

## DAFTAR PUSTAKA

- Abdalhameed, B. F., & Naimi, S. (2023). Based BIM techniques to *clash detection* for construction projects. *Periodicals of Engineering and Natural Sciences*, 11(1), 239–245. <https://doi.org/10.21533/pen.v11i1.3461>
- Afzal, M. (2021). *BIM 7D - Research on Applications for Operations & Maintenance*. 90. <https://creativecommons.org/licenses/by/4.0/>
- Amal, B., & Purnama, D. D. (2023). 3D Modeling of Existing Toll Roads With Building Information. *Menara: Jurnal Teknik Sipil*, 18(2), 80–86. <https://doi.org/10.21009/jmenara.v18i2.35742>
- Anggraini, R. P., & Herzanita, A. (2022). Estimasi Biaya Struktur Bangunan Menggunakan Bim (Building Information Modelling). *Jurnal ARTESIS*, 2(1), 19–25. <https://doi.org/10.35814/artesis.v2i1.3756>
- Autodesk. (2023). *What is Navisworks?* <https://www.autodesk.com/support/technical/article/caas/sfdcarticles/sfdcarticles/What-is-Navisworks.html>
- Autodesk. (2025). *What is Autodesk Revit?* [https://www.autodesk.com/asean/products/revit/free-trial?us\\_oa=dotcom-us&us\\_si=69d53cb6-edfd-490a-bd42-11f0feafe4e8&us\\_st=revit](https://www.autodesk.com/asean/products/revit/free-trial?us_oa=dotcom-us&us_si=69d53cb6-edfd-490a-bd42-11f0feafe4e8&us_st=revit)
- BIM-FORUM. (2024). *Level of Development (LOD) Specification*.
- Bitaraf, I., Salimpour, A., Elmi, P., & Shirzadi Javid, A. A. (2024). Improved Building Information Modeling Based Method for Prioritizing *Clash Detection* in the Building Construction Design Phase. *Buildings*, 14(11). <https://doi.org/10.3390/buildings14113611>
- Bukunova, O., & Bukunov, A. (2021). Building Information Modeling for Sustainable Construction. *IOP Conference Series: Materials Science and Engineering*, 1079(3), 032080. <https://doi.org/10.1088/1757-899x/1079/3/032080>
- Diantoro, B. R., Hendriyani, I., & Pratiwi, R. (2024). Implementasi Building Information Modelling ( Bim ) Pada Pekerjaan Struktur Beton Bertulang. *Jurnal Penelitian Teknik*, 1, 128–141.
- Du, X. (2021). Construction Cost Simulation Based on Artificial Intelligence and BIM. *Scientific Programming*, 2021. <https://doi.org/10.1155/2021/9744286>
- Enda, D., & Destriyana, E. (2022). Penerapan Metode Building Information Modeling (Bim) Pada Pekerjaan Struktural Gedung Kuliah Terpadu III (Gkt III) Politeknik Negeri Bengkalis. *Seminar Nasional Industri Dan Teknologi (SNIT)*, November, 193–214.
- Hariyanto, & Kurniawan, M. A. D. (2024). Pemodelan Struktur dengan Metode BIM Menggunakan Software Autodesk Revit. *Jurnal Ilmiah Teknosains*, 10(2).
- Hasan, M. (2025). *IFC Standardization Interoperability*. March, 0–33.

<https://doi.org/10.13140/RG.2.2.12295.10402>

- Kermanshahi, E. K., Tahir, M. B. M., Shukor Lim, N. H. A., Balasbaneh, A. T., & Roshanghalb, S. (2020). Implementation of Building Information Modeling for Construction *Clash Detection* Process in the Design Stage: A Case Study of Malaysian Police Headquarter Building. *IOP Conference Series: Earth and Environmental Science*, 476(1), 0–8. <https://doi.org/10.1088/1755-1315/476/1/012009>
- Khasbage, Y. R. (2022). Study on Building Information Modeling and Implementation of *Clash Detection* Tool in Building Design. *Interantional Journal of Scientific Research in Engineering and Management*, 06(06), 2458–2464. <https://doi.org/10.55041/ijrsrem14580>
- Layyinatusshefah, Purnomo, A., & Yasinta, R. B. (2023). Analisa *Quantity Take Off* Arsitektur dalam Penerapan Metode Building Modeling ( BIM ) Menggunakan Software Autodesk Revit 2023 Pada Pembangunan Graha Pemuda Kompleks Katedral Jakarta. *Jurnal Pendidikan Sejarah*, 7(3), 26300–26306.
- Linawati, E. V., & Miriam, S. (2025). *Jurnal Ilmiah Pendidikan Fisika Analysis of Students ' Misconceptions Using Three-Tier Diagnostic Test on Straight Motion Material*. 9(1), 23–33.
- Mahardika, D., & Windari, A. C. (2025). *Penerapan Building Information Modelling ( BIM ) dalam Peningkatan Efisiensi dan Keberlanjutan pada Proyek High-Rise Building di Indonesia*. 5, 2455–2462.
- Mohammad, W. N. S. W., & Azmi, N. N. M. (2023). Building Information Modeling (BIM)-Based Information Management Platform in the Construction Industry. *International Journal of Academic Research in Business and Social Sciences*, 13(4), 1640–1649. <https://doi.org/10.6007/ijarbss/v13-i4/16922>
- Muslihin, H. Y., Loita, A., & Nurjanah, D. S. (2022). Instrumen Penelitian Tindakan Kelas untuk Peningkatan Motorik Halus Anak. *Jurnal Paud Agapedia*, 6(1), 99–106. <https://doi.org/10.17509/jpa.v6i1.51341>
- Natalia, M., Misriani, M., Hamid, D., Zulfajri, M., & Iskandar, A. (2024). *Analisis Clash Detection Perencanaan Proyek X Untuk Meminimalisir Anggaran Biaya dan Waktu*. 21(2), 7–9.
- Patel, A. (2025). *What are BIM Dimensions – 3D, 4D, 5D, 6D, and 7D BIM*. UNITED BIM. [https://www.united-bim.com/what-are-bim-dimensions-3d-4d-5d-6d-7d-bim-explained-definition-benefits/#:~:text=3D covers geometry \(x%2C y,maintenance tracking throughout the lifecycle\)](https://www.united-bim.com/what-are-bim-dimensions-3d-4d-5d-6d-7d-bim-explained-definition-benefits/#:~:text=3D covers geometry (x%2C y,maintenance tracking throughout the lifecycle)).
- PMI. (2021). The standard for project management and a guide to the project management body of knowledge (PMBOK guide). In *Project Management Institute*.
- Ramadhani Rifqi, M. ., Wahiddin, & Deni Putra, A. (2022). Analisis *Clash Detection* Dan *Quantity Take Off* Berbasis Building Information Modelling (Bim) Pada Perencanaan Ulang Struktur Atas Gedung Laboratorium Dan

- Bengkel Teknik Elektronika. *Jurnal Online Skripsi*, 3(3), 284–291. <http://jos-mrk.polinema.ac.id/>
- Rezgui, H., Haddou, H. A., & Camilleri, G. (2025). *Application of Collaborative Engineering to Manage the Work of BIM Construction Stakeholders ( Design Stage )*. 1–29.
- Sadad, I., Jaya, F. H., & Januar, I. W. (2022). Implementasi BIM Take Off Quantity Material Struktur Abutment Jembatan Terhadap Volume Rencana. *Teknika Sains: Jurnal Ilmu Teknik*, 7(2), 91–97. <https://doi.org/10.24967/teksis.v7i2.1960>
- Savitri, D. M., Juliastuti, & Pramudya, A. A. (2020). *Clash detection analysis with BIM-based software on midrise building construction project*. *IOP Conference Series: Earth and Environmental Science*, 426(1), 0–10. <https://doi.org/10.1088/1755-1315/426/1/012002>
- Sihombing, B. (2024). *Model Pengembangan 4D ( Define , Design , Develop , dan Disseminate ) dalam Pembelajaran Pendidikan Islam*. 4, 11–19.
- Soleh, I. M., & Saputro, C. D. (2023). Implementasi Building Information Modelling Level 5D Pada Proyek Bangunan Air. *Jurnal Karkasa*, 9(2). <https://poltekstpaul.ac.id/jurnal/index.php/jkar/article/view/730%0Ahttps://poltekstpaul.ac.id/jurnal/index.php/jkar/article/download/730/524>
- Supriadi, L. S. R., Latief, Y., Susilo, B., & Rajasa, M. (2017). Development of risk-based standardized WBS (Work Breakdown Structure) for cost estimation of apartment's project. *International Journal of Civil Engineering and Technology*, 8(10), 822–833.
- United-BIM. (2025). *BIM Level of Development | LOD 100, 200, 300, 350, 400, 500*. <https://www.united-bim.com/bim-level-of-development-lod-100-200-300-350-400-500/>