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Sommario/riassunto	This key text is written for senior undergraduate and graduate engineering students. It delivers a complete introduction to finite element methods and to automatic adaptation (error estimation) that will enable students to understand and use FEA as a true engineering tool. It has been specifically developed to be accessible to non-mathematics students and provides the only complete text for FEA with error estimators for non-mathematicians. Error estimation is taught on nearly half of all FEM courses for engineers at senior undergraduate and postgraduate level; no other existing textbook for this market covers this topic. *The only introductory FEA text with error estimation for students of engineering, scientific computing and applied mathematics *Includes source code for creating and proving FEA error

estimators *Complete with homework exercises and supporting website with instructor's solutions manual