Engineering Books for Different Branches and Levels

1. Computer Science & Engineering

Beginner

- "Introduction to the Theory of Computation" Michael Sipser YouTube: https://www.youtube.com/watch?v=H9n1wx_ENag
- "Computer Networking: A Top-Down Approach" Kurose & Ross YouTube: https://www.youtube.com/watch?v=qiQR5rTSshw
- "Operating System Concepts" Silberschatz, Galvin, Gagne YouTube: https://www.youtube.com/watch?v=26QPDBe-NB8
- "Python Crash Course" Eric Matthes
 YouTube: https://www.youtube.com/watch?v=rfscVS0vtbw

Intermediate

- "Artificial Intelligence: A Modern Approach" - Stuart Russell & Peter Norvig

YouTube: https://www.youtube.com/watch?v=2ePf9rue1Ao

- "Database System Concepts" Silberschatz, Korth & Sudarshan YouTube: https://www.youtube.com/watch?v=WYZSdA4FwoY
- "Computer Organization and Design" David A. Patterson, John L. Hennessy

YouTube: https://www.youtube.com/watch?v=5r2E7GKm1Xs

- "Machine Learning" - Tom M. Mitchell
YouTube: https://www.youtube.com/watch?v=Gv9_4yMHFhl

Advanced

- "The Art of Computer Programming" Donald Knuth YouTube: https://www.youtube.com/watch?v=1MdBaiD3g18
- "Deep Learning" Ian Goodfellow, Yoshua Bengio, Aaron Courville YouTube: https://www.youtube.com/watch?v=aircAruvnKk
- "Pattern Recognition and Machine Learning" Christopher Bishop YouTube: https://www.youtube.com/watch?v=1zBvTQHuIFk
- "Reinforcement Learning: An Introduction" Richard S. Sutton, Andrew G. Barto

YouTube: https://www.youtube.com/watch?v=2pWv7GOvuf0

2. Mechanical Engineering

Beginner

- "Engineering Mechanics: Statics and Dynamics" - J.L. Meriam, L.G. Kraige

YouTube: https://www.youtube.com/watch?v=WIIu6FMoR3E

- "Thermodynamics: An Engineering Approach" - Yunus A. Çengel, Michael A. Boles

YouTube: https://www.youtube.com/watch?v=fy8Z2R-RfM8

- "Materials Science and Engineering: An Introduction" - William D. Callister

YouTube: https://www.youtube.com/watch?v=4F0F4t_KEjM

- "Introduction to Robotics: Mechanics and Control" - John J. Craig YouTube: https://www.youtube.com/watch?v=AJn842R_pqQ