ICT for INTERNET and MULTIMEDIA (MIME) engineering
8 CENTURIES OF ACADEMIC EXCELLENCE

- Italian **World-Class** University
- **Multidisciplinary** and **Interdisciplinary**
- **Research-Intensive**
Among the top Universities in Italy for Teaching and Research Quality

Top 250 University in the world
THE UNIVER-CITY

- City-campus
- Student-centred town
- Unique setting: UNESCO World Heritage Site
- Strategic position
## LANGUAGE CERTIFICATE

<table>
<thead>
<tr>
<th>LANGUAGE CERTIFICATE</th>
<th>MINIMUM SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOEFL (Including TOEFL IBT)</td>
<td>80</td>
</tr>
<tr>
<td>IELTS (Academic / General Training)</td>
<td>6.0</td>
</tr>
<tr>
<td>Cambridge ESOL (General and HE)</td>
<td>173</td>
</tr>
<tr>
<td>Trinity College London (ISE)</td>
<td>ISE II</td>
</tr>
<tr>
<td>Oxford University Press (OTE)</td>
<td>126</td>
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<tr>
<td>Gatehouse (ESOL International Classic)</td>
<td>GA Level 1</td>
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<tr>
<td>Pearson PTE</td>
<td>PTE General 3 (ESOL Level 1)</td>
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<tr>
<td>Pearson PTE Academic</td>
<td>65</td>
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</tbody>
</table>

Verify **country-based** specific entry title **requirements** at the following link: [https://www.unipd.it/en/entry-title-requirements](https://www.unipd.it/en/entry-title-requirements)
ICT for INTERNET and MULTIMEDIA (MIME) engineering
More than 110
faculty members

Approx 4000
undergraduate and postgraduate students

Approx 100
Ph.D. students

Approx 50
post-doctoral fellows

The Department is one of the highest earners of income for the University and it was classified as «Department of Excellence» by the Italian Ministry for University.
48 Research Labs

11 Teaching Labs
• Intro / website
• Application & entry requirements
• MIME: a multicultural environment
• Programme structure
• International mobility
• Research training & internship programme
• Career opportunities
• Testimonials & success stories
MIME lies at the intersection of three technical domains:

- Life Science
- E-health
- Multimedia

Internet technology includes:

- Networks
- Signals & Data
- TX devices

Wireless technology includes:

- Fiber optics
- Antennas
- Quantum comm.

ICT for Internet & Multimedia
<table>
<thead>
<tr>
<th>Country</th>
<th>Minimum GPA score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iran</td>
<td>14.5</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>3/4</td>
</tr>
<tr>
<td>Turkey</td>
<td>2.7</td>
</tr>
<tr>
<td>India</td>
<td>60/100; 7/10; 5.6/8; 2.8/4</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3.10</td>
</tr>
<tr>
<td>Syria</td>
<td>75</td>
</tr>
<tr>
<td>Nigeria</td>
<td>3.5</td>
</tr>
<tr>
<td>China</td>
<td>75/100; 3/5; 2.8/4</td>
</tr>
<tr>
<td>Egypt</td>
<td>70/100; 2.8/4</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>3/4; 80/100; B</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>4/5; 80/100</td>
</tr>
<tr>
<td>Sudan</td>
<td>70/100; 2.8/4</td>
</tr>
</tbody>
</table>
A MULTICULTURAL PROGRAMME

INCOMING INTERNATIONAL STUDENTS

In 2022, ICT for Internet and multimedia received 611 applications

<table>
<thead>
<tr>
<th>Country</th>
<th>Applications</th>
<th>Grants</th>
<th>Country</th>
<th>Applications</th>
<th>Grants</th>
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<tbody>
<tr>
<td>Iran</td>
<td>142</td>
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<td>Uzbekistan</td>
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<td>Pakistan</td>
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<td>9</td>
<td>Sudan</td>
<td>5</td>
<td>1</td>
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<tr>
<td>Afghanistan</td>
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<td>1</td>
<td>Azerbaijan</td>
<td>5</td>
<td>2</td>
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<td>Bangladesh</td>
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<td>Sri Lanka</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>India</td>
<td>38</td>
<td>4</td>
<td>Nepal</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Turkey</td>
<td>25</td>
<td>14</td>
<td>Albania</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>25</td>
<td>6</td>
<td>Brasil</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>China</td>
<td>23</td>
<td>6</td>
<td>Germany</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

and incoming Erasmus + students from Europe
ITALIAN STUDENTS

• Free admission, subject to requisites (see “avvisi di ammissione”)
  • https://www.unipd.it/corsi/iscriviti-magistrale
• “Avvisi di ammissione” for UNIPD Master’s degrees:
  • https://www.unipd.it/avvisi-ammissione-corsi

INTERNATIONAL STUDENTS

• Application website (check for info and deadlines):
  • https://apply.unipd.it/
• Eligibility subject to admission requirements (minimum GPA)
• Acceptance decided by a Selection Committee
STRUCTURE

• 120 ECTS credits (4 semesters, 30 ECTS each)
• 84 credits of coursework + 6 soft skills + 30 final thesis

THESIS

• Final project, usually carried out in the 4th semester
• Can be combined with a research training / internship

EXPECTED OUTCOMES

• Occupation rate of 100% after 1 month from graduation (even without knowing Italian language)
5 curricula

C1 Communication technologies
C2 Cybersystems
C3 Multimedia
C4 ICT for Life & Health
C5 Research and Innovation

http://mime.dei.unipd.it/
Study plan structure for C1-C4

All courses are worth 6 ECTS

6 Mandatory courses
3 Core courses from a list (choice amongst 10-12)
3 Related courses from a list (choice amongst 9-12)
2 Free courses

1 Research Training or Internship (9 ECTS)
1 Final Thesis (21 ECTS)
Devoted to Communication and Transmission Systems

6 Mandatory courses (6 ECTS)
- Antennas
- Deep Learning
- Digital Communications
- Multimedia Communication
- Wireless Networks
- 5G Systems

Other core courses (choose 3)
- Advanced topics in communications
- Fiber optics
- Game theory
- Information security
- Nanophotonics
- IoT and Smart Cities
- Optical & quantum communication
- Programming for TLC systems
- Satellite communications
- SDR/ORAN laboratory
• Devoted to **Communication Networks**

**6 Mandatory courses (6 ECTS)**
- Fiber Optics
- Digital Communications
- Iot & Smart Cities
- Multimedia Communication
- Wireless Networks
- Stochastic Processes

**Other core courses (choose 3)**
- Antennas
- Computer vision
- Deep learning
- Digital and Interactive Multimedia
- Game theory
- Information security
- IoT for Industrial Applications
- Network science
- Performance analysis of comnets
- SDR/ORAN laboratory
- 5G systems
• Devoted to **Multimedia Systems**

**6 Mandatory courses (6 ECTS)**
- Communication networks
- Computer vision
- Deep Learning
- Digital communications
- 3D & extended reality
- Optimization for ICT

**Other core courses (choose 3)**
- Adversarial machine learning
- Multimedia communications
- Biometrics
- Digital and interactive multimedia
- Game theory
- Human Data Analytics
- Performance analysis of comnets
- Information security
- Network science
- Wireless Networks
• Devoted to **ICT for e-health** (signal processing & transmission)

6 **Mandatory** courses (6 ECTS)
- Bio electromagnetism
- e-health
- Communication networks
- Computer vision
- Deep learning
- Optimization for ICT

Other **core courses** (choose 3)
- Multimedia communication
- Biometrics
- Bio photonics
- Digital and interactive multimedia
- Game theory
- Human Data Analytics
- Network analysis
- Network science
- IoT & Smart Cities
- 3D & extended reality
• Innovation & research for industrial and academic paths

3 Mandatory – choose 3 out of 4
• Digital communications
• Fiber optics
• Network modeling
• Computer vision

3 Mandatory – choose 3 out of 4
• Game theory
• Deep learning
• Stochastic processes
• Electromagnetic theory and methods

Project-based courses – choose 2 out of 4
• Advanced photonics
• Advanced wireless systems
• Advanced network analysis
• Advanced multimedia systems

1 core course from the entire offer
3 courses amongst related subjects
3 free courses

1 research training or internship (9 ECTS)
1 final thesis project (21 ECTS)
Choose 3

<table>
<thead>
<tr>
<th>Choose</th>
<th>Possible Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big data computing</td>
<td>Neuroimaging</td>
</tr>
<tr>
<td>Biomedical Wearable Technologies for Healthcare and Wellbeing</td>
<td>Neurorobotics and neurorehabilitation</td>
</tr>
<tr>
<td>Comp. Eng. for Music and Multimedia</td>
<td>Optimization methods for ICT</td>
</tr>
<tr>
<td>Computational genomics</td>
<td>Optoelectronics for green technologies</td>
</tr>
<tr>
<td>Convex optimization</td>
<td>Photovoltaic science and technology</td>
</tr>
<tr>
<td>Cryptography</td>
<td>Physical Models of Living Systems</td>
</tr>
<tr>
<td>Digital storytelling</td>
<td>Precision Medicine</td>
</tr>
<tr>
<td>Embedded real time control</td>
<td>Programmable hardware devices</td>
</tr>
<tr>
<td>Foundations of databases</td>
<td>Quantum information and computing</td>
</tr>
<tr>
<td>Human Computer Interaction</td>
<td>Quantum methods for ICT</td>
</tr>
<tr>
<td>ICT for automotive and domotics</td>
<td>Quantum optics and laser</td>
</tr>
<tr>
<td>ICT robotics</td>
<td>Quantum Technologies</td>
</tr>
<tr>
<td>Industrial communications</td>
<td>Reinforcement Learning</td>
</tr>
<tr>
<td>Molecular photonics</td>
<td>Sensing and measurement Systems</td>
</tr>
<tr>
<td>Nanostructured materials</td>
<td>Sports engineering and rehabilitation devices</td>
</tr>
<tr>
<td>Natural language processing</td>
<td>Web applications</td>
</tr>
</tbody>
</table>
• For the latest updates on the curricula
  • Courses, years/semesters, study programs, professors, etc.

Check:
• The MIME Website: https://mime.dei.unipd.it/
• The UNIPD educational offer: https://didattica.unipd.it/
  (select academic year → second cycle degree courses → school of engineering → ICT for Internet and Multimedia)
ERASMUS+

Recommended during the 3\textsuperscript{rd} semester

Change study plan with exams abroad

- suggested destinations
  (under responsibility of an ICT lecturer)

- proposed new flows
A min 42 of credits is required to start the internship / research training activity (worth 9 credits)

Example companies which collaborate with our Master’s degree for the final internship
According to AlmaLaurea – https://www2.almalaurea.it/

Student occupation status

- One year after graduating
- 85,2% working
- 8,2% not working and not looking for a job
- 69,3% of them in the scientific field,
- most of them for private companies

Degree effectiveness & satisfaction with current job

- 69,2% very effective
- 28,8% fairly effective
- 1,9% not very effective
• Marco Centenaro
  – Officer @ National Cybersecurity Agency, Italy
• Daniele Munaretto
  – Director of Research and Innovation @ Hewlett Packard (HP), Italy
• Marco Mezzavilla
  – Research faculty @ New York University, Brooklyn, NY, US
• Nicolò Michelusi
  – Professor @ Arizona State University, US
• Marco Levorato
  – Professor @ University of California, Irvine
• Michele Polese
  – Research assistant Professor @ Northeastern University, Boston, US
• Giorgio Quer
  – Director of Artificial Intelligence @ Scripps, San Diego, CA, US
WATCH OUR VIDEO “10 reasons for studying in Padua”
www.youtube.com/watch?v=Zl6vKRe6PWc