

IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS)



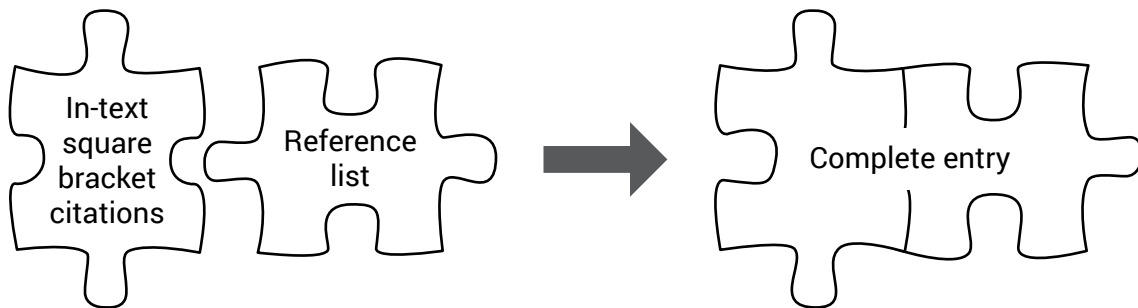
IEEE is a reference style guide that uses **numbered references** in **square brackets**. It is most often used in engineering and technical fields for stylistic consistency. The absence of in-text bibliographic information provides better flow and saves space.

This guide explains how to cite common sources using IEEE. For information on the citation format for sources not covered in this guide, refer to the IEEE website.



Documenting Sources

Sources must be documented in two places: in **in-text square bracket citations** and in a **reference list**.



In-text Citations

In-text citations direct readers to the specific sources you used. Insert a citation when you use a **direct quote** or **paraphrase** information from another source. Each source is assigned a **reference number** based on the order in which it appears in your paper. For example, the first source you use is [1], the second source you use is [2], and the third source you use is [3].

To retain your writing flow, place citations at a **natural pause** as close as possible to the information being cited, and directly **before** the punctuation that concludes the sentence or clause.

Sample citation:

Several major health organizations have approved GMOs for human consumption [1], [2], [3]. After a recent metastudy was completed [3], the European Union also began a process to regulate the production of GMOs [4].

In-text Citation Formatting for Different Kinds of Sources

General Format

Assign a **number** to each source based on the order in which they appear in your work. This number will correspond with this specific source for the duration of your paper. When referring to the source specifically, such as in a literature review, refer to it by the citation number only.

*e.g., Many birds migrate in the winter [6].
e.g., The basis for this experiment was established in [4].*

Citing Multiple Sources at Once

List each source **individually** in **square brackets** separated by **commas**. Note that you do not need to place an “and” before the last citation.

e.g., As has been noted by scholars [2], [6], [18], [20], nanotechnology is a complex field.

Specific Parts of a Source

In most cases, in-text citations will only include the **assigned number** of the work being cited. However, when including a direct quote or referring to a specific part of the text, include a **comma** followed by the **page number**, **chapter number**, or **section number** after the reference number.

e.g., Higher temperatures resulted in increased colonization [3, 54].



Reference List Formatting for Different Kinds of Sources

The reference list itemizes all material you cited in your text. Sources are listed **numerically** in the order they appear in your text. Place this separate section, titled “References,” at the very **end** of your text.



Sources that you consulted, but did not cite, are not included in this list.

References are arranged **numerically** using the number you assigned. Each reference begins with this number. Abbreviated versions of company names, months, periodical titles, and provinces are required.



Books

One Author

[Reference number] Initials. Last Name, *Title*. City: Publisher, Publication year.

[3] H. L. Sussman, *Victorian Technology: Invention, Innovation, and the Rise of the Machine*. Santa Barbara: Praeger Publishers, 2009.



If the city of publication is not in the United States, include the country after the city.

Two Authors

[Reference number] Initials. Last Name and Initials. Last Name, *Title*. City: Publisher, Publication year.

- [9] J. Swift and K. Stewart, *Hydro: The Decline and Fall of Ontario's Electric Empire*. Toronto, Canada: Between the Lines, 2004.



If a book has three or more authors, use the first author's name and et al.

Section of Book

[Reference number] Initials. Last name, "Title of Chapter," in *Title of Book*, First initials. Last name, Ed. City: Publisher, Publication year, pp. page range.

- [4] A. Smith, "Farms, Forests and Cities: The Image of the Land and the Rise of the Metropolis in Ontario, 1860-1914," in *Old Ontario: Essays in Honour of J.M.S. Careless*, D. R. Keane and C. F. Read, Eds. Toronto, Canada: Dundurn Press, 1990, pp. 71-94.



Web Sources

[Reference number] Initials. Last Name, *Title*. City: Publisher, Publication year.
[Format]. Available place or type: DOI.

- [7] J. Sherwood and Royal British Columbia Museum, *Surveying Central British Columbia: A Photojournal of Frank Swannell, 1920-1928*. Victoria: Royal British Columbia Museum, 2007. [E-Book] Available Safari E-book: DOI: 10.1000/182.



Periodicals or Journal Articles

Printed Periodicals or Journal Articles

[Reference number] Initials. Last name, "Title of Paper," *Abbreviated Title of Periodical*, vol. number, issue number, pp. page range, Abbreviated month year.

- [20] P. Dias, "The Disciplines of Engineering and History: Some Common Ground," *Technol. Soc. Mag.*, vol. 20, no. 2, pp. 539-549, Jun. 2014.



All IEEE periodicals have an abbreviated title. See the IEEE citation reference manual for a complete list of these abbreviations.

**Electronic
Periodicals or
Journal Articles**

[Reference number] Initials. Last name, "Title of paper," *Abbreviated Title of Periodical*, vol. number, issue number, pp. page range, Abbreviated month year. [Online]. Available: URL.DOI.

- [12] D. K. Gattie et al, "Engineering Education as a Complex System," *European J. Eng. Educ.*, vol. 36, no. 6, pp. 521–535, Dec. 2011. [Online]. Available: Academic OneFile, <http://find.galegroup.com>. DOI: 10.1000/182.

**Handbooks
or Manuals**

[Reference number] *Title of Manual/Handbook # ed.*, Initial. Last name. Abbreviated Name of Company, City of company, Year of publication, pp. page range.

- [2] *CMOS Sensor Design*, 4th ed., J. Lee. Kodak Co., New York, 2010, pp. 62-96.

**Technical
Reports**

[Reference number] Initials. Last name, "Title of report," Abbreviated Name of Company, City of company, Abbreviated province or state, Report type, Month day, Year of publication.

- [12] R. Lee and C. Wilson, "Calibration program for the underwater sensor," *Elect. Eng. Res. Lab.*, Trent Univ., Peterborough, ON, Tech. Memo. NGL-003-91-2, Aug. 15, 1985.

Patents

[Reference number] Initials. Last name, "Title of patent," Country of origin patent number, Month day, Year.

- [15] A.W. Davis, "Image stabilizer," Canadian Patent 8,563,912, March 17, 1991.

**Conference
Articles**

[Reference number] Initials. Last name, "Title of Paper," in *Unabbreviated Name of Conference*, City of conference, Abbreviated province or state, Year, pp. page range.

- [7] R.S. Ali, "Satellite Sensor Systems," in *Science in Space*. Toronto, ON, 2010, pp. 6-18.



All IEEE conference articles use standard abbreviations. Some samples are listed below. For a complete list, see the IEEE website.

Annals ...Ann.	Exposition...Expo.	Technical Paper... Tech. Paper
Annual... Annu.	International... Int.	First... 1st
Colloquium... Colloq.	National... Nat.	Second... 2nd
Conference... Conf.	Proceedings... Proc.	Third... 3rd
Congress... Congr.	Record... Rec.	Fourth/nth ... 4th/nth...
Convention... Conv.	Symposium... Symp.	
Digest... Dig.	Technical Digest... Tech. Dig.	

Write out all the remaining words, but omit most articles and prepositions like *of*, *the*, and *on*.

Before abbreviation:

e.g., *Proceedings of the 1996 Robotics and Automation Conference*

After abbreviation:

e.g., *Proc. 1996 Robotics and Automation Conf.*



Sample Reference List

References

- [1] R.S. Ali, "Satellite Sensor Systems," in *Science in Space*. Toronto: 2010, pp. 6-18.
- [2] R. Lee and C. Wilson, "Calibration program for the underwater sensor," *Elect. Eng. Res. Lab., Trent Univ., Peterborough, Tech. Memo. NGL-003-91-2*, Aug. 15, 1985.
- [3] A.W. Davis, "Image stabilizer," Canadian Patent 8,563,912, March 17, 1991.
- [4] P. Dias, "The Disciplines of Engineering and History: Some Common Ground," *Technol. Soc. Mag.*, vol. 20, no. 2, pp. 539-549, Jun. 2014.
- [5] J. Swift and K. Stewart, *Hydro: The Decline and Fall of Ontario's Electric Empire*. Toronto, Canada: Between the Lines, 2004.
- [6] D. K. Gattie, N. N. Kellam, J. R. Schramski, and J. Walther, "Engineering Education as a Complex System," *European Journal of Engineering Education*, vol. 36, no. 6, pp. 521-535, Dec. 2011. [Online]. Available: Academic OneFile, <http://find.galegroup.com>. [Accessed April 2, 2014]. DOI: 10.1000/182.
- [7] *CMOS Sensor Design*, 4th ed., J. Lee. Kodak Co., New York, 2010, pp. 62-96.
- [8] A. Smith, "Farms, Forests and Cities: The Image of the Land and the Rise of the Metropolis in Ontario, 1860-1914," in *Old Ontario: Essays in Honour of J.M.S. Careless*, D. R. Keane and C. F. Read, Eds. Toronto, Canada: Dundurn Press, 1990, pp. 71-94.