



Dr. Rishabh Anand

# SIGNALS AND SYSTEMS

## Signals And Systems

<b>Author :</b>	Rishabh Anand
<b>ISBN 13 :</b>	978-93-86173-53-9
<b>ISBN 10 :</b>	93-86173-53-0
<b>E-ISBN 13 :</b>	978-93-86173-53-9
<b>Edition :</b>	First
<b>Pages :</b>	716
<b>Type of book :</b>	Paperback
<b>Year :</b>	2025
<b>Language :</b>	English
<b>Publisher :</b>	Khanna Publishing House
<b>M.R.P :</b>	Rs 725.00
<b>Categories :</b>	<a href="#">Electrical, Electronics &amp; Communication Engineering</a> , <a href="#">Electrical, Electronics &amp; Communication Engineering</a>
<b>Condition Type :</b>	New
<b>Country Origin :</b>	India

### Product Description

This book presents the theory and concepts of signals and systems through analytical examples in a simple and lucid manner. It is designed for under graduate students of electronics and communication engineering, telecommunications engineering, electronics and instrumentation engineering, and electrical and electronics engineering. The book will also be useful to AMIE students. Written with student-centered, pedagogically driven approach, the text provides a self-contained introduction to the theory of signals and systems. This book looks at the concepts of systems, and also examines signals and the way that signals interact with physical systems. It covers topics ranging from basic signals and systems to signal analysis, properties of continuous-time Fourier transforms including Fourier transforms of standard signals, signal transmission through linear system, relation between convolution and correlation of signals, sampling theorems and techniques, and transform analysis of LTI systems. All the solved and unsolved problems in this book are designed to illustrate the topics in a clear way.



**Khanna Publishing House**

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: [contact@khannabooks.com](mailto:contact@khannabooks.com) | Tel: 011-2324 44 47 - 48 | Mobile: + +91-99109 09320

---

## Table of Contents

---

**Chapter 1:** Introduction to Signals and Systems. **Chapter 2:** Linear Time invariant Continuous- Time and Discrete-time Systems. **Chapter 3:** Fourier Series of Continuous-Time Signals or Continuous-Time Fourier Series(CTFS). **Chapter 4:** Discrete-Time Fourier Series (DTFS). **Chapter 5:** Continuous-Time Fourier Transform (CTFT). **Chapter 6:** The Discrete-Time Fourier Transform (DTFT). **Chapter 7:** The Discrete Fourier Transform (DFT). **Chapter 8:** Fast Fourier Transform (FFT) Algorithms. **Chapter 9:** The Laplace Transform. **Chapter 10:** Z-Transform. **Chapter 11:** Characterization of Signals and Systems in Time and Frequency-Domain **Chapter 12:** Sampling of Continuous-Time Signals **Chapter 13:** Sampling of Discrete-time Signals

---

## Author

---

**Rishabh Anand** received his Bachelor's degree B.E (Hons) in Electronics and Communication Engineering from Maharishi Dayanand University, Rohtak in 2006. The author is M.Tech. in Electronics and Communication Engineering from Veer Bahadur Singh Purvanchal University, Jaunpur in 2014, and MBA from Indian Institute of Management, Kozhikode in 2016. The Author is Program Diploma in Innovation Management from International Business Management Institute, Germany (Berlin) in 2020. The author has contributed to research publications in refereed, cited International Conferences and Journals, and attended many conferences, workshops, FDPs, and seminars. Also, he is the reviewer member of IJSDR Journal. He is a prolific author with 34 Text and Reference books to his credit, for B. Tech. (ECE/CSE/IT), M.Tech. (ECE/CSE/IT), BCA, MCA, and other courses of different Universities of India and overseas. His areas of interest include Software Project Management, Cloud Computing, Deep Learning, Tensor Flow, Python, R Programming and Machine Learning. He is currently working in ITES industry as a Global Service Delivery Manager. He is Project Management Professional (PMP)<sup>®</sup>, ITIL<sup>®</sup> Foundation Certificate in IT Service Management, PRINCE2<sup>®</sup> Practitioner Certification - Project Management, ScrumMaster<sup>®</sup> (CSM<sup>®</sup>), Certified Six Sigma White Belt (CSSWB<sup>™</sup>), Lean Six Sigma White Belt Certified (LSSWBC<sup>™</sup>) and Certified Six Sigma Green Belt<sup>™</sup> (CSSGB<sup>™</sup>). The author delivers lectures as Visiting Faculty (Assistant Professor) in the Global Institute of Technology and Management, Farrukh Nagar, Gurgaon.

---

