



# European Master of Small Animal Veterinary Medicine Cardiology

## Introduction

The EMSAVM combines **residential courses** with hands-on training in wet labs and practicals as well as distance learning between the courses. While at home, students keep a **case log** and write **case reports** as well as a **Master thesis**.

The Master diploma represents a University degree. It testifies that a veterinarian has acquired an advanced level of competence in specific discipline. This is neither a specialist diploma, nor a licence for a certain type of professional activity.

## Content

The European Master's Program in Small Animal Veterinary Medicine/Cardiology includes:

**Courses:** EMSAVM-Cardiology students take a series of one or two week ESAVS residential courses in Cardiology. The time schedule, learning objectives and contents of the courses are described on the ESAVS website

**Clinical work:** The program allows students to study from their practice. It is expected that they gradually apply the skills they acquire in the residential courses to their daily work at home.

**Written work:** To support the above objective students are assigned specific tasks to be completed at home. This includes a case log, a series of case reports and a master thesis.

**Examinations:** in order to obtain credit for the course work, students have to take and pass an examination for each course. In addition, a passing grade has to be collected for all written work, which is evaluated and graded by the examination committee. The passing grade has been established at 50% of the maximal possible points. Successful completion of course work, clinical work and written tasks leads to the acquisition of credits called **"ECTS (European Credit Transfer System) points"**.

## The Program

*According to the general organization of all teaching at the University of Luxemburg, the master program is divided in 6 Modules:*



## **Modules I and II: Courses**

### **Module I Major subjects (minimum 25 ECTS points):**

25 ECTS points have to be obtained in Small Animal Cardiology (corresponding to 5 Weeks of residential courses, ESAVS Cardiology I-V)

### **Module II Minor subjects (minimum 15 ECTS points):**

The following minor subjects are covered by the following ESAVS courses and can be validated as minors (list subject to changes):

- Internal Medicine (max 10 ECTS points)
- Emergency and Critical Care (max 5 ECTS points)
- Feline Medicine & Surgery – Cardiology & Respiratory Diseases
- Radiology (max 5 ECTS points)
- Other course work accumulated from instruction taken outside of the University of Luxembourg after approval by the committee

## **Module III: Case log (10 ECTS points)**

### **Case log of 200 well-documented cases in small animal Cardiology**

It is expected that the cases are compiled during the second half of the program.

**Detailed instructions** regarding the case spread and a **template** for the case log will be provided after enrolment.

Each case inserted in the case log must be supported by **detailed documentation**, a sample of which can be requested by the evaluator of the case log to be immediately delivered in electronic form.

The case log shall be submitted in two batches (100 cases each). Each batch is evaluated and graded by the examination board. A passing grade has to be obtained.

## **Module IV: Case reports (20 ECTS points)**

Detailed case reports shall comprise 10 cardiology cases. These cases shall address state of the art diagnostics and treatments of cardiac diseases. The following topics are recommended:

- Some congenital cardiac diseases, such as PDA, pulmonic stenosis or aortic stenosis, tetralogy of Fallot, VSD, ASD etc.
- Acquired diseases such as DCM, mitral valve endocardiosis, some feline cardiomyopathies
- The workup should include ECG, Radiographs and Echocardiography

Each case report is evaluated and graded by the examination board. A passing grade has to be obtained.



### **Module V: Practical work and experience (20 ECTS points)**

It is expected that candidates will continuously and progressively apply the skills they have acquired in the Master program in their daily practice or in their university clinic, in this way supporting and reinforcing the learning process. For this effort applicants will be awarded a total of 20 ECTS points for the years they are enrolled in the program. This part of the program is not examined.

### **Module VI: Master thesis (30 ECTS points)**

The thesis may consist of a prospective ethically-approved study, of an analytical retrospective study or of an experimental study relating to cardiology. An in depth literature review on a chosen subject, based on current literature standards, is also acceptable.

The Master thesis shall be written on a topic decided upon with the Master thesis tutor or the EMSAVM program director. A peer-reviewed publication of original research work with the candidate as a first author and produced during the enrolment in the Master program may also be accepted as a Master thesis, upon approval of the program director.

The thesis is evaluated and graded by the examination board. A passing grade has to be obtained.

### **Examinations**

An exam must be passed for each course. The examinations are conducted at and by the University of Luxembourg (UL). These exams can be taken at any of the bi-annual examination dates offered at the UL during enrolment in the program. The exams can be spread over several examination dates or taken together at one single date. The exams consist of multiple choice questions examination of appropriate clinical cases or pictures related to the subject(s) covered in that course. A passing grade of 50 % has to be obtained.

### **Duration of the program**

The minimum time requirement for the Master program is 3 years for candidates who are employed full-time. For candidates who are employed part-time (minimum 20h / week) the minimum time requirement is 4 years.

Generally the program is spread out over 4 years, the maximum time may not exceed 5 years (10 semesters). An applicant can enter the program immediately after graduating from veterinary school but the Master degree can only be obtained when the applicant has been practicing small animal veterinary medicine for at least 4 years since obtaining her/his veterinary degree.

**Admission, registration, fees:** Please consult the ESAVS website: [www.esavs-master.org](http://www.esavs-master.org)