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In this joint work with B. Ulrich, we show that integrally closedness of any ideals of height at least 2 is compatible with a specialization of generic elements using a vanishing theorem of local cohomology of certain degrees. Under additional assumptions, we use this compatibility to show that a module is integrally closed if and only if its Bourbaki ideal is integrally closed. (Received February 06, 2006)