

### **Introduction to Quantum Physics (EEE.4.6)**

The course is structured over a thirteen week period as follows:

Week 1: The crisis of classical physics.

Week 2: Quantization of electromagnetic radiation.

Week 3: Quantization of the atom; wave-particle duality.

Week 4: Material waves and Schrodinger equation.

Week 5: Statistical interpretation of the wave-function (Part A).

Week 6: The uncertainty principle.

Week 7: Statistical interpretation of the wave-function (Part B).

Week 8: Measurement in the context of classical and quantum physics.

Week 9: Dirac notation in quantum mechanics.

Week 10: Symmetry and conservation.

Week 11: Quantum and square well.

Week 12: Quantum scattering and tunnelling.

Week 13: Course revision