

Bachelor of Technology and Diploma in Electrical and Electronics Engineering

We are pleased to provide a curated list of open educational resources for the B.Tech. and Diploma in Electrical & Electronics Engineering programmes. These are only for the purpose of additional readings and support classroom interactions.

Basic Electrical Engineering

Johnson, D. (2014). *Fundamentals of electrical engineering*. OpenStax CNX. Open Textbook Library. <https://www.ece.rice.edu/~dhj/courses/elec241/col10040.pdf>. License: CC BY.

McLaughlin, D. J., & Howe, W. C. (2025). *Applied electrical engineering fundamentals*. University of Massachusetts Amherst Libraries. <https://openbooks.library.umass.edu/funee/>. License: CC BY.

Scharf, L. (2009). *A first course in electrical and computer engineering*. OpenStax CNX. Open Textbook Library. <https://archive.org/details/cnx-org-col10685>. License: CC BY.

Engineering Graphics and Design

Corradi Dell'Acqua, E., Mohammadi, J., & Murphy, S. (2025). *Introduction to engineering drawing and design*. LibreTexts. OER Commons. <https://oercommons.org/courses/introduction-to-engineering-drawing-and-design>. License: CC BY.

Hillyard, L. (2023). *VESL basic blueprint reading*. MHCC Library Press. Pressbooks. <https://mhcc.pressbooks.pub/veslblueprintforwelders/>. License: CC BY.

NSCC, & Camosun College. (2026). *Technical drawings*. Nova Scotia Community College. Pressbooks. <https://pressbooks.atlanticoer-relatlantique.ca/nscctechdrawings/>. License: CC BY-SA.

New Brunswick Community College, & Camosun College. (2024). *Technically drawn: Communicating technical information through drawings and sketches*. New Brunswick Community College. Pressbooks. <https://pressbooks.atlanticoer-relatlantique.ca/lined/>. License: CC BY-SA.

Tailony, R. (2024). *Engineering design with SolidWorks 2024*. South Georgia State College. ALG Commons. <https://oer.galileo.usg.edu/engineering-textbooks/11/>. License: CC BY-NC-SA.

Numerical Method

Dionne, B. (2023). *Numerical analysis*. University of Ottawa. OER Commons. <https://ruor.uottawa.ca/items/5bd4ab08-e6d8-4e84-8aec-065592cdc8b6>. License: CC BY-NC-SA.

Kees, V. (2023). *Numerical Methods for Ordinary Differential Equations*. Delft, Netherlands. Open Textbook Library. <https://books.open.tudelft.nl/home/catalog/view/165/285/536>. License: CC BY-SA.

Ökten, G. (2019). *First semester in numerical analysis with Julia*. Florida State University. OER Commons. <https://oercommons.org/courses/first-semester-in-numerical-analysis-with-julia>. License: CC BY-SA.

Basic of Mechanical Engineering/Engineering Mechanics

Baughman, J. A. (2023). *Introduction to mechanical engineering design*. Iowa State University Digital Press. Pressbooks. <https://iastate.pressbooks.pub/me270baughman/>. License: CC BY-SA.

Centennial College. (2021). *Student handbook: Mechanical engineering programs*. Centennial College. Pressbooks. <https://ecampusontario.pressbooks.pub/mechanicaleng/>. License: CC BY-NC-SA.

Generation, Transmission & Distribution

Boyer, C., Bourgeois, W., & Bryant, S. (2025). *Power solutions for large loads: Mastering electrical supply for new industrial facilities*. Mavs Open Press. OER Commons. <https://uta.pressbooks.pub/poweringlarge loads/>. License: CC BY-NC-SA.

Lee, A., & Flinn, C. (2020). *Basic motor control*. BCcampus. <https://opentextbc.ca/basicmotorcontrol/>. License: CC BY.

Yan, C. Y. (2022). *Introduction to engineering thermodynamics*. Pressbooks. <https://pressbooks.bccampus.ca/thermo1/>. License: CC BY-NC-SA.

Basic Electronics and Communication

Das, S., Thain, W., & Hil, S. (2019). *Laboratory manual for engineering electronics*. University System of Georgia. ALG Commons. <https://oer.galileo.usg.edu/engineering-textbooks/2/>. License: CC BY.

Montagne, A. J. M. (2023). *Structured electronics design: A conceptual approach to amplifier design* (3rd ed.). TU Delft Open. Open Textbook Library. <https://books.open.tudelft.nl/home/catalog/view/162/279/525>. License: CC BY.

Pytel, J. (2020). *Basic electronics 1*. Open Oregon Educational Resources. OER Commons. <https://oercommons.org/courses/basic-electronics-1-by-jim-pytel>. License: CC BY-NC-SA.

Measurement and Instrumentation

Dyer, J., & Davis, C. (2024). *Measurement and instrumentation: An introduction to concepts and methods* (1st ed.). SHAREOK. Open Textbook Library. <https://shareok.org/items/dbbf29d8-3916-4d80-aa23-f0622ca89075>. License: CC BY-NC-SA.

Montazami, R. (2020). *Engineering measurements and instrumentation* (1st ed.). Iowa State University. OER Commons. <https://dr.lib.iastate.edu/entities/publication/f42ec687-c959-4145-aa28-81b8222e726d>. License: CC BY-ND.

Digital Signal Processing

Tiberius, C., & Mulder, M. (2026). *Engineering signal analysis: From Fourier to filtering: Theory*. TU Delft Open. Open Textbook Library. <https://books.open.tudelft.nl/home/catalog/book/247>. License: CC BY.

Engineering Electromagnetic

Ellingson, S. W. (2018). *Electromagnetics* (Vol. 1). Virginia Tech Libraries. Open Textbook Library. <https://open.umn.edu/opentextbooks/textbooks/electromagnetics-vol-1>. License: CC BY-SA.

Ellingson, S. W. (2020). *Electromagnetics* (Vol. 2). Virginia Tech Publishing. Open Textbook Library. <https://vtechworks.lib.vt.edu/server/api/core/bitstreams/0a2690e9-be2c-4b50-802d-c74d6e77560f/content>. License: CC BY-SA.

Circuit Theory

Fiore, J. M. (2020). *DC Electrical Circuit Analysis: A Practical Approach*. Dissidents. Open Textbook Library. <http://www.dissidents.com/resources/DCElectricalCircuitAnalysis.pdf>. License: CC BY-NC-SA.

Fiore, J. M. (2020). *AC Electrical Circuit Analysis: A Practical Approach*. Dissidents. Open Textbook Library. <http://www.dissidents.com/resources/ACElectricalCircuitAnalysis.pdf>. License: CC BY-NC-SA.

Fiore, J. M. (2019). *Operational amplifiers & linear integrated circuits: Theory and application* (3rd ed.). OER Commons. <https://oercommons.org/courses/operational-amplifiers-linear-integrated-circuits-theory-and-application-3e>. License: CC BY-NC-SA.

Kann, C. W. (2014). *Digital circuit projects: An overview of digital circuits through implementing integrated circuits* (2nd ed.). Gettysburg College. OER Commons. <https://cupola.gettysburg.edu/oer/1/>. License: CC BY.

Pasquale, A. J. (2022). *Circuit analysis*. OER Commons. <https://oercommons.org/courses/circuit-analysis>. License: CC BY-NC-SA.

AC Motor

Lee, A., & Flinn, C. (2020). *Basic motor control*. BCcampus. <https://opentextbc.ca/basicmotorcontrol/>. License: CC BY.

Introduction of Microcontroller

Kardam, N. (2024). *Introduction to Microcontrollers*. Open WA. <https://openwa.pressbooks.pub/nehakardam10/>. License: CC BY.

Pasquale, A. J. (2025). *Microcontrollers*. <https://doctor-pasquale.com/wp-content/uploads/2021/02/The-Yellow-Book.pdf>. License: CC BY-NC-SA.

Power System Analysis

Preetham, G. (2019). *Introduction to power system engineering*. OER Commons. <https://mospace.umsystem.edu/items/acea7683-c560-4940-98e2-9375156abf4b>. License: CC BY.

Engineering Mechanics

Osgood, E., Cameron, G., & Christensen, E. (n.d.). *Engineering mechanics: Statics*. Robertson Library Pressbooks. Open Textbook Library.
<http://ndl.ethernet.edu.et/bitstream/123456789/37476/1/Engineering%20Mechanics%201%20Statics.pdf>. License: CC BY-NC-SA.

Control System

Zywno, M. (2023). *Introduction to control systems*. Ryerson University. Pressbooks.
<https://pressbooks.library.torontomu.ca/controlsystems/>. License: CC BY-NC.