

## Edexcel IAL Physics

### Specification content changes

level	Topic	Spec points	New content included	Content moved between units	Content not included
AS	mechanics	4	Recognise vector notation		
AS	Mechanics	14		Conservation of momentum in one direction	
AS	Mechanics	30		Efficiency equation	
AS	Materials				Fluid flow diagrams, streamline flow Definitions of mechanical properties such as brittle, ductile, hard, malleable, tough
AS	Waves and Particle Nature of Light	42	Use of the equation for the speed of a transverse wave on a string		Identify and describe applications of the regions of the electromagnetic spectrum. Explain how different media affect the transmission/reflection of waves
AS	Waves and Particle Nature of Light	44		Radiation flux is replaced by Intensity	
AS	Waves and Particle Nature of Light	50 51	Use of Huygen's construction Diffraction $n\lambda = d\sin\theta$		
AS	Waves and Particle Nature of Light	54		Use of de Broglie equation	
AS	Electric Circuits	68	Derivation of equations for resistors in series and parallel		

AS	Electric Circuits	80	Conduction models and the LDR		
AL	Further Mechanics	89	Derive by use vector diagrams, the equations for centripetal acceleration	De Broglie equation and conservation of momentum moved to AS	
AL	Nuclear and Particle Physics	121		More detail added about the standard model	
AL	Nuclear and Particle Physics	123	Conservation of Baryon and lepton numbers		
AL	Electric and Magnetic Fields	98.98	Electric potential and equipotential lines		
AL	Thermodynamics	125	Specific Latent heat		
AL	Thermodynamics	132	Derive and use $\frac{1}{2} m \langle c \rangle^2 = \frac{3}{2} kT$		
AL	Nuclear Decay	135	Links fission and fusion to BE/nucleon graph		
AL	Oscillations	145	Use of the equations for a simple harmonic oscillator $T = 2\pi\sqrt{m/k}$ and $T = 2\pi\sqrt{l/g}$		
AL	Astrophysics and Cosmology	158	Use of $V_{grav} = \frac{-Gm}{r^2}$ For a radial gravitational field		
AL	Astrophysics and Cosmology	164		Flux replaced by intensity	