

# COMP 7011 MULTIMEDIA COMMUNICATION SYSTEMS

**Credit Points** 10

**Legacy Code** 300256

**Coordinator** Mohammad Ahmadi (<https://directory.westernsydney.edu.au/search/name/Mohammad.Ahmadi/>)

**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/](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/>)

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=COMP7011\\_24-AUT\\_PS\\_1#subjects](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/>)

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=COMP7011\\_24-SC2\\_SC\\_1#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=COMP7011_24-SC2_SC_1#subjects))