



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Internship in Cardiology B

2223-3-H4102D072

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#### Aims

- Gain experience in how patients admitted in CCU are managed
- Discuss the indications the contraindications and the diagnostic yield of the main invasive cardiological diagnostic tests, and assist in their performance
- Assist in the performance of electrophysiology, coronary and structural heart disease transcatheter procedures

#### Contents

Coronary care unit: learn how to interpret the ECG, blood pressure and respiratory signals obtained from monitoring patients

Transesophageal echocardiography: understand how the heart can be visualized using the transesophageal approach and learn the anatomy of cardiovascular structures seen from the transesophageal approach

Cardiac catheterization and coronary angiography: understand how the arteries and veins can be cannulated and learn the anatomy of coronary arteries

Exercise cardiac catheterization: learn how the cardiovascular systems adapts in normal conditions and in patients with heart diseases

Coronary angioplasty: learn how coronary artery stenosis can be reduced without cardiac surgery

Electrophysiology study: learn how we can identify the electro-anatomical substrates of various cardiac arrhythmias

Pace-maker, implantable cardioverter defibrillator, cardiac resynchronization device implantation

## Pulmonary vein ablation procedure

### Detailed program

1. Attendance of the coronary care unit (CCU) to learn how patients with acute coronary syndromes, acute heart failure, acute aortic syndromes, and arrhythmias are managed
2. Attendance of the echocardiography laboratory to attend transesophageal and both exercise and pharmacological stress echocardiography and discuss with the cardiologist in charge indications and contraindications of the procedures, as well as their diagnostic yield
3. Attendance of the cardiac catheterization laboratory to attend cardiac catheterization and coronary angiography diagnostic procedures, as well as coronary angioplasty and stent implantation procedures, and discuss with the cardiologist in charge indications and contraindications of the procedures, as well as their diagnostic yield
4. Attendance of the electrophysiology laboratory to attend electrophysiology studies, electronic device implantation and ablation procedures, and discuss with the cardiologist in charge indications and contraindications of the procedures, as well as their diagnostic yield

### Prerequisites

Having attended the cardiology and respiratory vertical track lessons.

### Teaching form

Attendance of the CCU and laboratories, and bedside discussion with the cardiologist in charge

### Textbook and teaching resource

Slides and videorecordings of the course lessons available on the e-learning platform  
<https://www.msdmanuals.com/professional/cardiovascular-disorders/approach-to-the-cardiac-patient/cardiovascular-examination>  
<https://geekymedics.com/cardiovascular-examination-2/>

### Semester

III year, Second semester

## **Assessment method**

Evaluation of the attendance, the ability to interact constructively with both the patients and the colleagues by the tutor at the end of the internship period

## **Office hours**

Tuesday and Thursday from 2 to 4 PM

Via Magnasco 2, 20149 Milan (2nd floor)

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## **Sustainable Development Goals**

QUALITY EDUCATION | GENDER EQUALITY

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