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Nota di contenuto	1. Gas laws and basic thermodynamics -- 2. Petrol engines -- 3. Diesel (compression ignition) engines -- 4. Transmission -- 5. Forces and their effects on vehicle performance -- 6. Simple harmonic motion and vibrations -- 7. The CAN system -- 8. Engine mapping: an overview -- 9. Fuels and other energy sources -- 10. Electric propulsion: an overview.
Sommario/riassunto	"A motor vehicle's powertrain consists of the components which generate power and enable it to move - its engine, exhaust system, transmission, drive shaft, suspension and wheels. Any automotive engineering student going beyond basic mechanics will need a sound knowledge of the mathematics and scientific principles, particularly calculus and algebra, which underpin powertrain technology. This textbook supports a series of courses, for instance BTEC unit 28 "Further Mathematics for Engineering Technicians", which is a requisite for a foundation degree in automotive engineering, and BTEC higher unit 25 "Engine and Vehicle Design and Performance", without giving full coverage of automotive technology. It is a more focused companion to the author's Automotive Science & Mathematics 978-0-7506-8522-1, also published by Routledge"--