# 06. BIOLOGY AND REPRODUCTIVE TECHNOLOGIES

**Department of Experimental and Clinical Medicine (DMSC)**

<table>
<thead>
<tr>
<th>Course coordinator</th>
<th>Elisabetta Baldi</th>
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<tr>
<td>Organizing committee</td>
<td>Linda Vignozzi</td>
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<tr>
<td></td>
<td>Michaela Luconi</td>
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<td></td>
<td>Csilla Krausz</td>
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<td>Sara Marchiani</td>
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<td>Monica Muratori</td>
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**Contact person for information regarding course organization, the schedule of classes and course content**

Elisabetta Baldi
elisabetta.baldi@unifi.it

**Practical-professional profile of the course and reference job market**

The course aims to provide highly specialized skills in the field of techniques and technologies for the selection and evaluation of the characteristics of the two gametes, techniques and technologies used in assisted reproduction laboratories, and the primary diagnostic methodologies of male and female infertility, making use of both lectures and practical experience in specialized laboratories.

In particular, the course forms biologists/biotechnologists for employment in public and private medically-assisted reproduction centres and public and private infertility diagnostic laboratories.

To this end, training activities include both face-to-face lectures and structured practical courses within accredited or certified centres and laboratories in order to ensure adequate mentoring of participants.

By the end of the course, students will have acquired high-level skills and competence in the techniques and technologies applied in assisted human reproduction.

**Admission requirements**

Master's degree obtained in accordance with the system under Ministerial Decree No. 270/2004 (or Master's degree under Ministerial Decree No. 509/1999 equated under I.D. of July 9, 2009) in one of the following classes:

- LM-6 Biology;
- LM-8 Industrial biotechnology;
- LM-9 Medical, Veterinary, and Pharmaceutical Biotechnology;

Degree awarded in accordance with a system prior to Ministerial Decree No. 509/1999 in:

- Biotechnology - Medical biotechnology curriculum;
- Biotechnologies;
- Biology

**Admission procedure**

Selection based on qualifications

**Duration**

9 months

**Teaching methods**

mixed

**Language the course will be delivered in**

Italian

**Attendance requirement:**

70%

**Course location**

CUBO multipurpose complex, Viale Pieraccini 6, Firenze
Foreseen lecture days | 1 week per month, Monday through Friday, 9 am to 6 pm
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Exam procedure and schedule | 3 midterm tests consisting of multiple-choice tests, one every 2 months.
Final exam | Presentation of a paper

### Number of available places and enrolment fees

<table>
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<th>Full-fee students</th>
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<tr>
<td>Minimum no. of places</td>
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<td>Maximum no. of places</td>
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<tr>
<td>Enrolment fee</td>
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Where agreements are in the process of being stipulated with external bodies, one or more scholarships may be available to reimburse all or part of the tuition fee. These scholarships cannot be combined with other benefits and will be awarded based on a score that takes into account the admission test score and the final exam score. Detailed information will be made available at Master | Didattica | Università degli Studi di Firenze | UniFI.

### Free supernumerary places

| UNIFI employees | 1 |

### Single modules

| None planned |

### Description of traineeship activities and training objectives

The traineeship aims to:
- provide specific technical skills in semen analysis, semen preparation for MAP techniques, and semen cryopreservation;
- teach techniques for assessing sperm DNA fragmentation and sperm chromatin compaction;
- acquire skills regarding assisted fertilization techniques (in vitro insemination, ICSI, and embryo culture), oocyte cryopreservation, and embryo cryopreservation;
- deepen knowledge regarding embryo quality assessment;
- provide in-depth knowledge of tests used for genetic diagnosis of male infertility and prenatal diagnosis.

Observational activity. 200 total hours of traineeship.

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1 This document is a translation of the form A.1 relating to the characteristics of the course attached to the Decree of the Deputy number 652 (record 154925) of 13th of July 2023, drafted in Italian and issued on the Master | Didattica | Università degli Studi di Firenze | UniFI and which therefore constitutes the only official document. This English translation cannot be used for legal purposes and has the sole purpose of supplying information in English on the content of the public notice.