



**Colegio de San Juan de Letran**  
Dominican Avenue, Abucay, Bataan  
Library and Media Services

## **RESEARCH GUIDE: ENGINEERING DRAWING PLANS**

### **TABLE OF CONTENTS**

#### **I. Scope Note**

#### **II. Search Aids**

#### **III. Information Resources**

##### **A. Library Resources**

###### **a. E-Journals**

###### **b. E-Theses**

##### **B. Open Access**

###### **a. Free E-Books**

###### **b. Free E-Journals**

###### **c. Free E-Theses**

##### **C. Professional Organizations**

##### **D. Other Related Web Portals**

##### **E. Related Research Guides**

#### **IV. Tutorials**

## RESEARCH GUIDES

### ENGINEERING DRAWING PLANS

#### I. SCOPE NOTE

*A two dimensional representation of three dimensional objects. [doc.lagout.org](http://doc.lagout.org).*

#### II. SEARCH AIDS (BT: Broader Term, RT: Related Term, NT: Narrow Term)

##### BT:

- Engineering Drawing

##### RT:

- Design process
- Architectural scale
- Engineering scale
- Freehand sketching
- Lettering techniques
- Orthographic projections
- Symbols and conventions
- Building drawings
- Working drawing content
- Common code requirements
- Common specification information
- Bridge drawings
- Building information modeling
- Engineering drawings
- Planning of sheet
- Dimension

##### NT:

- Drawing process
- Lines and letters
- Isometric drawing
- Orthographic or Multiview
- Sectioning
- Dimension text
- Dimension line
- Arrows
- Extension Lines
- Isometric projection
- Dimetric projection
- Trimetric projection

### III. INFORMATION RESOURCES

#### A. LIBRARY RESOURCES

*Note: For the appropriate access credentials, please contact the Letran Bataan Library*

#### ➤ E-JOURNALS

- Journal of Science Education and Technology.  
[https://www.proquest.com/central/publication/publications\\_2043721](https://www.proquest.com/central/publication/publications_2043721)
- IOP Conference Series. Materials Science and Engineering.  
[https://www.proquest.com/central/publication/publications\\_4998670](https://www.proquest.com/central/publication/publications_4998670)
- Interactive Learning Environments.  
[https://www.proquest.com/central/publication/publications\\_436408](https://www.proquest.com/central/publication/publications_436408)
- IOP Conference Series. Earth and Environmental Science.  
[https://www.proquest.com/central/publication/publications\\_4998669](https://www.proquest.com/central/publication/publications_4998669)
- Programming and Computer Software.  
[https://www.proquest.com/central/publication/publications\\_2043762](https://www.proquest.com/central/publication/publications_2043762)
- Journal of Educational Technology & Society.  
[https://www.proquest.com/central/publication/publications\\_1586335](https://www.proquest.com/central/publication/publications_1586335)
- Neural Computing & Applications.  
[https://search.proquest.com/central/publication/publications\\_2043988](https://search.proquest.com/central/publication/publications_2043988)
- International Journal on Interactive Design and Manufacturing.  
[https://search.proquest.com/central/publication/publications\\_2044253?accountid=190548](https://search.proquest.com/central/publication/publications_2044253?accountid=190548)
- The International Journal of Advanced Manufacturing Technology.  
[https://search.proquest.com/central/publication/publications\\_2044010](https://search.proquest.com/central/publication/publications_2044010)
- The International Journal of Engineering Education.  
[https://search.proquest.com/central/publication/publications\\_33186](https://search.proquest.com/central/publication/publications_33186)
- Engineering Studies.  
[https://search.proquest.com/central/publication/publications\\_186195](https://search.proquest.com/central/publication/publications_186195)

#### ➤ E-THESES

- Wetzel, J. (2014). Understanding and critiquing multi-modal engineering design explanations (Order No. 3669343). Available from ProQuest Central. (1648715572). Retrieved from <https://www.proquest.com/dissertations-theses/understanding-critiquing-multi-modal-engineering/docview/1648715572/se-2?accountid=190548>
- Tang, X. (2014). Engineering knowledge and student development: An institutional and pedagogical critique of engineering education (Order No. 3684113). Available from ProQuest Central. (1658783841). Retrieved from <https://www.proquest.com/dissertations-theses/engineering-knowledge-student-development/docview/1658783841/se-2?accountid=190548>
- Mapson, K. H. (2011). Best practices for designing online learning environments for 3D modeling curricula: A delphi study (Order No. 3463717). Available from ProQuest Central.

- (879806510). Retrieved from <https://www.proquest.com/dissertations-theses/best-practices-designing-online-learning/docview/879806510/se-2?accountid=190548>
- Herrera, A. (2003). CAD: A lean engineering tool. impacting human \*efficiency in the design engineering process (Order No. 3090235). Available from ProQuest Central. (305232174). Retrieved from <https://www.proquest.com/dissertations-theses/cad-lean-engineering-tool-impacting-human/docview/305232174/se-2?accountid=190548>
  - Portsmore, M. D. (2010). Exploring how experience with planning impacts first grade students' planning and solutions to engineering design problems (Order No. 3396538). Available from ProQuest Central. (305228421). Retrieved from <https://search.proquest.com/docview/305228421?accountid=190548>
  - Sutton, K. G. (2018). Investigating performance assessment practices in post-secondary fundamental technical graphics courses and reliability of a current performance assessment method (Order No. 10969945). Available from ProQuest Central. (2092661373). Retrieved from <https://search.proquest.com/docview/2092661373?accountid=190548>
  - Kassem, D. (2014). The sketchpad window (Order No. 10591722). Available from ProQuest Central. (1896118068). Retrieved from <https://search.proquest.com/docview/1896118068?accountid=190548>
  - Davis, M. (2020). Development and comparison of 3D printed mount plate vs. G10 fiberglass mount plate for UAV integration of multiple sensors (Order No. 27836136). Available from ProQuest Central. (2406646832). Retrieved from <https://search.proquest.com/docview/2406646832?accountid=190548>
  - Nozaki, S. Y. (2017). The development of a concept inventory for engineering graphics (Order No. 10665959). Available from ProQuest Central. (1979365528). Retrieved from <https://search.proquest.com/docview/1979365528?accountid=190548>

## B. OPEN ACCESS

### ➤ FREE E-BOOKS

- Simmons, Colin H. (2004). Manual of Engineering Drawing, 2<sup>nd</sup> edition. <https://www.pdfdrive.com/manual-of-engineering-drawing-second-edition-to-britishand-international-standards-d188962698.html>
- American Society of Mechanical Engineers. (2009). Dimensioning and Tolerancing: Engineering Drawing and Related Documentation Practices. U.S.A: ASME International. <https://www.pdfdrive.com/dimensioning-and-tolerancing-engineering-drawings-andrelated-documentation-practices-an-international-standard-d167719007.html>
- Reddy, Venkata. (2008). Textbook of Engineering Drawing, 2<sup>nd</sup> edition. BS Publications. <https://www.pdfdrive.com/textbook-of-engineering-drawing-d28918244.html>

### ➤ FREE E-JOURNALS

- Symmetry. [https://www.mdpi.com/journal/symmetry/special\\_issues/Advances\\_Engineering\\_Graphics\\_Improvements\\_New\\_Proposals](https://www.mdpi.com/journal/symmetry/special_issues/Advances_Engineering_Graphics_Improvements_New_Proposals)
- Engineering. <https://www.springeropen.com/p/engineering>

- Journal of Engineering, Project, and Production Management. <https://sciendo.com/journal/JEPPM>
- Engineering Journal. <https://www.omicsonline.org/engineering-journals-list.php>
- Journal of Engineering, Design & Technology. <https://www.emeraldgroupublishing.com/journal/jedt>
- Open Engineering. <https://www.degruyter.com/view/journals/eng/eng-overview.xml>
- Journal of Engineering, Project and Production Management. <https://content.sciendo.com/view/journals/jeppm/jeppm-overview.xml>

#### ➤ FREE E-THESES

- Hassan, B. (2018). Relationship between attitude, motivation and occupational task performance in teaching engineering drawing among technical education teachers in Nigeria. (Doctoral Dissertation). Universiti Tun Hussein Onn Malaysia. Retrieved from <http://eprints.uthm.edu.my/id/eprint/12220/>
- Rösner, M. (2018). Technologie tažení neželezných materiálů: Drawing technology of non-ferrous materials. (Thesis). Brno University of Technology. Retrieved from <http://hdl.handle.net/11012/14487>
- Černošek, J. (2020). Svarky v technické dokumentaci: Weldment in the engineering drawing. (Thesis). Brno University of Technology. Retrieved from <http://hdl.handle.net/11012/192141>
- ABDULLAH, Z. (2015). Improving Malaysian engineering graduate ability to read and interpret engineering drawings. (Doctoral Dissertation). University of Melbourne. Retrieved from <http://hdl.handle.net/11343/55154>
- Chiloyan, V. (2011). Polyethylene fiber drawing optimization. (Thesis). MIT. Retrieved from <http://hdl.handle.net/1721.1/68829>
- Bopp, S. M. (2014). The Historic American Buildings Survey and Interpretive Drawing: Using Digital Tools to Facilitate Comprehensive Heritage Documentation. (Master's Thesis). Columbia University. Retrieved from <https://doi.org/10.7916/D8BG2MHW>
- Robertson, F. (2011). Ruling the line: learning to draw in the first age of mechanical reproduction. (Doctoral Dissertation). Glasgow School of Art. Retrieved from <http://radar.gsa.ac.uk/2260/>
- Houston, T. K. (2010). 3-D Model System. (Master's Thesis). Loyola Marymount University. Retrieved from <http://digitalcommons.lmu.edu/etd/393>
- Černošek, J. (2018). Svarky v technické dokumentaci: Weldment in the engineering drawing. (Thesis). Brno University of Technology. Retrieved from <http://hdl.handle.net/11012/66756>
- ABDULLAH, Z. (2015). Improving Malaysian engineering graduate ability to read and interpret engineering drawings. (Doctoral Dissertation). University of Melbourne. Retrieved from <http://hdl.handle.net/11343/55154>

#### C. PROFESSIONAL ORGANIZATIONS

- IEEE Institution of Electrical and Electronics Engineer. <https://www.ieee.org/>
- Audio Engineering Society. <http://www.aes.org/>
- American Association of Engineering Societies. <https://www.aaes.org/>

- American Council of Engineering Companies. <https://www.acec.org/>
- Association for Computing Machinery. <https://www.acm.org/>
- Institution of Electrical & Electronics Engineer. <https://www.ieee.org/>
- The Institution of Engineering & Technology. <https://www.theiet.org/>
- Electronic Power Research Institute. <https://www.epri.com/>
- American Society for Engineering Education. <http://www.asee.org/>
- IEEE Communication Society. <https://www.comsoc.org/>

#### D. OTHER RELATED WEB PORTALS

- Technical Drawing. <https://www.autodesk.com/solutions/technical-drawing>
- Designing Building Wiki. [https://www.designingbuildings.co.uk/wiki/Engineering\\_drawing](https://www.designingbuildings.co.uk/wiki/Engineering_drawing)
- Teach Engineering. [https://www.teachengineering.org/activities/view/cub\\_engrdrawings\\_activity01](https://www.teachengineering.org/activities/view/cub_engrdrawings_activity01)
- Smart Draw. <https://www.smartdraw.com/cad/engineering-drawing-software.htm>
- Fractory. <https://fractory.com/engineering-drawing-basics/>
- AutoDesk. <https://www.autodesk.com/solutions/technical-drawing>

#### E. RELATED RESEARCH GUIDES

- Penn State University Libraries. <https://guides.libraries.psu.edu/HBGce100/drawing>
- Sydney Tafe Library. <https://sydneytafe.libguides.com/civil/CAD>
- Virginia Tech. <https://guides.lib.vt.edu/c.php?g=10365&p=3808911>
- UT Library. <https://libguides.uttyler.edu/citations/engineering>

#### IV. TUTORIALS

- Technical Drawing Tutorial 1 | Engineering Drawing | Free Technical Drawing Lesson | Line & Arc. <https://www.youtube.com/watch?v=yVsZgQQC2Ys>
- Engineering Drawing Tutorial Part 1. <https://www.youtube.com/watch?v=e795004-aVA>
- Engineering Drawing Tutorials / Orthographic Drawing with Sectional Front & Side view (T 7.2A). <https://www.youtube.com/watch?v=fQNwVo2hWU4>
- Introduction To Engineering Drawing. <https://www.youtube.com/watch?v=z4xZmBpXlzQ>
- Engineering Drawing Tutorials/Orthographic drawing 1 with front view and slide view (T 5. 5). <https://www.youtube.com/watch?v=6qs2PA2JWvQ>
- Introduction to Engineering Drawing 1. <https://www.youtube.com/watch?v=h5ZiSbZJ4ok>
- Orthographic projection- 1, Tutorial - engineering drawing. <https://www.youtube.com/watch?v=eL9K2u0AMQ4>
- Engineering Drawing Tutorials/Sectional and Auxiliary Views with Front view & Side view (T 7.3). <https://www.youtube.com/watch?v=D70jCaF6FRQ>
- Tutorials Point. [https://www.tutorialspoint.com/engineering\\_drawing/index.asp](https://www.tutorialspoint.com/engineering_drawing/index.asp)
- WIS IQ. <https://www.wiziq.com/tutorials/engineering-drawing>
- Yes Yen Graphi Tech. [https://www.yesyen.com/engineering\\_drawing/tutorial/tutorialIndex.php](https://www.yesyen.com/engineering_drawing/tutorial/tutorialIndex.php)



**Prepared by:**

**Mr. Marvin A. Milla**

Layout

[mamilla@letranbataan.edu.ph](mailto:mamilla@letranbataan.edu.ph)

**Ms. Maria Rosiel C. Ordenes**

Subject Librarian

[mrcordenes@letranbataan.edu.ph](mailto:mrcordenes@letranbataan.edu.ph)

**Asst. Prof. Norady Mercado Pere**

Chief Librarian

[ndmercado@letranbataan.edu.ph](mailto:ndmercado@letranbataan.edu.ph)

For more inquiries, kindly e-mail us at [library@letranbataan.edu.ph](mailto:library@letranbataan.edu.ph)

