



Faculty of Health, Science and Technology  
Geo-Science

## Course Reading

### Digital photogrammetry and visualization in 3D

Valid from 01/21/2019

**Course Code:** NGGB48

**Course Title:** Digital photogrammetry and visualization in 3D

**Credits:** 7.5 ETCS cr

**Degree Level:** Undergraduate level

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#### Books

Björklund, M. & Paulsson, U. (2012). *Seminarieboken: Att skriva, presentera och opponera* (2. uppl.). Lund: Studentlitteratur

Eastman, C. M., Teicholz, P., Sacks, R. & Liston, K. (2011). *BIM handbook: A guide to building information modeling for owners, managers designers, engineers, and contractors* (2. ed.). Hoboken, New Jersey: John Wiley & Sons, Inc.

Harrie, L. (2013). *Geografisk informationsbehandling: Teori, metoder och tillämpningar* (6 uppl.). Lund: Studentlitteratur

Linder, W. (2016). *Digital Photogrammetry: A Practical Course* (4th ed.). Berlin and Heidelberg: Springer

Vosselman, G. & Maas, H.-G. (2010). *Airborne and terrestrial laser scanning*. Dunbeath: Whittles Publishing

#### Articles

Biljecki, F., Heuvelink, G. B., Ledoux, H. & Stoter, J. (2018). The effect of acquisition error and level of detail on the accuracy of spatial analyses. *Cartography and Geographic Information Science*, 45 (2), p. 156-176

Biljecki, F., Stoter, J., Ledoux, H., Zlatanova, S. & Çöltekin, A. (2015). Applications of 3D city models: State of the art review. *ISPRS International Journal of Geo-Information*, 4 (4), p. 2842-2889

De Laat, R. & Van Berlo, L. (2011). Integration of BIM and GIS: The development of the CityGML GeoBIM extension. *Advances in 3D geo-information sciences*, p. 211-225

El-Mekawy, M., Östman, A. & Hijazi, I. (2012). A unified building model for 3D urban GIS. *ISPRS International Journal of Geo-Information*, 1 (2), p. 120-145

Ellul C., Stoter, J., Harrie, L., Shariat, M., Behan, A. & Pla, M. (2018). Investigating the state of play of GeoBIM across Europe. *Proceedings of 3D GeoInfo*. Delft 1-2 October

Erenoglu, R. C., Erenoglu, O. & Arslan, N. (2018). Accuracy assessment of low cost UAV based city modelling for urban planning. *Tehnicki vjesnik*, 25 (6), p. 1708-1714

Eriksson, H., Harrie, L. & Paasch, J. M. (2018). What is the need for building parts? - A comparison of CityGML, INSPIRE Building and a Swedish building standard. *Proceedings of 3D GeoInfo*. Delft 1-2 October

Liu, X., Wang, X., Wright, G., Cheng, J. C. P., Li, X. & Liu, R. (2017). A state-of-the-art review on the integration of Building Information Modeling (BIM) and Geographic Information System (GIS). *ISPRS International Journal of Geo-Information*, 6 (2), p. 53

#### Avhandlingar

Biljecki, F. (2017). Level of Detail in 3D city models. Dissertation, TU Delft, <https://books.bk.tudelft.nl/index.php/press/catalog/view/isbn.9789461868008/520/139-1>

#### Kompendier

Lantmäteriet (2013). Geodetisk och fotogrammetrisk mättnings- och beräkningsteknik. Version 2013-10-28.

Lantmäteriet, (2017). HMK - Fotogrammetrisk detaljmätning.

#### Rapporter

Andrée, M., Larsson, K., Nordqvist Darell, F., Malm, L., Tullberg, O., Wallberg, A., Norsell, J., Paasch, J. M., Seipel, S. & Paulsson, J. (2017). BIM som informationsstöd för 3D fastighetsbildning. Project report in Smart Built Environment project "Smart Planering för Byggande".

Batty, M., Chapman, D., Evans, S., Haklay, M., Küppers, S., Shiode, N., Hudson-Smith, A. & Torrens, P. M. (2000). Visualizing the city: Communicating urban design to planners and decision-makers. Technical Report Paper 26; Centre for Advanced Spatial Analysis (UCL): London, UK.

Sveriges kommuner och landsting (2017). BIM - digitalisering av byggnads