 17:05 30 min	Emerging Technologies: Robotic-Assisted Surgery, Navigation & Patient-Specific Instrumentation	Lecture
17:05 - 17:25 20 min	Enhanced Recovery After Surgery (ERAS) Protocols in TKR: Perioperative Optimisation	Lecture
17:25 - 17:50 25 min	Wrap-Up, Q&A & Certificate Distribution	Plenary

270

minutes of structured hands-on cadaveric laboratory time

3

progressive laboratory modules from exposure through closure

17:50

planned course close, Q&A and certificate distribution

Accreditation status: the activity has been submitted for CME/CPD accreditation. Confirmed credit hours will be communicated before the course.



HANDS-ON CURRICULUM

Three progressive laboratory modules

MODULE 1

09:45 - 11:15
90 minutes

Exposure & Bone Preparation

- Positioning, limb preparation and tourniquet application
- Synovectomy, osteophyte removal and cruciate management
- Distal femoral resection: angle and depth
- Incision planning and medial parapatellar arthrotomy
- Tibial resection: slope, level and coronal alignment
- Femoral sizing, anterior/posterior and chamfer cuts

MODULE 2

11:35 - 13:05
90 minutes

Trial Reduction & Soft-Tissue Balancing

- Insertion of tibial and femoral trials
- Medial and lateral release techniques
- Patellar tracking and the no-thumb test
- Flexion-extension gap assessment
- Patellar sizing, resection and component selection
- Final range of motion and stability assessment

MODULE 3

14:20 - 15:50
90 minutes

Implantation, Cementing & Closure

- Pulsatile lavage, bone preparation and drying
- Sequential component insertion and impaction
- Final ROM, stability, alignment and tracking
- Cement mixing, application and pressurisation
- Cement excess removal and insert locking
- Layered capsule, subcutaneous and skin closure

Pre-course preparation

- Review technique guides, alignment overview and implant catalogues supplied two weeks before the course.
- Complete the online pre-course assessment.
- Bring licence or credentialing documentation if requested.

Laboratory requirements

- Scrubs and PPE will be supplied; personal scrubs are acceptable.
- Closed-toe, fluid-resistant footwear is required.
- Surgical loupes are encouraged; participants should bring their own.



FACULTY PLACEHOLDERS

Meet the course leadership and faculty

Faceless portrait models and placeholder names are shown for layout approval. Final photographs, titles and names can replace these cards without changing the design structure.



COURSE CHAIRMAN
Dr. XXX XXXXX



COURSE DIRECTOR
Dr. XXX XXXXX



FACULTY 1
Dr. XXX XXXXX



FACULTY 2
Dr. XXX XXXXX



FACULTY 3
Dr. XXX XXXXX



FACULTY 4
Dr. XXX XXXXX



FACULTY 5
Dr. XXX XXXXX

Course Secretariat

For enquiries regarding registration, programme content or logistics, please use the contact placeholders shown here until final details are confirmed.

Email

Phone

Website