

Introducing Pure Mathematics by Robert Smedley and Garry Wiseman

OCR Syllabus Grid

5.1 Module 2631: Pure Mathematics 1 (P1)

Topic	Pages	Notes
5.1.1 Indices and surds	404–409	
5.1.2 Quadratics	1–44	
5.1.3 Coordinate Geometry and Graphs	31–32, 79–88, 126–127, 131–147, 173–178, 305–309	
5.1.4 Trigonometry	45–48, 334–354	
5.1.5 Differentiation	156–188	
5.1.6 Integration	189–208	

5.2 Module 2632: Pure Mathematics 2 (P2)

Topic	Pages	Notes
5.2.1 Circular measure	68–72	
5.2.2 Sequences and series	230–261	
5.2.3 Polynomials	117–130, 262–269	
5.2.4 Functions; the modulus function	79–116	
5.2.5 Logarithmic and exponential functions	404–422, 463–466	
5.2.6 Differentiation and integration	209–215, 292–297, 327–331, 416–432	
5.2.7 Numerical methods	472–478, 484–486	

5.3 Module 2633: Pure Mathematics 3 (P3)

Topic	Pages	Notes
5.3.1 Rational functions and the binomial theorem	262–291	
5.3.2 Coordinate geometry	220–229, 319–320	
5.3.3 Trigonometry	334–378	
5.3.4 Differentiation	297–303, 313–327, 383–387	
5.3.5 Integration	294–297, 383–403, 423, 433–449	
5.3.6 First order differential equations	327–331, 457–466	
5.3.7 Vectors	493–515	

5.4 Module 2634: Pure Mathematics 4 (P4)

FPM = Further Pure Mathematics

Topic	Pages	Notes
5.4.1 Rational functions and graphs	284–288, 305–309	Also <i>FPM</i> pp. 130–139
5.4.2 Summation of series	237–247, 288–290	Also <i>FPM</i> pp. 168–176
5.4.3 Proof by induction		<i>FPM</i> pp. 159–168
5.4.4 Polar coordinates		<i>FPM</i> pp. 43–52
5.4.5 Differentiation and integration		<i>FPM</i> pp. 35–42, 57–79, 177–182
5.4.6 Complex numbers		<i>FPM</i> pp. 1–21, 154–158, 338–340

5.5 Module 2635: Pure Mathematics 5 (P5)

FPM = Further Pure Mathematics

Topic	Pages	Notes
5.5.1 Roots of polynomial equations		<i>FPM</i> pp. 147–153
5.5.2 Hyperbolic functions		<i>FPM</i> pp. 189–200
5.5.3 Differentiation and integration		<i>FPM</i> pp. 192–210, 241–268
5.5.4 Differential equations		<i>FPM</i> pp. 57–79
5.5.5 Numerical methods		<i>FPM</i> pp. 268–280, 286–292

5.6 Module 2636: Pure Mathematics 6 (P6)

FPM = Further Pure Mathematics

Topic	Pages	Notes
5.6.1 Matrices		<i>FPM</i> pp. 80–81, 87–93, 299–314
5.6.2 Vectors		<i>FPM</i> pp. 94–121
5.6.3 Complex numbers		<i>FPM</i> pp. 330–354
5.6.4 Groups		<i>FPM</i> pp. 369–404

Further Pure Mathematics by Brian and Mark Gaulter

OCR Syllabus Grid

5.1 Module 2631: Pure Mathematics 1 (P1)

IPM = Introducing Pure Mathematics

Topic	Pages	Notes
5.1.1 Indices and surds		<i>IPM</i> pp. 404–409
5.1.2 Quadratics		<i>IPM</i> pp. 1–44
5.1.3 Coordinate Geometry and Graphs		<i>IPM</i> pp. 31–32, 79–88, 126–127, 131–147, 173–178, 305–309
5.1.4 Trigonometry		<i>IPM</i> pp. 45–48, 334–354
5.1.5 Differentiation		<i>IPM</i> pp. 156–188
5.1.6 Integration		<i>IPM</i> pp. 189–208

5.2 Module 2632: Pure Mathematics 2 (P2)

IPM = Introducing Pure Mathematics

Topic	Pages	Notes
5.2.1 Circular measure		<i>IPM</i> pp. 68–72
5.2.2 Sequences and series		<i>IPM</i> pp. 230–261
5.2.3 Polynomials		<i>IPM</i> pp. 117–130, 262–269
5.2.4 Functions; the modulus function		<i>IPM</i> pp. 79–116
5.2.5 Logarithmic and exponential functions		<i>IPM</i> pp. 404–422, 463–466
5.2.6 Differentiation and integration		<i>IPM</i> pp. 209–215, 292–297, 327–331, 416–432
5.2.7 Numerical methods		<i>IPM</i> pp. 472–478, 484–486

5.3 Module 2633: Pure Mathematics 3 (P3)

IPM = Introducing Pure Mathematics

Topic	Pages	Notes
5.3.1 Rational functions and the binomial theorem		<i>IPM</i> pp. 262–291
5.3.2 Coordinate geometry		<i>IPM</i> pp. 220–229, 319–320
5.3.3 Trigonometry		<i>IPM</i> pp. 334–378
5.3.4 Differentiation		<i>IPM</i> pp. 297–303, 313–327, 383–387
5.3.5 Integration		<i>IPM</i> pp. 294–297, 383–403, 423, 433–449
5.3.6 First order differential equations		<i>IPM</i> pp. 327–331, 457–466
5.3.7 Vectors		<i>IPM</i> pp. 493–515

5.4 Module 2634: Pure Mathematics 4 (P4)

IPM = Introducing Pure Mathematics

Topic	Pages	Notes
5.4.1 Rational functions and graphs	130–139	Also <i>IPM</i> pp. 284–288, 305–309
5.4.2 Summation of series	168–176	Also <i>IPM</i> pp. 237–247, 288–290
5.4.3 Proof by induction	159–168	
5.4.4 Polar coordinates	43–52	
5.4.5 Differentiation and integration	35–42, 57–79, 177–182	
5.4.6 Complex numbers	1–21, 154–158, 338–340	

5.5 Module 2635: Pure Mathematics 5 (P5)

Topic	Pages	Notes
5.5.1 Roots of polynomial equations	147–153	
5.5.2 Hyperbolic functions	189–200	
5.5.3 Differentiation and integration	192–210, 241–268	
5.5.4 Differential equations	57–79	
5.5.5 Numerical methods	268–280, 286–292	

5.6 Module 2636: Pure Mathematics 6 (P6)

Topic	Pages	Notes
5.6.1 Matrices	80–81, 87–93, 299–314	
5.6.2 Vectors	94–121	
5.6.3 Complex numbers	330–354	
5.6.4 Groups	369–404	

Introducing Mechanics by Brian Jefferson and Tony Beadsworth

OCR Syllabus Grid

5.7 Module 2637: Mechanics 1 (M1)

Topic	Pages	Notes
5.7.1 Force as a vector	8–30, 57–65	
5.7.2 Equilibrium of a particle	50–65, 164–169	
5.7.3 Kinematics of motion in a straight line	31–49, 97–106	
5.7.4 Newton's laws of motion	75–96	
5.7.5 Linear momentum	275–288	

5.8 Module 2638: Mechanics 2 (M2)

Topic	Pages	Notes
5.8.1 Centre of mass	221–236	
5.8.2 Equilibrium of a rigid body	183–205, 245–249	
5.8.3 Motion of a projectile	123–134	
5.8.4 Uniform motion in a circle	340–359	
5.8.5 Coefficient of restitution; impulse	275–295	
5.8.6 Energy, work and power	250–274	

5.9 Module 2639: Mechanics 3 (M3)

Topic	Pages	Notes
5.9.1 Equilibrium of rigid bodies in contact	81–85, 301–307	
5.9.2 Elastic strings and springs	370–391	
5.9.3 Impulse and momentum in two dimensions	275–300	
5.9.4 Motion in a vertical circle	359–369	
5.9.5 Linear motion under a variable force	97–110	
5.9.6 Simple harmonic motion	392–408	

5.10 Module 2640: Mechanics 4 (M4)

FM = Further Mechanics

Topic	Pages	Notes
5.10.1 Relative motion	144–163	
5.10.2 Centre of mass	221–245	
5.10.3 Moment of inertia		<i>FM</i> pp. 201–223
5.10.4 Rotation of a rigid body		<i>FM</i> pp. 224–245
5.10.5 Stability and oscillations		<i>FM</i> pp. 188–200, 246–260

Further Mechanics by Brian Jefferson and Tony Beadsworth

OCR Syllabus Grid

5.7 Module 2637: Mechanics 1 (M1)

IM= Introducing Mechanics

Topic	Pages	Notes
5.7.1 Force as a vector		<i>IM</i> pp. 8–30, 57–65
5.7.2 Equilibrium of a particle		<i>IM</i> pp. 50–65, 164–169
5.7.3 Kinematics of motion in a straight line		<i>IM</i> pp. 31–49, 97–106
5.7.4 Newton's laws of motion		<i>IM</i> pp. 75–96
5.7.5 Linear momentum		<i>IM</i> pp. 275–288

5.8 Module 2638: Mechanics 2 (M2)

IM= Introducing Mechanics

Topic	Pages	Notes
5.8.1 Centre of mass		<i>IM</i> pp. 221–236
5.8.2 Equilibrium of a rigid body		<i>IM</i> pp. 183–205, 245–249
5.8.3 Motion of a projectile		<i>IM</i> pp. 123–134
5.8.4 Uniform motion in a circle		<i>IM</i> pp. 340–359
5.8.5 Coefficient of restitution; impulse		<i>IM</i> pp. 275–295
5.8.6 Energy, work and power		<i>IM</i> pp. 250–274

5.9 Module 2639: Mechanics 3 (M3)

IM= Introducing Mechanics

Topic	Pages	Notes
5.9.1 Equilibrium of rigid bodies in contact		<i>IM</i> pp. 81–85, 301–307
5.9.2 Elastic strings and springs		<i>IM</i> pp. 370–391
5.9.3 Impulse and momentum in two dimensions		<i>IM</i> pp. 275–300
5.9.4 Motion in a vertical circle		<i>IM</i> pp. 359–369
5.9.5 Linear motion under a variable force		<i>IM</i> pp. 97–110
5.9.6 Simple harmonic motion		<i>IM</i> pp. 392–408

5.10 Module 2640: Mechanics 4 (M4)

IM= Introducing Mechanics

Topic	Pages	Notes
5.10.1 Relative motion		<i>IM</i> pp. 144–163
5.10.2 Centre of mass		<i>IM</i> pp. 221–245
5.10.3 Moment of inertia	201–223	
5.10.4 Rotation of a rigid body	224–245	
5.10.5 Stability and oscillations	188–200, 246–260	