INFS 7002 ADVANCED HEALTHCARE SOFTWARE AND SYSTEMS

Credit Points 10

Legacy Code 301029

Coordinator Jim Basilakis (https://directory.westernsydney.edu.au/search/name/Jim Basilakis/)

Description In this subject students will learn the concepts underpinning the services computing paradigm of "bridging the gap between Business Services and IT Services". Services Computing technology includes Web services and service-oriented architecture (SOA), business consulting methodology and utilities, business process modelling, transformation and integration. Students will learn, through the development of practical examples, how to utilise these technologies within a healthcare context. Advanced knowledge and knowledge of recent developments in specific sub-topics will also be acquired through practical components in the subject.

School Computer, Data & Math Sciences

Discipline Information Systems

Student Contribution Band HECS Band 2 10cp

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

Level Postgraduate Coursework Level 7 subject

Restrictions

Students must be enrolled in a postgraduate program.

Learning Outcomes

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

1. Characterise the functional and practical elements of XML-related technologies and Web Services relating to the areas of messaging, workflow and clinical documentation within a healthcare context.
2. Design high-level user and technical specification of Web Services for healthcare applications.
3. Apply highly developed and technically advanced written presentation skills in describing Web Services for healthcare applications.
4. Analyse and integrate ideas from forefront knowledge via readings and scientific literature about best practice integration approaches in existing sharable healthcare system implementations.
5. Analyse the operations of Web services in the context of newer Internet technologies (eg. mobile and Cloud-based) and adapting to the changing business requirements in healthcare.
6. Apply new knowledge gained from unit to complex cases arising in the Australian Health System workplace, exercising professional judgement in the context of the new knowledge area.

Subject Content

1. Use and application of XML-related technologies and Web Services in the healthcare environment (eg. business process modelling, transformation, messaging, document architectures)
2. Best practice approaches for achieving integration of applications and information within healthcare
3. Techniques for achieving adaptable and scalable system architectures responsive to healthcare business requirements
4. Industry and regulatory standards relevant to national and international healthcare system implementations

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	Mandatory
Report	5-6 pages (2500-3000)	35	N	Individual	Y
Report	5-6 pages (2500-3000)	35	N	Individual	Y
Final Exam	2 hours	30	N	Individual	Y

Teaching Periods

Spring (2025)

Online
Online
Subject Contact Jim Basilakis (https://directory.westernsydney.edu.au/search/name/Jim Basilakis/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=INFS7002_25-SPR_ON_2#subjects)

Parramatta - Victoria Rd
On-site
Subject Contact Jim Basilakis (https://directory.westernsydney.edu.au/search/name/Jim Basilakis/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=INFS7002_25-SPR_PS_1#subjects)