

1. Record Nr.	UNINA9911019185103321
Autore	Isaacson Michael
Titolo	An Introduction to Coastal Engineering
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2024 ©2025
ISBN	9781394257171 1394257171 9781394257157 1394257155 9781394257164 1394257163
Edizione	[1st ed.]
Descrizione fisica	1 online resource (331 pages)
Disciplina	627.58
Soggetti	Coastal engineering Wave mechanics Textbooks.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover -- Title Page -- Copyright -- Contents -- About the Author -- Preface -- About the Companion Website -- Chapter 1 Introduction -- 1.1 Scope of Coastal Engineering -- 1.2 Outline of Book -- 1.3 Example Projects -- 1.3.1 Coastal Flooding -- 1.3.2 Coastal Structure Design -- 1.3.3 Sediment Transport -- 1.3.4 Marina Design -- 1.4 Evolution of Coastal Engineering and Future Trends -- Chapter 2 Regular Waves -- 2.1 Introduction -- 2.2 Boundary Value Problem -- 2.2.1 Assumptions -- 2.2.2 Equations of Motion -- 2.2.3 Boundary Conditions -- 2.2.4 Governing Equations -- 2.3 Linear Wave Theory -- 2.3.1 Governing Equations -- 2.3.2 Solution for Flow Field -- 2.3.3 Depth Parameter -- 2.3.4 Description of Results -- 2.3.5 Linear Dispersion Relation -- 2.4 Wave Energy and Momentum
Sommario/riassunto	An Introduction to Coastal Engineering by Michael Isaacson provides a comprehensive overview of the principles and practices involved in

coastal engineering. It covers a range of topics including the design and analysis of coastal structures, wave predictions, sediment transport, and environmental fluid mechanics. The book serves as an introductory text aimed at students and professionals in civil engineering, focusing on solving engineering problems in the coastal environment. It includes chapters on regular and random waves, winds, tides, tsunamis, and storm surges, along with design considerations for coastal structures. The book also addresses coastal flooding and erosion, offering practical examples and problem-solving exercises.

---