

# MASTER IN PHOTONICS

<https://photonics.masters.upc.edu/en/academic-year-2023-24>

# MASTER EUROPHOTONICS

<https://www.europhtonics.org/wordpress>

# TIMETABLE ACADEMIC YEAR 2023-2024

Last update: June 14th 2023



UNIVERSITAT POLITÈCNICA  
DE CATALUNYA

**UAB**  
Universitat Autònoma  
de Barcelona



UNIVERSITAT DE  
BARCELONA

**ICFO**  
Institut  
de Ciències  
Fotòniques

# Calendar. Academic Year 2023-2024

September '23						
M	Tu	W	Th	F	Sa	Su
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

October '23						
M	Tu	W	Th	F	Sa	Su
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

November '23						
M	Tu	W	Th	F	Sa	Su
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

December '23						
M	Tu	W	Th	F	Sa	Su
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

January '24						
M	Tu	W	Th	F	Sa	Su
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February '24						
M	Tu	W	Th	F	Sa	Su
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29			

March '24						
M	Tu	W	Th	F	Sa	Su
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April '24						
M	Tu	W	Th	F	Sa	Su
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

May '24						
M	Tu	W	Th	F	Sa	Su
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

June '24						
M	Tu	W	Th	F	Sa	Su
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

July '24						
M	Tu	W	Th	F	Sa	Su
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

August '24						
M	Tu	W	Th	F	Sa	Su
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

September '24						
M	Tu	W	Th	F	Sa	Su
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Block	Teaching Period
B1A	12 Sept - 06 Oct
B1B	09 Oct - 01 Dec
B2	11 Dec - 16 Feb
B3	19 Feb - 19 Apr
MSc Thes	22 April...

<b>Lab Days</b>
<b>Exams</b>
Activity Days
Without activity
Extra Activities

## Important dates and information

### REGISTRATION:

Master in Photonics: 1<sup>st</sup> week of September 2023. Exact date to be announced at master's web page

### COURSE STARTS:

Master in Photonics: 12<sup>th</sup> September 2023 / Europhotonics: 09<sup>th</sup> October 2023

**WELCOME SESSION:** 12<sup>th</sup> September 2023 at 11h00. Exact location to be announced

### SPRING SCHOOL by Erasmus Mundus Europhotonics Master

Tentative date: **March 26<sup>th</sup>-29<sup>th</sup> 2024**

(Master in Photonics students are also invited)

### TEACHING BLOCKS

Lectures are grouped into three teaching blocks plus a fourth block allocated for the Master Thesis

**Block 1A:** From 12 Sep to 06 Oct (**only MSc. in Photonics**). **Location:** University of Barcelona, Physics building, Martí i Franquès 1, Barcelona

**Block 1B:** From 09 Oct to 01 Dec. **Location:** University of Barcelona, Physics building, Martí i Franquès 1, Barcelona

**Block 2:** From 11 Dec to 22 Dec and from 08 Jan to 16 Feb. **Location:** UPC Campus Nord, Barcelona

**Block 3:** From 19 Feb to 19 Apr. **Location:** UPC Campus Nord, Barcelona

**Block 4:** From 23 Apr until September. **Location:** Advisor's institution.

**Christmas holidays:** From 23 Dec 2023 to 08 Jan 2024

**Holy Week/Easter holidays:** From 23 March to 02 April

## Block 1A: Universitat de Barcelona, Facultat de Física

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
10:00-11:00			SEMINARS Room N/A		
11:00-12:00					
12:00-13:00					
13:00-14:00					
14:00-15:00		INTRODUCTION TO PHOTONICS Room N/A Code 230550	INTRODUCTION TO PHOTONICS Room N/A Code 230550	INTRODUCTION TO PHOTONICS Room N/A Code 230550	
15:00-16:00					
16:00-17:00		BEAM PROPAGATION AND FOURIER OPTICS Room N/A Code 230553	BEAM PROPAGATION AND FOURIER OPTICS Room N/A Code 230553	BEAM PROPAGATION AND FOURIER OPTICS Room N/A Code 230553	
17:00-18:00					

## Block 1A: Laboratory

	MONDAY 02 OCTOBER				FRIDAY 06 OCTOBER
15:00-19:00	LABORATORY SESSION 1  (UPC / UAB / UB)				LABORATORY SESSION 1  (UPC / UAB / UB)

**Notes:** Lecture Rooms: Not available yet, still to be determined

# Block 1B: Universitat de Barcelona, Facultat de Física

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
10:00-11:00			SEMINARS Room N/A		
11:00-12:00					
12:00-13:00					
13:00-14:00					
14:00-15:00	PHOTONICS MATERIALS AND METAMATERIALS Room N/A Code 230562	QUANTUM OPTICS, Room N/A, Code 230555 / ACTIVE AND SPECTRAL IMAGING, Room N/A, Code 230581	INTRODUCTION TO PHOTONICS Room N/A Code 230550	INTRODUCTION TO PHOTONICS Room N/A Code 230550	QUANTUM OPTICS, Room N/A, Code 230555 / ACTIVE AND SPECTRAL IMAGING, Room N/A, Code 230581
15:00-16:00					
16:00-17:00	FIBERS AND TELECOM, Room N/A, Code 230566/ OPTOELECTRONICS & PHOTOVOLTAIC TECHNOLOGY, Room N/A, Code 230569	FROM COOLING AND TRAPPING ..., Room N/A, Code 230579/ MEASURING WITH LIGHT, Room N/A, Code 230573	BEAM PROPAGATION AND FOURIER OPTICS Room N/A Code 230553	BEAM PROPAGATION AND FOURIER OPTICS Room N/A Code 230553	FROM COOLING AND TRAPPING ..., Room N/A, Code 230579/ MEASURING WITH LIGHT, Room N/A, Code 230573
17:00-18:00					
18:00-19:00	FIBERS AND TELECOM, Room N/A, Code 230566/ OPTOELECTRONICS & PHOTOVOLTAIC TECHNOLOGY, Room N/A, Code 230569	BEAM PROPAGATION AND FOURIER OPTICS Room N/A Code 230553	PHOTONICS MATERIALS AND METAMATERIALS Room N/A Code 230562		
19:00-20:00					

## Notes:

Courses that overlap in time (in red) cannot be chosen simultaneously (“Quantum Optics” and “Active and Spectral Imaging”, and “From Cooling and Trapping” and “Measuring with Light”)

Lectures Room: Not available yet, still to be determined.

# Blocks 1A and 1B: Exams, Labs and Activities

	MONDAY 20 NOVEMBER	TUESDAY 21 NOVEMBER	WEDNESDAY 22 NOVEMBER	THURSDAY 23 NOVEMBER	FRIDAY 24 NOVEMBER
14:00-17:00	PHOTONICS MATERIALS AND METAMATERIALS Room N/A	QUANTUM OPTICS Room N/A	<b>INTRODUCTION TO PHOTONICS</b> Room N/A	PHOTOVOLTAIC TECHNOLOGY Room N/A	FROM COOLING AND TRAPPING Room N/A
17:00-20:00	FIBERS AND TELECOM Room N/A	ACTIVE AND SPECTRAL IMAGING Room N/A	<b>BEAM PROPAGATION AND FOURIER OPTICS</b> Room N/A		MEASURING WITH LIGHT Room N/A

	MONDAY 27 NOVEMBER	TUESDAY 28 NOVEMBER	WEDNESDAY 29 NOVEMBER	THURSDAY 30 DECEMBER	FRIDAY 01 DECEMBER	MONDAY/TUESD AY 04/05 DECEMBER
15:00-19:00	LABORATORY SESSION 2  (UPC / UAB / UB)	ACTIVITIES DAY 1	ACTIVITIES DAY 2	ACTIVITIES DAY 3	LABORATORY SESSION 2  (UPC / UAB / UB)	EXTRA Activities

## Notes:

During the Activity days, several visits to research labs will be scheduled (including UPC, UAB, UB and ICFO)  
Lecture rooms for exams still to be determined.

## Block 2: Universitat Politècnica de Catalunya (UPC), Campus Nord

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
10:00-11:00			SEMINARS Room N/A		
11:00-12:00					
12:00-13:00					
13:00-14:00					
14:00-15:00	VISUAL OPTICS & BIOPHOTONICS, Room N/A, Code 230582 / ADVANCED QUANTUM OPTICS ..., Room N/A, Code 230558	NONLINEAR OPTICS Room N/A Code 230563	VISUAL OPTICS & BIOPHOTONICS, Room N/A, Code 230582 / ADVANCED QUANTUM OPTICS ..., Room N/A, Code 230558	NONLINEAR OPTICS Room N/A Code 230563	LASER SYSTEMS AND APPLICATIONS Room N/A Code 230570
15:00-16:00					
16:00-17:00	BUSINESS AND PATENTS IN PHOTONICS Room N/A Code 230552	LASER SYSTEMS AND APPLICATIONS Room N/A Code 230570	IMAGE PROCESSING IN BIOPHOTONICS Room N/A Code 230561/ SEMICONDUCTOR PHOTONICS, Room N/A, Code N/A	BUSINESS AND PATENTS IN PHOTONICS Room N/A Code 230552	QUANTUM SIMULATORS, Room N/A, Code 230578
17:00-18:00					
18:00-19:00	QUANTUM SIMULATORS, Room N/A, Code 230578			INTEGRATED PHOTONICS Room N/A Code 230567	
19:00-20:00					

**Notes:** Courses that overlap in time (in red) cannot be chosen simultaneously (Visual Optics & Biophotonics / Advanced Quantum Optics, and Quantum Simulators/Semiconductor Photonics)

## Block 2: Exams, Labs and Activities

	MONDAY 05 FEBRUARY	TUESDAY 06 FEBRUARY	WEDNESDAY 07 FEBRUARY	THURSDAY 08 FEBRUARY	FRIDAY 09 FEBRUARY
14:00–17:00	VISUAL OPTICS & BIOPHOTONICS Room N/A	LASER SYSTEMS AND APPLICATIONS Room N/A	IMAGE PROCESSING IN BIOPHOTONICS Room N/A	NONLINEAR OPTICS Room N/A	QUANTUM SIMULATORS Room N/A
17:00–20:00	ADV. QUANTUM OPTICS WITH APPLICATIONS Room N/A		SEMICONDUCTOR PHOTONICS Room N/A	INTEGRATED PHOTONICS Room N/A	

	MONDAY 12 FEBRUARY	TUESDAY 13 FEBRUARY	WEDNESDAY 14 FEBRUARY	THURSDAY 15 FEBRUARY	FRIDAY 16 FEBRUARY
15:00-19:00	LABORATORY SESSION 3 (UPC / UAB / UB)	ACTIVITIES DAY 4	ACTIVITIES DAY 5	ACTIVITIES DAY 6	LABORATORY SESSION 3 (UPC / UAB / UB)

### Notes:

The specific timetable for the activities days will be coordinated by the corresponding professors



## Block 3: Universitat Politècnica de Catalunya (UPC), Campus Nord

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
10:00-11:00			SEMINARS Room N/A		
11:00-12:00					
12:00-13:00					
13:00-14:00					
14:00-15:00	MANAGING LIGHT WITH DEVICES, Room N/A, Code 230572 / QUBITS APPLICATIONS, Room N/A, Code N/A	ULTRAFAST AND ULTRAIINTENSE LIGHT, Room N/A, Code 230565/ OPTICAL DESIGN, Room N/A, Code 230587	MANAGING LIGHT WITH DEVICES, Room N/A, Code 230572 / QUBITS APPLICATIONS, Room N/A, Code N/A	ULTRAFAST AND ULTRAIINTENSE LIGHT, Room N/A, Code 230565/ OPTICAL DESIGN, Room N/A, Code 230587	EXPERIMENTAL OPTICAL TECHNIQUES IN BIOLOGY (@ICFO) Code 230554
15:00-16:00					
16:00-17:00	BUSINESS AND PATENTS IN PHOTONICS Room N/A Code 230552	MACHINE LEARNING ON CLASSICAL AND QUANTUM DATA Room N/A Code 230584	BUSINESS AND PATENTS IN PHOTONICS Room N/A Code 230552	MACHINE LEARNING ON CLASSICAL AND QUANTUM DATA Room N/A Code 230584	
17:00-18:00					
18:00-19:00	NANOPHOTONICS Room N/A Code 230564	3D LIGHT CONTROL FOR BIOLOGICAL APPLICATIONS, Room N/A, Code N/A	NANOPHOTONICS Room N/A Code 230564	3D LIGHT CONTROL FOR BIOLOGICAL APPLICATIONS, Room N/A, Code N/A	
19:00-20:00					

**Notes:** Courses that overlap in time (in red) cannot be chosen simultaneously (Managing Light with Devices / Qubits applications, Ultrafast and Ultraintense Light/Optical Design, Optoelectronics&Photovoltaic Technology/3D Light Control for Biological Applications)

## Block 3: Exams, Labs and Activities

	MONDAY 08 APRIL	TUESDAY 09 APRIL	WEDNESDAY 10 APRIL	THURSDAY 11 APRIL	FRIDAY 12 APRIL
14:00-17:00	MANAGING LIGHT WITH DEVICES Room N/A	ULTRAFAST & ULTRAIINTENSE LASER LIGHT Room N/A	QUBITS APPLICATIONS Room N/A	MACHINE LEARNING ON CLASSICAL AND QUANTUM DATA Room N/A	EXPERIMENTAL OPTICAL TECHNIQUES IN BIOLOGY Room N/A
17:00-20:00	NANOPHOTONICS Room N/A	OPTICAL DESIGN Room N/A	BUSINESS AND PATENTS IN PHOTONICS	3D LIGHT CONTROL FOR BIOLOGICAL APPLICATIONS Room N/A	

	MONDAY 15 APRIL	TUESDAY 16 APRIL	WEDNESDAY 17 APRIL	THURSDAY 18 APRIL	FRIDAY 19 APRIL
15:00-19:00	LABORATORY SESSION 4  (UPC / UAB / UB)	ACTIVITIES DAY 7	ACTIVITIES DAY 8	ACTIVITIES DAY 9	LABORATORY SESSION 4  (UPC / UAB / UB)

**Notes:** The exams for the courses in red (Ultrafast and Ultraintense Light/Optical Design) overlap in time  
 The specific timetable for the activities days will be coordinated by the corresponding professors.  
 Lecture Room for exams: still to be determined

## Block 4: Master Thesis (22 Apr to 09 Sep, 2024)

**BLOCK 4** is devoted to the Master Thesis work.  
The presentations will be scheduled in 2 sessions in **July and September 2024**.

## Notes

### **SEMINARS:**

A **3 hours/week slot** is reserved for *seminars*. These seminars will be organized occasionally and will be announced a few weeks in advance and held in Campus Nord, when possible. They are part of the Master program and the assistance is compulsory.

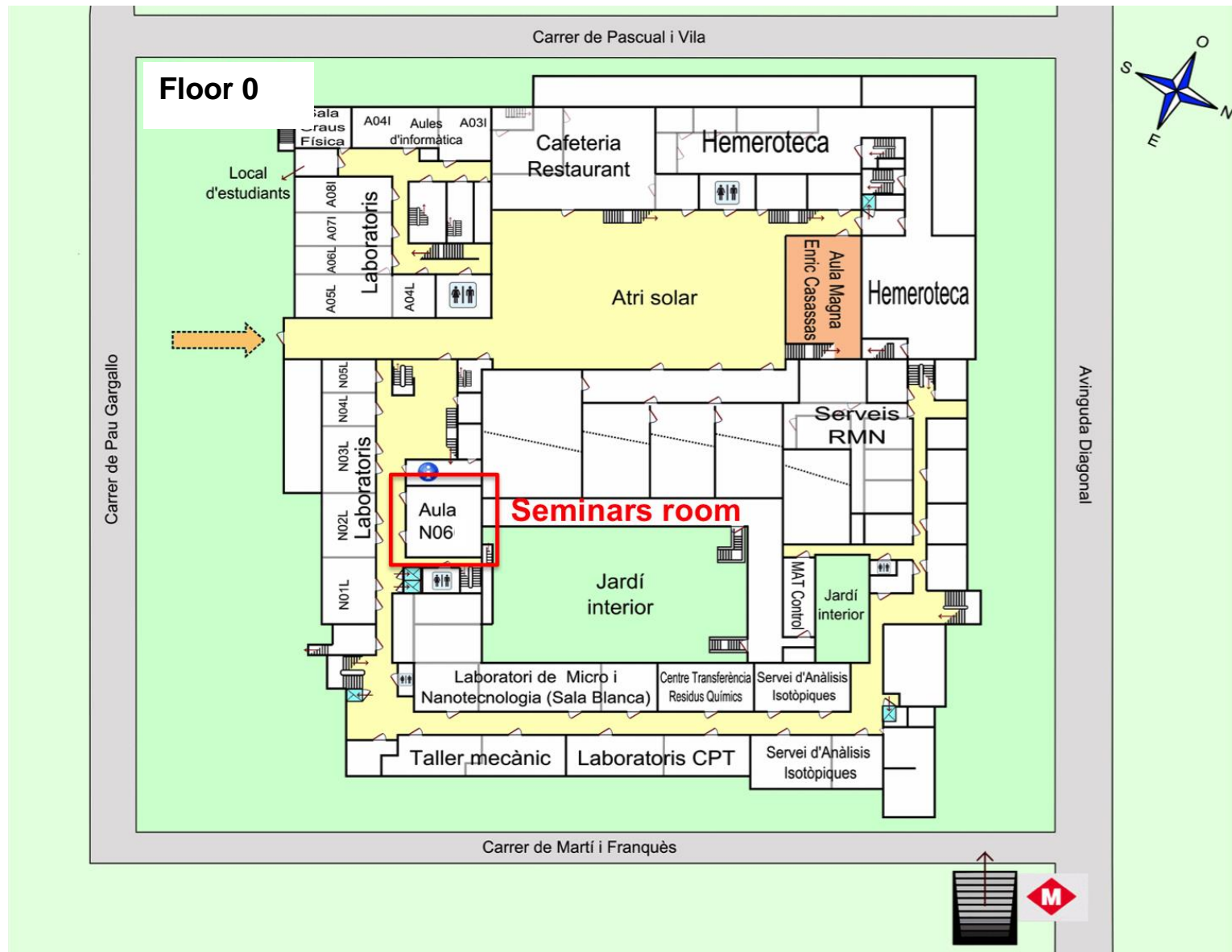
### **EXAMS AND EVALUATION PROCEDURE:**

Professors of each course decide the assessment procedure, as pointed out in the Course Contents. Exams are scheduled at the end of each teaching block. Exceptionally, other examination activities might be performed outside the exams week schedule.

### **OTHER POSSIBLE CIRCUMSTANCES**

Under unexpected circumstances, lectures may be cancelled. In this case, re-schedule will be carried out provided that both students and professors agree.  
All courses will be taught in-classroom.

# Annex: Classroom distribution for UB lectures



# Annex: Classroom distribution for UB lectures

