

**NOTE: Please feel free to use the most recent edition of textbooks referenced in this list**  
**NOTA : Utilisez l'édition la plus récente des manuels cités dans cette liste.**

**16-Mechatronics-A1 System Analysis and Control (16-Mec-A3)**

Bissell, C.C., Control Engineering, latest edition. Taylor & Francis.  
Franklin, Feedback Control of Dynamic Systems.

**16-Mechatronics-A2 Circuits (16-Elec-A1)**

Nilsson, James W. and Susan Riedel, Electric Circuits, latest edition. Prentice Hall.  
Alexander, Charles and Mathew Sadiku, Fundamentals of Electric Circuits, latest edition. McGraw Hill.  
Schwarz and Oldham, Electrical Engineering: An Introduction, latest edition. Oxford University Press.

**16-Mechatronics-A3 Electronics (16-Elec-A5)**

Sedra and Smith, Microelectronic Circuits, latest edition. Oxford University Press.

**16-Mechatronics-A4 Digital Systems and Computers (16-Elec-A4)**

Brey, Barry, The Motorola Microprocessor Family: 68000, 68008, 68010, 68020, 68030, and 68040: Programming and Interfacing with Applications. Saunders College Publishing.

**16-Mechatronics-A5 Applied Thermodynamics, Fluid Mechanics, and Heat Transfer (16-Mec-A1)**

Moran, M.J., H.N. Shapiro, B.R. Munson and D.P. DeWitt, Introduction to Thermal Systems Engineering: Thermodynamics, Fluid Mechanics, and Heat Transfer. John Wiley and Sons.

**16-Mechatronics-A6 Kinematics and Dynamics of Machines (16-Mec-A2)**

Inman, D.J., Engineering Vibrations, latest edition. Prentice-Hall.  
Waldron, K.J., and Kinzel, G.L., Kinematics, Dynamics and Design of Machinery. John Wiley & Sons.

**16-Mechatronics-A7 Power Systems and Machines (16-Elec-A6)**

Chapman, Stephen, Electric Machinery and Power System Fundamentals, McGraw Hill.  
Wildi, Theodore, Electrical Machines, Drives, and Power Systems, latest edition, Prentice Hall.

**Group B Examinations****16-Mechatronics-B1 Signals and Communications (16-Elec-A3)**

Haykin, Communication Systems, latest edition, John Wiley & Sons Canada Ltd.

Or

Haykin, Simon & Michael Moher, Introduction to Analog and Digital Communication Systems, latest edition, John Wiley & Sons.

Lathi, B.P., Signal Processing and Linear Systems. Oxford University Press.

or

Haykin, Simon & Barry Van Veen, Signals and Systems, Interactive Solutions Edition, latest edition, John Wiley & Sons Canada Ltd.

**16-Mechatronics-B2 Digital Signal Processing (16-Elec-B1)**

Ifeachor, Emmanuel, and Barrie Jervis, Digital Signal Processing, a Practical Approach, latest edition. Prentice Hall.

Mitra, Sanjit, Digital Signal Processing, a Computer-Based Approach, latest edition. McGraw Hill.

**16-Mechatronics-B3 Advanced Control Systems (16-Elec-B2)**

Dutton, Ken, Steve Thompson, and Bill Barraclough, The Art of Control Engineering. Prentice Hall.

Nise, Norman, Control Systems Engineering. John Wiley.

**16-Mechatronics-B4 Environmental Control in Buildings (16-Mec-B2)**

F.C. McQuinston & G.D. Parker, Heating, Ventilating, & Air Conditioning – Analysis & Design, latest edition. John Wiley & Sons.

Jennings, Environmental Engineering, International Test Book Co.; Carrier & Trane System Manuals; ASHRAE Handbooks; ASHRAE Environmental Control Principles & Education Supplement to ASHRAE Handbook Fundamentals Volume.

**16-Mechatronics-B5 Acoustics and Noise Control (16-Mec-B11)**

Prime Text:

Barron, Randall F., Industrial Noise Control and Acoustics. Marcel Dekker.

Supplementary Texts:

Bell, Lewis H. and Douglas H. Bell, Industrial Noise Control: Fundamentals and Applications, latest edition, Marcel Dekker.

Irwin, J.D., Industrial Noise and Vibration Control. Prentice-Hall.

Wilson, Charles E., Noise Control: Measurement, Analysis, and Control of Sound and Vibration. Krieger, 1994.

**16-Mechatronics-B6 Robot Mechanics (16-Mec-B12)**

Paul, R.P., Robot Manipulators - Mathematics, Programming and Control. MIT Press.

Craig, J.J., Introduction to Robotics: Mechanism and Control. Addison-Wesley Publishing Co.

**16-Mechatronics-B7 Power Electronics and Drives (16-Elec-B8)**

Rashid, Muhammad H., Power Electronics: Circuits, Devices and Applications, latest edition. Prentice-Hall.

Mohan, N, Undeland, T, Robbins, W, Power Electronics – Converters, Applications, and Design. John Wiley.

Sen, P C., Principles of Electric Machines and Power Electronics, latest edition. Wiley.

**16-Mechatronics-B8 Design and Manufacture of Machine Elements (16-Mec-A4)**

Juinall, Robert C., and Kurt M. Mershek, Fundamentals of Machine Component Design, latest edition. Wiley.

Groover, Mikell P., Fundamentals of Modern Manufacturing: Materials, Processes, and Systems, latest edition. Wiley.

**16-Mechatronics-B9 Product Design and Development (16-Mec-B5)**

Prime Texts:

Ulrich, Karl T. & Steven D. Eppinger, Product Design and Development, latest edition. McGraw Hill.

Boothroyd, G., W.A. Knight & Peter Dewhurst, Product Design for Manufacture and Assembly, latest edition. Marcel Dekker Inc.

Supplementary Texts:

Ullman, David G., The Mechanical Design Process, latest edition. McGraw Hill.

**16-Mechatronics-B10 Integrated Manufacturing Systems (16-Mec-B4)**

Groover, Mikell P., Automation, Production Systems, and Computer-integrated Manufacturing, latest edition. Prentice Hall.