The European X-ray Free Electron Laser (XFEL.EU) will provide as-yet-unrivaled peak brilliance and ultra short pulses of spatially coherent X-rays with a pulse length of less than 100 fs in the energy range between 0.25 and 25 keV. The high radiation intensity and ultra-short pulse duration will open a window for novel scientific techniques and will allow to explore new phenomena in biology, chemistry, material science, of matter at high energy density, in atomic, ion and molecular physics. The variety of scientific applications and especially the unique XFEL time structure will required adequate instrumentation to be developed to exploit the full potential of the light source. The detector performance requirements of the facility are extremely demanding and difficult to realize. To make optimal use of the unprecedented capabilities of the European XFEL, the European XFEL GmbH started a detector R&D program. The technology concepts of the detectors system presently under development are complementary in their performance and will cover the performance requirements of a large fraction of scientific applications envisaged for the European XFEL facility. I will present the actual status of our detector development program which includes ultra-fast 2D imaging detectors, low repetition rate small area 2D imaging detectors and strip detectors for, e.g., spectroscopy applications.

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