







# MASTER IN PHOTONICS and MASTER EUROPHOTONICS

# TIMETABLE for ACADEMIC YEAR 2015/2016

# GENERAL ASPECTS MSc in PHOTONICS & EUROPHOTONICS (2015/2016)

STARTING DATE:MSc. in Photonics: September 14th 2015<br/>(Registration must be performed before September 8th)MSc. Europhotonics: October 13th 2015

(Registration must be performed before October 6<sup>th</sup>)

### **TEACHING BLOCKS and HOLIDAYS:**

Lectures (common for both Masters) are grouped into **4 teaching blocks**:

Block 1:September 14th - December 6th 2015 (for the MSc. in Photonics) - December 6th 2015 (for the MSc. Europhotonics)Compulsory courses start on September 15th (10 teaching weeks)Elective courses start on October 13th (6 teaching weeks)	non-working days: September 24 <sup>th</sup> & 25 <sup>th</sup> October 12 <sup>th</sup> November 13 <sup>th</sup>
Block 2: December 7th 2015- February 21th 2016 (for both Masters).	non-working days: December 7, 8 <sup>th</sup>

January 6, 7th

Christmas holidays: December 24st - January 7th

Block 3: February 22th to April 24th 2016(for both Master).

Easter holidays: March 21st - 28th 2016

Block 4 (MSc Thesis):<br/>May 1st<br/>June 24thApril 25th to September 9th 2016(for both Master).non-working days:<br/>May 1st<br/>June 24thSummer holidays may be taken in August (if the MSc work is advanced enough).non-working days:<br/>May 1st<br/>June 24th

# **GENERAL ASPECTS**

# MSc in PHOTONICS & EUROPHOTONICS (2015/2016)

SEPTEMBER 2015											
Мо	Tu	We	Th	Fr	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 2015											
Мо	Tu	We	Th	Fr	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 2015								
Мо	Tu	We	Th	Fr	Sa	K		
2	3		5	6	7			
9	10	11	12	13	14			
16	17	18	19	20	21	3		
23	24	25	26	27	28			
30								

DECEMBER 2015											
Su	Sa	Fr	Th	We	Tu	Мо					
6	5	4	3	2	1						
13	12	11	10	9	8	7					
				16							
27	26	25	24	23	22	21					
			31	30	29	28					
			31	23 30	29	28					

	JANUARY 2016											
Мо	Tu	We	Th	Fr	Sa	Su						
				1	2	3						
		6		8	-							
11	12	13	14	15	16	17						
		20				24						
25	26	27	28	29	30	31						

Мо	Tu	We	Th	Fr	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						

**JUNE 2016** <u>Mo Tu We Th</u> Fr Sa Su 1 2 3

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

4 5

MARCH 2016										
Мо	Tu	We	Th	Fr	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 2016										
Mo	Tu	We	Th	Fr	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 2016											
Мо	Tu	We	Th	Fr	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										

<b>TEACHING WEEK</b>
EXAMS WEEK
ACTIVITIES WEEK
MSc THESIS
NON-WORKING DAYS

JULY 2016											
Мо	Tu	We	Th	Fr	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 2016								
Мо	Tu	We	Th	Fr	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 2016								
Мо	Tu	We	Th	Fr	Sa	Su		
			1	2	3	4		
5	6	7	8	9	10	11		
12	13	14	15	16	17	18		
		14 21			24	25		
26	27	28	29	30				

## BLOCK 1 (Campus: Universitat de Barcelona)

### Compulsory courses (orange): from 14/09 to 22/11 2015 (10 teaching weeks)

#### First 3 weeks (14/09 – 4/10): compulsory courses

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
11:00-12:00			SEMINARS		
12:00-13:00			AULA - c3b/-102		
13:00-14:00					
14:00-15:00	INTRODUCTION TO PHOTONICS	SEMINARS AND SKILLS	INTRODUCTION TO PHOTONICS	INTRODUCTION TO PHOTONICS	
15:00-16:00	AULA -	AULA – (*) the session on 29/09 will be from 14 to 18h)	AULA -	AULA -	
16:00-17:00	BEAM PROPAGATION AND FOURIER OPTICS		BEAM PROPAGATION AND FOURIER OPTICS	BEAM PROPAGATION AND FOURIER OPTICS	
17:00-18:00	AULA -		AULA -	AULA -	
18:00-19:00					

### 4<sup>th</sup> week (5/10 – 11/10): compulsory courses

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
11:00-12:00			SEMINARS		
12:00-13:00			AULA -		
13:00-14:00					
14:00-15:00	INTRODUCTION TO		INTRODUCTION TO		
15:00-16:00	PHOTONICS AULA -	LABORATORY	PHOTONICS Aula -		
16:00-17:00	BEAM PROPAGATION	1 <sup>st</sup> SESSION			LABORATORY 1 <sup>st</sup> SESSION
10.00-17.00	AND FOURIER OPTICS	[at several campus]	BEAM PROPAGATION AND FOURIER OPTICS		[at several campus]
17:00-18:00	AULA -		AULA -		
18:00-19:00					

### BLOCK 1 (Campus: Universitat de Barcelona)

Compulsory courses (orange): from 14/09 to 22/11 2015 (10 teaching weeks) Elective courses (green): from 13/10 to 22/11 2015 (6 teaching weeks)

### Last 6 weeks (13/10 – 22/11): both compulsory and elective courses

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
11:00-12:00			SEMINARS		
12:00-13:00			AULA -		
13:00-14:00					
14:00-15:00		QUANTUM OPTICS		PHOTONICS MATERIALS	QUANTUM OPTICS
15:00-16:00	AULA -	AULA -	PHOTONICS AULA -	AND METAMATERIALS AULA -	AULA -
16:00-17:00	BEAM PROPAGATION AND FOURIER OPTICS	MEASURING WITH LIGHT	BEAM PROPAGATION AND FOURIER OPTICS	MEASURING WITH LIGHT	PHOTONICS MATERIALS
17:00-18:00	AULA -	(optical metrology) AULA -	AND FOURIER OFFICS	(optical metrology) AULA -	AND METAM ATERIALS AULA -
18:00-19:00	OPTOELECTRONICS & PHOTOVOLTAIC	BUILDING OPTOMEC.	OPTOELECTRONICS & PHOTOVOLTAIC	BUILDING OPTOMEC.	
19:00-20:00	TECHNOLOGY AULA -	SYSTEMS AULA -	TECHNOLOGY AULA -	SYSTEMS AULA -	

#### EXAMS: 23 to 27/11/2015

	MONDAY(23/11)	TUESDAY(24/11)	WEDNESDAY(25/11)	THURSDAY(26/11)	FRIDAY(27/11)
14:00-15:00	INTRODUCTION TO PHOTONICS	QUANTUM OPTICS	BEAM PROPAGATION AND FOURIER OPTICS	PHOTONICS MATERIALS AND METAMATERIALS	OPTOELECTRONICS & PHOTOVOLTAIC
15:00-16:00	AULA	AULA	AULA		TECHNOLOGY
16:00-17:00	AULA	AULA	AULA	AULA	AULA
17:00-18:00		BUILDING		MEASURING WITH LIGH	
18:00-19:00		OPTOMEC. SYSTEMS		AULA	
19:00-20:00		AULA -			

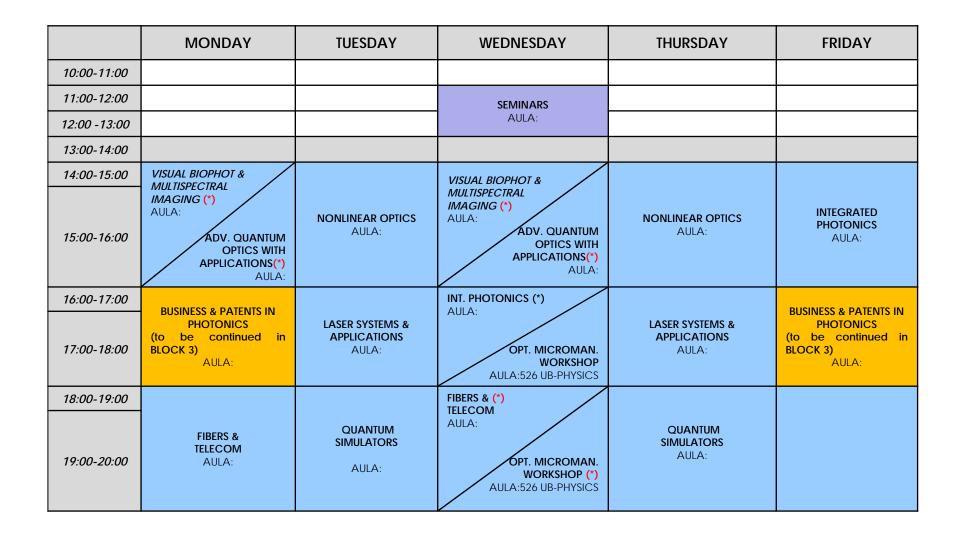
#### ACTIVITIES WEEK: 30/11 to 4/12/2015

	MONDAY(30/11)	TUESDAY(1/12)	WEDNESDAY(2/12)	THURSDAY(3/12)	FRIDAY(4/12)
14:00-15:00					
15:00-16:00	LABORATORY	QUANTUM OPTICS	BEAM PROPAGATION AND FOURIER OPTICS	PHOTONICS MATERIALS AND METAMATERIALS	LABORATORY
16:00-17:00	2 <sup>nd</sup> SESSION	&	&	&	2 <sup>nd</sup> SESSION
17:00-18:00	[at several campus]	INTROD. PHOTONICS	OPTOELECTRONICS &	OPTICAL IMAGING IN	[at several campus]
18:00-19:00			PHOTOVOLTAIC DEVICES	BIOLOGY AND MEDICINE	
19:00-20:00					

(Time table for these activities should be coordinated)

### BLOCK 2 (Campus Nord: UPC)

#### 6 TEACHING WEEKS (7/12/2015 to 7/02/2016)



(\*) These pairs of curses overlap in time. They can not be chosen simultaneously.

# BLOCK 2 (Campus Nord: UPC)

#### EXAMS: 8 to12/02/2016

	MONDAY(8/02)	TUESDAY(9/02)	WEDNESDAY(10/02)	THURSDAY(11/02)	FRIDAY(12/02)
14:00-15:00	ADV. QUANTUM OPTICS	NONLINEAR OPTICS	INT. PHOTONICS	VISUAL BIOPHOT &	ADV. QUANTUM OPTICS
15:00-16:00	WITH APPLICATIONS	NONLINEAR OPTICS		MULTISPECTRAL IMAGING	WITH APPLICATIONS
16:00-17:00	AULA: A5205	AULA: A5205	AULA: A5205	AULA:A5205	AULA: A5205
17:00-18:00	FIBERS &	LASER SYSTEMS &	opt. Microman.	QUANTUM	FIBERS &
18:00-19:00	TELECOM	APPLICATIONS	WORKSHOP	SIMULATORS	TELECOM
19:00-20:00	AULA:A5205	AULA: A5205	AULA:526 UB-PHYSICS	AULA:A5205	AULA:A5205

#### ACTIVITIES WEEK: 15 to 19/02/2016

	MONDAY(15/02)	TUESDAY(16/02)	WEDNESDAY(17/02)	THURSDAY(18/02)	FRIDAY(19/02)
14:00-15:00					
15:00-16:00	LABORATORY	NONLINEAR OPTICS &	EXP. QUANTUM OPTICS &	VISUAL BIOPHOT. &	LABORATORY
16:00-17:00	3 <sup>st</sup> SESSION	LASER SYSTEMS & APPL &	INTEGRATED PHOT. &	QUANTUM SIMULATORS	3 <sup>st</sup> SESSION
17:00-18:00	[at several campus]	PHOT. & BUISNESS	FIBERS AND TELECOM		[at several campus]
18:00-19:00					
19:00-20:00					

(Time table for activities schaduled in the same day should be coordinated)

## BLOCK 3 (Campus Nord of UPC)

6 TEACHING WEEKS (22/02 to 10/04/2016)

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
11:00-12:00			SEMINARS		
12:00 -13:00			AULA:		
13:00-14:00					
14:00-15:00	MANAGING LIGHT WITH DEVICES	ULTRAFAST & ULTRAINTENSE LASER		ULTRAFAST & ULTRAINTENSE LASER	MANAGING LIGHT WITH DEVICES-
15:00-16:00	AULA:	LIGHT AULA:		LIGHT AULA:	AULA:
16:00-17:00		IMAGE PROC. IN BIOPHOT (*)	Experimental optical Techniques in Biology		
17:00-18:00	BUSINESS AND PATENTS IN PHOTONICS This course ends on 14/03 AULA:	AULA: PHOTONICS SYST. IN TELECOM(*) AULA:	AULA: ICFO-laboratory	Quantum information Theory Aula:	BUSINESS AND PATENTS IN PHOTONICS This course ends on 14/03 AULA:
18:00-19:00				IMAGE PROC. IN BIOPHOT (*)	
19:00-20:00	NANOPHOTONICS AULA:	Quantum information Theory Aula:		AULA PHOTONICS SYST. IN TELECOM (*) AULA:	NANOPHOTONICS AULA:

(\*) These pairs of curses overlap in time. They can not be chosen simultaneously.

EXAMS: 11/04 to 15/04/2016

		MONDAY(11/04)	TUESDAY(12/04)	WEDNESDAY(13/04)	THURSDAY(14/04)	FRIDAY(15/04)
14:00-1	15:00		ULTRAFAST &	MANAGING LIGHT	IMAGE PROC. IN	BUSINESS AND PATENTS IN PHOTONICS
15:00-1	16:00	TECHNIQUES IN BIOLOGY AULA:	ULTRAINTENSE LASER LIGHT	WITH DEVICES	Biophot Aula:	AULA:
16:00-1	17:00		AULA:	AULA:		
17:00-1	18:00		PHOTONICS	NANOPHOTONICS	QUANTUM INF. THEORY	
18:00-1	19:00		SYST. IN TELECOM	AULA:	AULA:	
19:00-2	20:00		AULA:			

#### ACTIVITIES WEEK (18/04 to 22/04/2015)

	MONDAY(18/04)	TUESDAY(19/04)	WEDNESDAY(20/04)	THURSDAY(21/04)	FRIDAY(22/04)
14:00-15:00					
15:00-16:00	LABORATORY	MANAGING LIGHT WITH DEVICES	ultrafast & ultraint. Laser Light	QUANTUM INFORMATION &	LABORATORY
16:00-17:00	4 <sup>st</sup> SESSION	& NANOPHOTONICS	& IMAGE PROCECESING	MEASURING WITH LIGHT	4 <sup>st</sup> SESSION
17:00-18:00	[at several campus]	& PHOT. & BUISNESS			[at several campus]
18:00-19:00					
19:00-20:00					

(Time table for activities schaduled in the same day should be coordinated)

• Spring school: about Photonics Engeneering, Nanophotonics and Biophotonics

Organized by the Europhotonics MSc. and Doctorate Programs (students of the Master in Photonics are also invited). (date and place to be announced)

### BLOCK 4

### Master Thesis Project

**BLOCK 4** is devoted mainly to the Master Thesis work Final oral defense sessions will be organized in **July & September (before 10<sup>th</sup> September)** 

# **GENERAL ASPECTS**

LABORATORY: • SESSION 1:	October 6 <sup>th</sup> & 9 <sup>th</sup> , 2015
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- SESSION 2: November 30<sup>th</sup> & 4<sup>th</sup> December, 2015
- SESSION 3: February 15<sup>th</sup> & 19<sup>th</sup>, 2016
- SESSION 4: April18<sup>th</sup> & 22<sup>th</sup>, 2016
- **Recovery:** April 25<sup>th</sup> & 29<sup>th</sup>, 2016

### **SEMINARS:**

During the first 3 teaching blocks, a slot of *2 hours/week* (on Wednesday from 11 to 13h) are reserved for *seminars* given by internationally well-known invited professors and researchers as well as specialists in different fields of applied photonics coming from companies. These seminars will be announced few weeks in advance and there will be held in Campus Nord, always when possible. They are part of the Master program and the assistance is compulsory.

### **EXAMS AND EVALUATION PRECEDURE:**

Professors of each course decide the evaluation procedure, as pointed out in the Course Contents. The evaluation acts (exams, presentations,...) will be done within the scheduled "Exam week" at the end of each teaching block. Nevertheless, exceptionally, some evaluation act could be performed outside those scheduled times if professor and students agree on that.

### **OTHER POSSIBLE CIRCUMSTANCES**

If, exceptionally, some unexpected circumstance appears, which obliges to cancel some lecture session, or some special activity is planned, it could be performed outside the scheduled, if professor and students agree.