

جدول للكتب و المصادر العلمية المعتمدة في القسم

No.	Subject	Stage	References
1	DC Circuit Analysis	First Level	<ul style="list-style-type: none"> ➤ Text Books: Engineering Circuit Analysis by WillianHayt&Kemmerly. ➤ Reference Books: Engineering Circuit Analysis by James W. Nilsson. ➤ Introduction to Electric Circuits by Richard C. Dorf.
2	Physics	First Level	<ul style="list-style-type: none"> ➤ Text books: <ul style="list-style-type: none"> • Microelectronic Circuits by Adel S. Sedra& Kenneth C. Smith. • University Physics by Sears & Zemansky (4th Edition). ➤ Reference: Physics by Robert Renick& David Halliday. <ul style="list-style-type: none"> • Circuit Analysis by John R. O'Malley. • Electronics Circuits Discrete & Integrated by Schilling and Belove.
3	Electronics	First Level	<ul style="list-style-type: none"> ➤ Text books: <ul style="list-style-type: none"> • Microelectronic Circuits by Adel S. Sedra& Kenneth C. Smith. • University Physics by Sears & Zemansky (4th Edition). ➤ Reference: Physics by Robert Renick& David Halliday. Circuit Analysis by John R. O'Malley. Electronics Circuits Discrete & Integrated by Schilling and Belove.
4	Fundamentals Digital Applications	First Level	<ul style="list-style-type: none"> ➤ Digital principles and applications, by Albert Paul Malvino, 2nd Edition. ➤ Digital Logic Circuits by D.A.GodseA.P.Godse, Technical Publications 2008.
5	Engineering Drawing	First Level	<ul style="list-style-type: none"> ➤ Fundamentals of Engineering Drawing by French & Vierck. ➤ Getting started with Solid Edge. Version 12, by Unigraphics Solution Inc. ➤ Fundamentals of drafting with AutoCAD LT by Paul Wallach, Dean Chowenhill& James Cullen.
6	Mathematics-I (Calculus and Analytical Engineering)	First Level	<ul style="list-style-type: none"> ➤ Text Books: <ul style="list-style-type: none"> • Calculus and Analytic Geometry by Thomas. • Advanced Engineering Mathematics by Kreyszig. ➤ Reference Books:

			<ul style="list-style-type: none"> • Analytic Geometry and calculus with Vectors by Agnew. • Practical Mathematics Vol-I & II by Toft & Mckay. • Advanced Calculus for Application by Hildebrand. • Vector Calculus by Bedford F W.
7	Mathematics-II (Differential Equations)	First Level	<ul style="list-style-type: none"> ➤ William E. Boyce and Richard C. Diprima, “Elementary Differential Equations and Boundary Value Problems”, Tenth Edition, 2012, John Wiley. ➤ John Polking, Al Boggess, and David Arnold, “Differential Equations”, Second Edition, 2005. ➤ Stephen W.Goode and Scott A. Annin, “Differential Equations and Linear Algebra”, Third Edition, 2009, Prentice Hall.
8	Digital Systems - Basics & Applications Logic	Second Stage	<ul style="list-style-type: none"> ➤ Digital principles and applications, by Albert Paul Malvino, 2nd Edition. ➤ Digital Logic Circuits by D.A.Godse A.P.Godse, Technical Publications 2008.
9	Electronic Circuits & Electrical Machine	Second Stage	<ul style="list-style-type: none"> ➤ Text Books: <ul style="list-style-type: none"> • Engineering Circuit Analysis by Willian Hayt & Kemmerly. • Electric Machinery Fundamentals (3rd Edition) by Stephen J. Chapman. ➤ Reference <ul style="list-style-type: none"> • Engineering Circuit Analysis by James W. Nilsson. • Introduction to Electric Circuits by Richard C. Dorf. • Electric Machines: Theory, Operation, Applications, Adjustment and Control by Charles Hubert. • Direct & Alternating Current Machinery by Rosenblatt and Friedman.
10	Aircrafts Structure & Aerospace Technology	Second Stage	<ul style="list-style-type: none"> ➤ Analysis of Aircraft Structures – An Introduction, by Donaldson, B.K. McGraw-Hill, 1993. ➤ Strength of Materials, by Timoshenko, S. Vol. I and II, Princeton D. Von Nostrand Co, 1990
11	Electromagnetic Field Theory	Second Stage	<ul style="list-style-type: none"> ➤ Text Books <ul style="list-style-type: none"> • Elements of Electromagnetic by Matthew N.O. Sadiku (2nd Edition). ➤ References <ul style="list-style-type: none"> • Field and Wave Electromagnetic by David K. Cheng (2nd Edition).

			<ul style="list-style-type: none"> • Engineering Electromagnetic by William H. Hayt (2nd Edition). • Electronic communication System by George Kennedy (2nd Edition). • Electromagnetic Waves and Radiating System by Balma.
12	Thermodynamics of Propulsion & Applied Aerodynamics- Basics	Second Stage	<ul style="list-style-type: none"> ➤ Text Books: <ul style="list-style-type: none"> • Engineering Thermodynamics, An introduction Textbook by J. B. Jones/G. A. Hawkins, second edition, John Wiley & Sons Inc, 1986. • Introduction to Flight by J. D. Anderson, Jr. (2nd/3rd). ➤ Reference: <ul style="list-style-type: none"> • Thermodynamics by Kenneth Wark. • Applied Thermodynamics by T D Estop/Mckonkey. • Gas Dynamics by E. A. John. • Fundamentals of Aerodynamics by J. D. Anderson, Jr(2nd Ed.)
13	Probability, Signals & Systems	Second Stage	<ul style="list-style-type: none"> ➤ Modern Elementary Statistics by John E. Freund. ➤ Probability and its engineering uses by T.C.Fry. ➤ Elementary Statistics by P. A. Games & G. R. Klaro. ➤ Probability and Statistics by Nestollor, Rourke and Thomas. ➤ Introduction to Signals and Systems by Oppenheim. ➤ Signals and Systems- An Introduction by Leslie Balme.
14	Mathematic II	Second Stage	<ul style="list-style-type: none"> ➤ Text Books: <ul style="list-style-type: none"> • Advanced Engineering Mathematics by Kreyszig. ➤ Reference: <ul style="list-style-type: none"> • Advanced Engineering Mathematics by Zill & Cullen. • Introduction to Ordinary Differential equations by Ross. • Introduction to Partial Differential equations by Sankara Rao.
15	Antenna and Transmission Lines	Third Stage	<ul style="list-style-type: none"> ➤ Text Books: <ul style="list-style-type: none"> • Antenna Theory Analysis and Design by C.A> Balanis, John Wille Sons. • Elements of Electromagnatics by Matthew N. O. Sadiku (2nd Edition) ➤ Reference <ul style="list-style-type: none"> • Antenna Theory and Design by Stutzman • Field Wave Electromagnetic by Daived K. Cheng (2nd Edition).

			<ul style="list-style-type: none"> • Engineering Electromagnetic by William H. Hayt (2nd Edition).
16	Analogy & Digital Communications	Third Stage	<ul style="list-style-type: none"> ➤ Text Books: <ul style="list-style-type: none"> • Modern Digital and Analog Communication System by B. P. Lathi, 3rd Edition. • Microwave Devices & Circuits by Samuel Y. Liao • Passive and Active Microwave Circuit by J. Helszajn. ➤ Reference <ul style="list-style-type: none"> • Introduction to Communication System by Ferral G. Stremmer. • Principles of Communication System by Herbert Taub & Donald L. Schilling. • Electronic Communication System by George Kenned.
17	Digital Signal Processing (DSP)	Third Stage	<ul style="list-style-type: none"> ➤ Discrete Time Signal Processing, by Alan V Oppenheim, Ronald W Schafer, John R Back, PHI, 2nd Edition 2000. ➤ DSP Implementation using DSP microprocessor with Examples from TMS32C54XX, by Avtar singh, S. Srinivasan, Thomson / Brooks cole Publishers, 2003. ➤ Digital Signal Processing, by S. Salivahanan, A. Vallavaraj, Gnanapriya, McGraw-Hill / TMH, 2333.
18	Engineering and Numerical Analysis	Third Stage	<ul style="list-style-type: none"> ➤ Text Books: <ul style="list-style-type: none"> • Fundamentals of numerical analysis by Stephen G. Kellison. ➤ Reference Books: <ul style="list-style-type: none"> • A First Course in Numerical Analysis by Anthony Ralston. • Methods in Numerical Analysis by K. I. Nielsen.
19	Analog and Digital Control	Third Stage	<ul style="list-style-type: none"> ➤ Text Books: <ul style="list-style-type: none"> • Feedback Control Systems by philips and Harbor (3rd Edition). • Digital Control and State variable methods: Conventional and Intelligent control systems, by M.Gopal, Tata McGraw Hill, 3rd Ed., 2009. ➤ Reference Books: <ul style="list-style-type: none"> • Modern Control System by Richard C. Dorf (5th Edition). • Control Sytem Design using MATLAB by Bahram Shahian & Michael Hassul. • User's Guide for The Student Edition of MATLAB by Duane Hanselman & Bruce Littlefield. • H. K. Khalil, 'Nonlinear Systems', Prentice Hall, 3rd Ed., 2002.

			<ul style="list-style-type: none"> • S.Sastry, 'Nonlinear Systems: Analysis, Stability and Control', Springer, 6999.
20	<p style="text-align: center;">Technical Writing and presentation Skills, International Relations</p>	Third Stage	<ul style="list-style-type: none"> ➤ Writing. Advanced by Ron White. Oxford Supplementary Skills. Third mpression 1992. ISBN 0194354073 (particularly suitable for discursive, discursive, argumentative, and report writing). ➤ College Writing Skills by John Langan. McGraw-Hill higher education 2004. ➤ pattern of College Writing (4th edition) by laurie G. Kirszner and Stephen R. Mandell. St. Martin's Press. ➤ The Mercury Reader. A Custom Publication. Compiled by nother Llinois University. General Editors: Janice Neulib; Kathleen Shine Cain; Stephen Ruffus and maurice Scharton. (A reader which will give students exposure to the best of twentieth century literature, without taxing the taste of engineering students.