

BLDG 3004 CONSTRUCTION INFORMATION SYSTEMS

Credit Points 10

Legacy Code 200503

Coordinator Samudaya Nanayakkarawasam (<https://directory.westernsydney.edu.au/search/name/SamudayaNanayakkarawasam/>)

Description This subject is designed to provide skills and knowledge for information management technology and practice as it relates to the building industry. The subject gives an overview of information management, data collection and storage, information classification systems, communications, specialist computer applications and artificial intelligence.

School Eng, Design & Built Env

Discipline Building Construction Management

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 3 subject

Assumed Knowledge

Students must be familiar with spreadsheet and database software. Students should also have a basic understanding of contract administration.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Discuss information management requirements in general and specifically as they relate to the building industry.
2. Explain the essential components of an integrated information management system for all stages of building procurement.
3. Discuss technology advances in hardware and software in information management including data collection, storage, retrieval, analysis and communication.
4. Demonstrate the ability to effectively use spreadsheet and database management software for complex building related applications.
5. Discuss specialist computer applications for building including expert systems.
6. Develop computer applications using spreadsheet and database software, for project management processes

Subject Content

- introduction to information management
- information characteristics
- information systems
- information management in The Building industry
- Classification systems and integration between different Building procurement phases
- data collection from construction site
- data storage systems
- data analysis and Reporting in construction
- advanced Technology - Hardware for construction industry
- advanced Technology - software used in construction industry
- communication Technology used in construction industry

- expert systems used in construction industry such as NATHERS, FIRECAL, BCAIDER
- future directions in Building information systems

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/Group Task
Report	2000 words	25	N	Individual
Applied Project	Develop a spreadsheet-based construction information system incorporating three project-related datasets	25	N	Individual
Report	2000 words	20	N	Individual
Applied Project	Develop an integrated information system utilising at least three software applications and incorporating a minimum of three project-related datasets.	30	N	Individual

Prescribed Texts

- Suitable computer equipment and software (Excel, Access, Buildsoft, MS Project, and Archi CAD). Software is available at the Blacktown Campus computer labs. Students can purchase their own software and practice outside the class time.
- Lecture and Tutorial Notes are updated every year and posted on the elearning site.
- A Book of reading will be provided via vUWS;

Teaching Periods

Autumn (2024)

Parramatta - Victoria Rd

On-site

Subject Contact Samudaya Nanayakkarawasam (<https://directory.westernsydney.edu.au/search/name/SamudayaNanayakkarawasam/>)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=BLDG3004_24-AUT_PS_1#subjects)