

**CURRICULUM**  
**Postgraduate / Master Academic Program**  
**CLIMATOLOGY AND WATER RESOURCES**  
**FIELD: GEOGRAPHY**  
**Learning system: full-time studies**  
**Year of studies: I (2020-2021)**

| No. | NAME OF COURSE | NUMBER OF HOURS |              |         |              | NUMBER OF CREDITS |        |       | TYPE OF ASSESSMENT |         |
|-----|----------------|-----------------|--------------|---------|--------------|-------------------|--------|-------|--------------------|---------|
|     |                | Sem. I          |              | Sem. II |              | Sem. I            | Sem II | TOTAL | Sem. I             | Sem. II |
|     |                | Course          | PA / Seminar | Course  | PA / Seminar |                   |        |       |                    |         |

**COMPULSORY COURSES**

|     |   |   |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|---|---|
| 1.  | Regional climatology  | 2 | 2 | - | - | 6 | - | 6 | E | - |
| 2.  | Global climate change   | - | - | 2 | 2 | - | 6 | 6 | - | E |
| 3.  | Catchment hydrology   | 2 | 2 | - | - | 6 | - | 6 | E | - |
| 4.  | Hydrologic frequency analysis                                 | - | - | 2 | 2 | - | 6 | 6 | - | E |
| 5.  | Geographic information systems in meteorology and climatology | 1 | 1 | - | - | 3 | - | 3 | C | - |
| 6.  | Geographic information systems in hydrology                   | - | - | 1 | 1 | - | 3 | 3 | - | C |
| 7.  | Marine meteorology  | 2 | 2 | - | - | 4 | - | 4 | E | - |
| 8.  | Ocean-atmosphere interaction                                  | - | - | 2 | 2 | - | 6 | 6 | - | E |
| 9.  | Ethics and academic integrity                                 | 1 | 1 | - | - | 2 | - | 2 | V | - |
| 10. | Professional internship                                       | - | 3 | - | 3 | 4 | 4 | 8 | C | C |

**OPTIONAL COURSES**

|    |  |   |   |   |   |   |   |   |   |   |
|----|--|---|---|---|---|---|---|---|---|---|
| 1. | Radar- and satellite-based meteorology *   | 2 | 1 | - | - | 5 | - | 5 | E | - |
|    | Aeronautical meteorology *                 | 2 | 1 | - | - | 5 | - | 5 | E | - |
| 2. | Urban water supply *                       | - | - | 2 | 1 | - | 5 | 5 | - | C |
|    | Integrated management of water resources * | - | - | 2 | 1 | - | 5 | 5 | - | C |

|  |  |           |           |          |           |           |           |           |                   |               |
|--|--|-----------|-----------|----------|-----------|-----------|-----------|-----------|-------------------|---------------|
|  | <b>TOTAL NUMBER OF HOURS, CREDITS, TYPES OF ASSESSMENT</b> | <b>10</b> | <b>12</b> | <b>9</b> | <b>11</b> | <b>30</b> | <b>30</b> | <b>60</b> | <b>4E; 2C; 1V</b> | <b>3E; 3C</b> |
|--|--|-----------|-----------|----------|-----------|-----------|-----------|-----------|-------------------|---------------|

**ELECTIVE COURSES**

|    |                         |   |   |   |   |   |   |   |   |   |
|----|-------------------------|---|---|---|---|---|---|---|---|---|
| 1. | Climate and health      | - | - | 2 | - | - | 3 | 3 | - | C |
| 2. | Water and health        | 2 | - | - | - | 3 | - | 3 | C | - |
| 3. | Practical activities ** | - | - | 2 | - | - | 2 | 2 | - | C |

**Compulsory courses for students with graduate degrees in fields other than geography**

|    |                                   |   |   |   |   |   |   |   |   |   |
|----|-----------------------------------|---|---|---|---|---|---|---|---|---|
| 1. | Meteorology                       | 2 | 2 | - | - | 4 | - | 4 | E | - |
| 2. | Climatology                       | - | - | 2 | 2 | - | 4 | - | - | E |
| 3. | General hydrology and groundwater | 2 | 2 | - | - | 4 | - | 4 | E | - |

Type of assessment: C - colloquy; E - exam; V - test

\* Students will choose one of the two proposed courses

\*\* Also possible to validate all hours in one semester

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**CURRICULUM**  
**Postgraduate / Master Academic Program**  
**CLIMATOLOGY AND WATER RESOURCES**  
**FIELD: GEOGRAPHY**  
**Learning system: full-time studies**  
**Year of studies: II (2020-2021)**

| No. | NAME OF COURSE | NUMBER OF HOURS |              |         |              | NUMBER OF CREDITS |        |       | TYPE OF ASSESSMENT |         |
|-----|----------------|-----------------|--------------|---------|--------------|-------------------|--------|-------|--------------------|---------|
|     |                | Sem. I          |              | Sem. II |              | Sem. I            | Sem II | TOTAL | Sem. I             | Sem. II |
|     |                | Course          | PA / Seminar | Course  | PA / Seminar |                   |        |       |                    |         |

**COMPULSORY COURSES**

|    |  |   |   |   |   |   |   |    |   |   |
|----|--|---|---|---|---|---|---|----|---|---|
| 1. | Climate and society                          | 2 | 1 | - | - | 5 | - | 5  | E | - |
| 2. | Atmospheric circulation                      | - | - | 2 | 1 | - | 5 | 5  | - | C |
| 3. | Applied climatology                          | - | - | 2 | 1 | - | 5 | 5  | - | E |
| 4. | Applied hydrology                            | 2 | 2 | - | - | 6 | - | 6  | E | - |
| 5. | Air pollution                                | 2 | 2 | - | - | 6 | - | 6  | E | - |
| 6. | Water pollution                              | - | - | 1 | 1 | - | 3 | 3  | - | C |
| 7. | Hydric risk management                       | 2 | 2 | - | - | 6 | - | 6  | E | - |
| 8. | Hydrological zoning                          | - | - | 2 | 1 | - | 5 | 5  | - | E |
| 9. | Dissertation thesis-related (practical) work | - | 3 | - | 7 | 4 | 9 | 13 | V | C |

**OPTIONAL COURSES**

|    |  |   |   |   |   |   |   |   |   |   |
|----|--|---|---|---|---|---|---|---|---|---|
| 1. | Climatology modelling *                                | 1 | 1 |   |   | 3 | - | 3 | C | - |
|    | Meteorological and climate diagnosis and forecasting * | 1 | 1 | - | - | 3 | - | 3 | C | - |
| 2. | Hydrology modelling *                                  | - | - | 1 | 1 | - | 3 | 3 | - | C |
|    | Dynamic hydrology *                                    | - | - | 1 | 1 | - | 3 | 3 | - | C |

|  |  |          |           |          |           |           |           |           |                   |               |
|--|--|----------|-----------|----------|-----------|-----------|-----------|-----------|-------------------|---------------|
|  | <b>TOTAL NUMBER OF HOURS, CREDITS, TYPES OF ASSESSMENT</b> | <b>9</b> | <b>11</b> | <b>8</b> | <b>12</b> | <b>30</b> | <b>30</b> | <b>60</b> | <b>4E, 1C, 1V</b> | <b>2E, 4C</b> |
|--|--|----------|-----------|----------|-----------|-----------|-----------|-----------|-------------------|---------------|

**ELECTIVE COURSES**

|    |  |   |   |   |   |   |   |   |   |   |
|----|--|---|---|---|---|---|---|---|---|---|
| 1. | Atmospheric optics                                   | 2 | - | - | - | 3 | - | - | C | - |
| 2. | Hydro-technical infrastructure and associated impact | - | - | 2 | - | - | 3 | 3 | - | C |
| 3. | Practical activities **                              | - | 2 | - | - | 2 | - | 2 | C | - |

**Compulsory courses for students with graduate degrees in fields other than geography**

|    |                            |   |   |   |   |   |   |   |   |   |
|----|----------------------------|---|---|---|---|---|---|---|---|---|
| 1. | Meteorological forecasting | - | - | 1 | 1 | - | 3 | 3 | - | C |
| 2. | Synoptic meteorology       | 2 | 2 | - | - | 4 | - | 4 | E | - |
| 3. | Water management           | 2 | 2 | - | - | 4 | - | 4 | E | - |

Type of assessment: C - colloquy; E - exam; V - test

\* Students will choose one of the two proposed courses

\*\* Also possible to validate all hours in one semester

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