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## Learning notes

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### The world of Quantum Technologies

Linked Article: [The Peculiar Powers of Polarisation](#)

Alan Denton's article on The Peculiar Powers of Polarisation is a great starting point for taking your students on a journey through the science behind and applications of a range of quantum technologies. In support of STEM Learning's Quantum Ambassador Programme, a range of self-guided, interactive learning modules have been designed to take students through not only polarisation, but a range of exciting technologies and phenomena.

#### Learning Task:

Head to the Quantum Technologies Programme online learning modules here: [www.stem.org.uk/quantum](http://www.stem.org.uk/quantum)

The first of the four modules – Quantum Communications builds upon the science and technology discussed in The Peculiar Powers of Polarisation and will challenge the understanding of your students.

Divided into four sub-modules, students will explore why we need cryptography, what underlying physics do they need to understand and where quantum physics fits in to all of that!

The module will take approximately 40 minutes to 1 hour for students to complete and includes questions and interactive tasks throughout.

#### Take your learning further:

After exploring the Quantum Communications module students can develop their understanding of the many applications of quantum technologies by exploring the remaining 3 modules. All modules are supported with curricula links and include opportunities for students to test their understanding.

Each module will take approximately 40 minutes to 1 hour for students to complete.

#### Take your learning further still:

The Quantum Ambassador Programme supports post-16 teachers and students in their teaching and learning of quantum technologies and the underlying physics by bringing scientists and professionals that use quantum technologies into the classroom. Ambassadors will bring the material in the online modules to life by sharing insights into their career and daily work.

You can sign up to the programme by visiting the Quantum Ambassador Programme webpage here: [www.stem.org.uk/quantum-ambassador-programme](http://www.stem.org.uk/quantum-ambassador-programme)