

D.TECT 2026



Monday 8 June 2026 - Friday 19 June 2026

DESY Hamburg

Scientific Programme

Please note that a **basic understanding of particle interactions and fundamental detection principles is expected from all participants**, as these topics will not be covered in the lecture program. The curriculum is designed to extend this knowledge, focusing on advanced detection technologies and instrumentation.

Lecture Programme

The scientific program includes a series of 45-minute, university-style lectures on advanced experimental topics and detection techniques. A list of the lecture topics is provided below. Further details will follow.

- Semiconductor Detectors
- Calorimeters
- Timing Detectors
- Photo Detectors and Particle ID
- Gas Detectors
- Liquid Detectors
- Quantum Sensing
- DAQ and Electronics
- Overview of Proposed Experiments

Lab Courses

The D.TECT school places strong emphasis on practical learning through small-group laboratory work, guided by expert tutors in on-campus facilities. A brief overview of the laboratory activities is provided below; further information will be available soon.

- Probing Semiconductor Properties and TCAD Modelling
- Radiation Detection & Monte Carlo Simulations
- Exploring Calorimeter Performance at Testbeam
- Operation and Characterization of Gaseous Detectors
- Build-Your-Own Particle Detector
- Tracking and Analysis in Testbeam
- Detector Systems, DAQ, and Control Electronics

Beyond HEP Seminars

The scientific programme will be complemented by two evening seminar-style events that explore topics extending beyond particle physics. Further details will follow.