

3rd Olympiad in Engineering Science - OES 2027

26 May 2027 - 28 May 2027

**Faculty of Commerce, Turism, and Social
Sciences**

Scientific Programme

Machine Learning and Computational Intelligence

Innovative IT Systems

LLMs and Agentic AI

Computational Mechanics (FEM, BEM, Transfer Matrices)

Fracture Mechanics, Fatigue and Structural Integrity

Marine Structures, Pipelines, and Subsea Technology

Wind Turbines, Renewable Energy Production

Structural Health Monitoring and Sensors Technology

Mechanics of Advanced Materials and Composites

Structural Dynamics and Vibrations

Soil Dynamics and Earthquake Engineering

Nanomechanics and Nanotechnology

Non-Destructive Testing and Evaluation

Smart Materials and Structures

Hydrogen Storage and Transportation

Additively Manufactured Materials and Technology

Computational Fluid Dynamics

Fluid-Structure Interaction

Viscous Fluid Flow, Turbulent Flow, Multi-Phase Flow

Robotics and Automatic Control

Building Information Technology (BIM)

Materials Science, Corrosion and Corrosion Protection

Engineering Mathematics, Numerical Analysis, PDFs

Multiphysics Simulation

Sustainable Cities, Energy Transition, and Circular Economy

Safety of Buildings, fire protection, environmental hazards

ST - Advances in Digital Engineering for Smart Infrastructure: Foundation Models, Spatial Platforms, and Simulation

ST - AI-enabled Sensing for Structural Health Monitoring

ST - Artificial Intelligence for Biomedical Applications

ST - Intelligent Systems for Digital and Multimodal Biomarkers in Neurological and Mental Health Conditions

ST - Emerging Intelligence for Critical Infrastructure Management: Multi-Source Perception, Health Prediction, & Optimal Decision-Making

ST - SMILE: Smart Methods and Intelligent Systems for Leading-edge Engineering

ST - Data-Driven Computational Mechanics for Sustainable Composite Structures

ST - AI-empowered aerodynamics