

## MASTER'S DEGREE

### ACADEMIC REGULATIONS Applicable as from academic year 2017-2018

**FIELD:** STS (Advanced technical course)

**DEGREE:** MASTER'S DEGREE **LEVEL:** M1 and M2

**Specialisation:** MATHEMATICS AND APPLICATIONS

**Programme of study:** M1 Industrial and Applied Mathematics M2 Master of Science in Industrial and Applied Mathematics

**Training system / Modes:**

**System:**  Initial training  off-the-job training

**Modes:**  presence-based;  distance training;  agreement  
 sandwich course;  professional training or  apprenticeship

**DATE OF THE ACCREDITATION ORDER BY THE MINISTRY:** 05 JULY 2016

**MASTER'S PROGRAMME DIRECTOR :** OLIVIER GAUDOIN (GRENOBLE INP) - FRANÇOIS DAHMANI (UGA)  
**HEAD OF THE YEAR:**

**M1 MSIAM :** CHRISTOPHE PICARD (GRENOBLE INP) - MAËLLE NODET (UGA)

**M2 MSIAM :** JEAN-BAPTISTE DURAND ET EMMANUEL MAITRE (GRENOBLE INP) - LAURENT DESBAT (UGA)

**MANAGER :**

**M1 MSIAM :** ELENA LEIBOWITCH (GRENOBLE INP), BERENGERE DUC (UGA)

**M2 MSIAM :** ELENA LEIBOWITCH (GRENOBLE INP), CARINE BEAUJOLAIS (UGA)

### I - General provisions

#### Article 1: Aims and skills acquired during the training

Train mathematics specialists for careers in engineering, teaching and research within a large range of fields (pure and applied mathematics) which are in high demand in the social-economic world: security and cryptology, scientific calculation, operational research, analysis of large volumes of data, image synthesis and processing, statistics, etc. Business segments: R&D, mathematical engineering in industry, public research and teaching. Several programmes (MSIAM, CS, ROCO, CM-BHC) provide very high-level dual mathematics/informatics expertise.

The main job prospects for the MSIAM programme are: researcher and professor of applied mathematics – R&D engineer in industrial mathematics and informatics - technical-commercial engineer.

## Article 2: Conditions of enrolment

### Enrolment in M1

Enrolment in M1 is by right for students who hold: L3 (three-year university degree) with a specialisation in Informatics from the Mathematics and Informatics programme

Other cases:

- upon assessment from the head of the beginner training programme, for students who hold a three-year university degree in another field and/or another specialisation.
- upon assessment from the teaching committee for students with non-LMD (Bachelor's degree-Masters degree-Doctorate system) training (Engineer, etc.).
- upon validation of studies or acquired personal or professional experience: upon individual decision, after examination of the file by a validating teaching committee.

### Enrolment in M2

Upon individual decision, after examination of the file by an admissions teaching committee.

Other cases: (delete, where necessary, the options described below which are not offered)

- upon assessment from the teaching committee for students with non-LMD (Bachelor's degree-Masters degree-Doctorate system) training (Engineer, etc.).
- upon validation of studies or acquired personal or professional experience: upon individual decision, after examination of the file by a validating teaching committee.

## II - Organisation of studies

### Article 3: General organisation of studies

The training course is organised into: 4 semesters (2 semesters per year, 30 credits per semester)

- divided into compulsory course units (U.E. - *Unités d'Enseignements*) or elective course units (mandatory or optional)

M1 : semester 7 : 5 compulsory course units, 1 elective course unit (language)

M1 : semester 8 : 4 compulsory course units (including 1 internship and 1 project), 2 elective course units (for M2 specialisation)

M2 : semester 9 : all course units are elective course units amongst those offered (Research tracks MSCI/STAT); 6 compulsory course units, the remaining elective course units (Research track DS); 6 compulsory course units and the others are elective course units (Pro track IM)

M2 : semester 10: 1 internship and one cross-cutting course-unit.

**Number of hours of training per year: M1: 470 M2: 200 (Research tracks DS /MSCI/STAT)  
340 (Pro track IM)**

DS: Data Science; MSCI: Modelling; Scientific Computing and Image analysis; STAT: Statistics; IM: Industrial Mathematics

#### Article 4: Composition of the courses

Refer to the Knowledge Assessment Procedures table of the relevant course.

#### Comments on certain items of the Knowledge Assessment Procedures Table:

All courses are taught in English in M1 and in M2 (MSIAM is an international programme)

In M1: 1 mandatory language course unit (French as a foreign language or English, depending on the student's profile)

Language taught: English as well as French as a foreign language in M1, French as a foreign language in M2  
(see above)

Number of hours: **M1:** Lectures: 0 Seminars: 18 **M2:** Lectures: 0 Seminars : 0

mandatory: S7  S8  S9  S10

optional: S7  S8  S9  S10

#### Internship

mandatory (required for obtaining the degree)

optional with ECTS credits (necessary for obtaining the degree when selected)

optional with no ECTS credits (not taken into account for obtaining the degree when selected)

#### Duration

In M1: minimum 8 weeks, maximum 4 months

In M2: minimum 14 weeks, maximum 4 months.

The internship in the same host structure shall not exceed 924 hours (equivalent to 6 months full-time) per university year outside of class hours.

#### Period:

May to September for M1

March to September for M2

#### Conditions:

An agreement must be signed for any internship. Depending on the duration, the place of the internship and the nature of the institution, the intern may receive payment in accordance with legal and regulatory provisions in force. Non-credited internships may, subject to conditions, be considered within the framework of the training, in addition to the internships planned in the programme, provided that they do not take place during teaching hours and that they are covered by a report submitted by the student and subject to an assessment.

Under no circumstances must an internship be continued after 30 September of the academic year in progress.

Students should consult the educational website <http://msiam.imag.fr/>

For more information on the M1/M2 internships (in particular regarding validation, the report, the presentation, etc.)

**Dissertation / Internship report / Tutored projects:** Deadline date for submission: at least 2 days before the *viva voce* for which the date shall be set by the dissertation supervisor.

### III - Skills and knowledge assessment

<b>Article 5: Test methods</b>	
<b>5.1 - Test procedures</b> Refer to the Knowledge Assessment Procedures table.	
<b>5.2 - Course attendance</b>	
During lectures:	Mandatory
During seminars and practicals:	Mandatory
Attendance exemption:	Attendance exemptions may be granted on a case-by-case basis, for example for students doing off-the-job training or other special situations.
<b>Article 6: Validation, pass by compensation and accumulation</b>	
<b>6.1 - General rules for validating course units, a semester, a year</b>	
Year	M1 and M2 semesters cannot be compensated.
Semester	A semester may be passed: - by validating each course unit making up the semester (grade $\geq 10/20$ ), - by compensation between these course units (overall average of the semester $\geq 10/20$ ) except for the Internship course unit for M2.  No grade $< 7$ for course units which have a threshold grade (refer to "threshold grade" paragraph below).
Waiving the pass by compensation rule	It is possible to waive the pass by compensation rule within a semester in the case where a student would like to be able to significantly improve his or her grades for the following session, by repeating a course unit that was not passed during the semester (grade $< 10/20$ ).  The waiving of the pass by compensation rule for the semester automatically results in the waiver of obtaining the degree during session 1.  The waiver applications must be sent in writing to the review committee and submitted to the applications department within five days following the posting of the session-1 results for the semester in question.
Threshold grade	In M1 and M2 all course units have a threshold grade of 7.
Course units which cannot be passed by compensation	In M2, the internship course unit cannot be passed by compensation.
<b>6.2 - Accumulation:</b>	
A course unit that has been validated cannot be taken again. As a result, the course units and the corresponding ECTS credits are validated and accumulated insofar as the student has obtained the passing grade. The course components that have received ECTS credits can be accumulated. <b>The subjects that have no credits cannot be accumulated.</b>	

## IV - Examinations

### Article 7: Examination conditions

#### 7.1 - Schedule of examination sessions

A resit session is organised for the Master's programme.

##### Examination periods:

Semester 7 session 1	: first half of December	resit session: late January - early February
Semester 8 session 1	: first half of May	resit session: late May - during June
Semester 9 session 1	: late January - early February	resit session: late April and early July
Semester 10 session 1	: late June and early September	resit session: early September

#### 7.2 - Management of absences

Absences during continuous assessments	<p>Students who are absent with a valid reason are given zero for the continuous assessment, unless they can be proposed a resit examination during the same session.</p> <p>Students who are absent without a valid reason are considered as defaulting the continuous assessment in question.</p>
Absence during the final examinations	<p>If a student is absent, the examinations cannot be resit during the same session.</p> <p>Students who are absent with a valid reason during the 1st session or during the resit session receive a zero grade at the final examination in question.</p> <p>Students who are absent without a valid reason are considered as defaulting for the final examination in question.</p> <p><u>Entering of the grades:</u> For any absence, a substitution grade (absence with valid reason or absence without valid reason) shall be entered, to the exclusion of any other (no DEF).</p>

### Article 8: Organisation of the resit session

Interval between the 2 sessions	The resit session is organised at least fifteen days after publication of the results of the initial session.
Transfer of the session-1 grade to the resit session	<p>In the event of failure of a semester:</p> <p><b>Validated course units:</b></p> <p>A course unit for which the grade is more than or equal to 10 is permanently validated. No subjects or components of this course unit can be taken again.</p>

<p>Transfer of the session-1 grade to the resit session</p>	<p><b>Non-validated course units:</b></p> <p>Course units that can be passed by compensation:</p> <ul style="list-style-type: none"> <li>- Students may opt to resit a course unit for which they received a grade less than 10/20.</li> </ul> <p>Course units that cannot be passed by compensation:</p> <ul style="list-style-type: none"> <li>- Course units for which the grade is less than 10/20 must be taken again.</li> </ul> <p>Course units with a threshold of 7:</p> <ul style="list-style-type: none"> <li>- Course units for which the grade is &lt; 7/20 must be taken again.</li> <li>- Students may opt to resit the course units for which they received a grade <math>\geq 7/20</math> and &lt; 10/20.</li> </ul> <p>If the course unit is composed of course components or subjects:</p> <ul style="list-style-type: none"> <li>- The grades of the course components, if they have been validated, are automatically retained for the resit session.</li> <li>- The grades of the subjects may be retained, based upon the assessment of the Programme Director.</li> </ul> <p>Irrespective of the grade received during the resit session, it replaces the session-1 grade.</p>												
<p><b>Article 9: Review committee</b></p>													
<p>The decisions of the review committee, with regard to the grades and the final result, are final and irrevocable. The committee has sole authority and may or may not, via a special decision, allocate “jury points” to allow the student to pass.</p> <p>For a course unit for which the student received a grade less than 7, the review committee reserves the right, after examination of the student’s overall grade and based on the student’s study project, to cancel the threshold grade if said course unit is not essential to the student’s project.</p> <p>Any student who notes an error in his or her results must promptly report it.</p> <p><u>Meeting periods of the review committee</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Semester 7 session 1 : January</td> <td></td> </tr> <tr> <td>Semester 8 session 1 : May</td> <td></td> </tr> <tr> <td>Semester 9 session 1 : March</td> <td style="text-align: right;">resit session: mid-July</td> </tr> <tr> <td>Semester 10 session 1 : early July and early September</td> <td style="text-align: right;">resit session: early September</td> </tr> </table> <p>Meeting times of the degree-awarding committee:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">M1 session 1: early July</td> <td style="text-align: right;">resit session: early September</td> </tr> <tr> <td>M2 session 1: early July</td> <td style="text-align: right;">resit session: early September</td> </tr> </table>		Semester 7 session 1 : January		Semester 8 session 1 : May		Semester 9 session 1 : March	resit session: mid-July	Semester 10 session 1 : early July and early September	resit session: early September	M1 session 1: early July	resit session: early September	M2 session 1: early July	resit session: early September
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<p><b>Article 10: Posting of results</b></p>													
<p>The results are posted at the location of training and/or on the student’s digital work environment (ENT).</p>													

## V- Results

<b>Article 11: Repeating a year</b>	
Repeating a year	<p>In M1, students may repeat the year provided that they comply with the university registration procedures.</p> <p>In M2, students who would like to repeat the year must make a request to do so. Their request is examined by the admissions committee. In the event of acceptance, the students must comply with the conditions of registration.</p>
<b>Article 12: Awarding of the degree</b>	
<b>12.1 - Intermediary four-year university degree</b>	
The four-year university degree is obtained by validation of each of the 2 semesters.	
<b>12.2 - Master's degree</b>	
<p>The Master's degree is obtained when the student has independently validated M1 and M2.</p> <p>The Master's grade is calculated according to the following procedure:</p> <ul style="list-style-type: none"> <li>- average of the grades for semesters 3 and 4 only.</li> </ul>	
<b>12.3 - Rules for awarding honours</b>	
<p>Honours are calculated based on the general average of the degree, whether it is obtained in session 1 or in the resit session.</p> <p>Average <math>\geq 10</math> and <math>&lt; 12</math> = Pass            Average <math>\geq 12</math> and <math>&lt; 14</math> = Lower Second Class honours            Average <math>\geq 14</math> and <math>&lt; 16</math> = Upper Second Class honours            Average <math>\geq 16</math> = First Class honours</p>	
<b>12.4 - Issuing of the supplement to the degree</b>	
The supplement to the degree is issued at the student's request.	

## VI - Miscellaneous provisions

<b>Article 13: Travel</b>
As part of their schooling, students may have to make trips to take part in activities outside of the university premises.
<b>Article 14: Study abroad</b>
Within the framework of the Grenoble INP international exchange agreements, students may study in a foreign university for the year or the semester. This option is subject to prior approval of the Programme Director.

**Article 15: Provisions for specific students**

Upon proposal from the Head of the school, and upon written request to that effect sent to the student's department, the president of the Grenoble Institute of Technology may grant special arrangements, in particular in the following cases: art-studies status, top-level athletes, business owner students, working students, disabled students, gradual resumption of studies after health problems or maternity leave.

**Article 16: General discipline**

Refer to the framework regulations of studies and examinations for the master's cycle.

**Article 17: Provisions specific to the training (if necessary)**

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**Article 18: Transitional measures**

The risk of having a low number of enrolments may result in a review of the course units offered and therefore lead to marginal modifications of the course schedule.  
The changes made by Grenoble INP to the course schedule may result in marginal modifications for the M1 course units that are pooled between UGA and Grenoble INP.