

COMP 7011 MULTIMEDIA COMMUNICATION SYSTEMS

Credit Points 10

Legacy Code 300256

Coordinator Mohammad Ahmadi ([https://directory.westernsydney.edu.au/search/name/Mohammad Ahmadi/](https://directory.westernsydney.edu.au/search/name/Mohammad%20Ahmadi/))

Description This subject covers advanced concepts and technologies used in emerging multimedia communication systems. Theory, practice and standards for IT professionals endeavouring to build data compression systems for multimedia applications are emphasised.

School Computer, Data & Math Sciences

Discipline Computer Science, Not Elsewhere Classified.

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.

Assumed Knowledge

Basic knowledge in digital compression and coding, digital communication systems and fundamentals of data communication and networking.

Learning Outcomes

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

1. Demonstrate an understanding of current data compression schemes for all sources of information: audio, data, images, and video.
2. Describe current compression standards and why the various design choices and tradeoffs were made.
3. Demonstrate an understanding of the main issues involved in designing, implementing, selecting and evaluating data compression methods, algorithms and standards for providing multimedia services.
4. Describe and analyse common protocols used in various contemporary networks for multimedia communication.

Subject Content

- Overview of multimedia and multimedia communication systems
- frequency domain coding
- still-image compression Standard and Developments
- video compression techniques and Standards
- speech coding techniques and Standards
- multimedia conferencing Standards
- multimedia communication protocols and Standards
- multimedia Communications over networks
- Recent Advances in multimedia Communications

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 |
|--------------------|------------|---------|-----------|---------------------------|
| Intra-session Exam | 1 hour | 20 | N | Individual |
| Report | 3000 words | 30 | N | Individual |
| Final Exam | 2 hours | 50 | N | Individual |

Teaching Periods

Autumn (2024)

Parramatta - Victoria Rd

On-site

Subject Contact Mohammad Ahmadi ([https://directory.westernsydney.edu.au/search/name/Mohammad Ahmadi/](https://directory.westernsydney.edu.au/search/name/Mohammad%20Ahmadi/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=COMP7011_24-AUT_PS_1#subjects)

Sydney City Campus - Term 2 (2024)

Sydney City

On-site

Subject Contact Mahsa Razavi ([https://directory.westernsydney.edu.au/search/name/Mahsa Razavi/](https://directory.westernsydney.edu.au/search/name/Mahsa%20Razavi/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=COMP7011_24-SC2_SC_1#subjects)