







# MASTER IN PHOTONICS and MASTER EUROPHOTONICS-POESII

TIMETABLE for ACADEMIC YEAR 2016/2017

# **GENERAL VIEW**

# MSc in PHOTONICS & EUROPHOTONICS (2016/2017)

**STARTING DATE**: MSc. in Photonics: 12/09/2016 (registration before September 9<sup>th</sup>)

MSc. Europhotonics: 10/10/2016 (registration before October 7th)

# **TEACHING BLOCKS and HOLIDAYS:**

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

**Block 1:** 12/09 - 4/12 2016 (for the MSc. in Photonics)

10/10 - 4/12 2016 (for the MSc. Europhotonics)

Compulsory courses start on 12/09/2016 (10 teaching weeks)

Elective courses start on 10/10/2016 (6 teaching weeks)

<u>free days:</u> 12/10

12/10

**Block 2:** 5/12/2016- 12/02/2017 (for both Masters).

Christmas holidays: 24/12/2016 - 5/01/2017

free days: 6 and 8/12

Block 3: 13/02 - 9/04/2017 (for both Master).

Easter holidays: 10-17/04/2017

Block 4 (MSc Thesis): 18/04 - 10/09/2017 (for both Master).

Summer holidays may be taken in August (if the MSc work is advanced enough).

free days: 1/05/2017 24/06/2017

# **GENERAL VIEW**

# MSc in PHOTONICS & EUROPHOTONICS (2016/2017)

SEPTEMBER 2016								
Мо	Ľ	We	ħ	Ě	Sa	Su		
			1	2	3	4		
5	6	7	8	9	10	11		
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19	20	21	22	23	24	15		
26	27	28	29	30				

OCTOBER 2016								
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24	25	26	27	28	29	30		
31								

NOVEMBER 2016								
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28	29	30						

DECEMBER 2016								
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19	20	21	22	23	24	25		
26	27	28	29	30	31			

JANUARY 2017							
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30	31						

	FEBRUARY 2017							
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27	28							

	MARCH 2017								
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20	21	22	23	24	25	26			
27	28	29	30	31					

APRIL 2017								
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MAY 2017								
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22	23	24	25	26	27	28		
29	30	31						

JUNE 2017							
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19	20	21	22	23	24	25	
26	27	28	29	30			

JULY 2017							
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17	18	19	20	21	22	23	
24	25	26	27	28	29	30	

	AUGUST 2017									
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14	15	16	17	18	19	20				
21	22	23	24	25	26	27				
22	29	30	31							

SEPTEMBER 2017								
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11	12	13	14	15	16	17		
18	19	20	21	22	23	24		
25	26	27	28	29	30			

TEACHING WEEK	
EXAMS WEEK	
ACTIVITIES WEEK	
MSc THESIS	
HOLIDAYS & NON-WORKIN	NG DAY

## Compulsory courses: from 12/09 to 20/11 2016 (10 teaching weeks)

First 3 weeks (12/09 - 2/10): compulsory courses

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
11:00-12:00			SEMINARS		
12:00-13:00			AULA - N07P		
13:00-14:00					
14:00-15:00	INTRODUCTION TO PHOTONICS room - A1 Centre Recerca	SEMINARS AND SKILLS room – A1 (CRM)	INTRODUCTION TO PHOTONICS	INTRODUCTION TO PHOTONICS	
15:00-16:00	Matematica (CRM) Facultat de Ciències	CANCELED!!! (TO BE RESCHADULE)	room - A1 (CRM)	room - A1 (CRM)	
16:00-17:00	BEAM PROPAGATION AND FOURIER OPTICS		BEAM PROPAGATION AND FOURIER OPTICS	BEAM PROPAGATION AND FOURIER OPTICS	
17:00-18:00	room – A1 (CRM)		room - A1 (CRM)	room - A1 (CRM)	
18:00-19:00					

# 4<sup>th</sup> week (3/10 – 9/10): compulsory courses

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
11:00-12:00		•	SEMINARS		
12:00-13:00			room - A1 (CRM)		
13:00-14:00					
14:00-15:00	INTRODUCTION TO		INTRODUCTION TO		
15:00-16:00	PHOTONICS room - A1 (CRM)	LABORATORY 1st SESSION	PHOTONICS room - A1 (CRM)		LABORATORY 1st SESSION
16:00-17:00	BEAM PROPAGATION AND FOURIER OPTICS	[at several campus]	BEAM PROPAGATION AND FOURIER OPTICS	BEAM PROPAGATION AND FOURIER OPTICS	[at several campus]
17:00-18:00	room - A1 (CRM)		room - A1 (CRM)	room - A1 (CRM)	
18:00-19:00					

Compulsory courses (orange): from 12/09 to 20/11 2015 (10 teaching weeks)

Elective courses (green): from 10/10 to 20/11 2015 (6 teaching weeks)

### Last 6 weeks (10/10 - 20/11): compulsory & elective courses

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
11:00-12:00			SEMINARS		
12:00-13:00			room A1(CRM)		
13:00-14:00					
14:00-15:00	INTRODUCTION TO	MEASURING	INTRODUCTION TO	PHOTONICS	QUANTUM OPTICS
15:00-16:00	PHOTONICS room A1(CRM)	WITH LIGHT room A1(CRM)	PHOTONICS room A1(CRM)	MATERIALS AND METAMATERIALS room A1(CRM)	room A1(CRM)
16:00-17:00	BEAM PROPAGATION	QUANTUM OPTICS	BEAM PROPAGATION	MEASURING	BEAM
17:00-18:00	room A1(CRM)	room A1(CRM)	AND FOURIER OPTICS room A1(CRM)	WITH LIGHT room A1(CRM)	PROPAGATION AND FOURIER OPTICS room A1(CRM)
18:00-19:00	OPTOELECTRONICS & PHOTOVOLTAIC	FROM COOLING & TRAPPING	OPTOELECTRONICS & PHOTOVOLTAIC	FROM COOLING & TRAPPING	
19:00-20:00	TECHNOLOGY roomA1(CRM)	room A1(CRM)  BUILDING  OPTOMEC.  SYSTEMS  room c5b/015	TECHNOLOGY room A1(CRM)	room A1(CRM) BUILDING OPTOMEC. SYSTEMS room c5b/015	PHOTONICS MATERIALS AND METAMATERIALS room A1(CRM)

#### **EXAMS**: 21 to 25/11/2015

	MONDAY(21/11)	TUESDAY(22/11)	WEDNESDAY(23/11)	THURSDAY(24/11)	FRIDAY(25/11)
14:00-15:00	INTRODUCTION TO PHOTONICS	QUANTUM OPTICS	BEAM PROPAGATION AND FOURIER OPTICS	PHOTONICS MATERIALS AND METAMATERIALS	OPTOELECTRONICS & PHOTOVOLTAIC
15:00-16:00		D A 1 (ODA 1)			TECHNOLOGY
16:00-17:00	Room A1(CRM)	Room A1(CRM)	Room A1(CRM)	Room A1(CRM)	Room A1(CRM)
17:00-18:00		BUILDING OPTOMEC.	FROM COOLING & TRAPPING TO BE COND.	MEASURING WITH LIGH	
18:00-19:00		SYSTEMS	TRAITING TO BE COND.	Room A1(CRM)	
19:00-20:00		Room A1(CRM)	Room A1(CRM)		

#### **ACTIVITIES WEEK: 28/11 to 2/12/2015**

	MONDAY(28/11)	TUESDAY(29/11)	WEDNESDAY(30/11)	THURSDAY(1/12)	FRIDAY(2/12)
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	FROM COOLING & TRAPPING TO BE	& OPTOELECTRONICS &	& BUILDING	2 <sup>nd</sup> SESSION
17:00-18:00	[at several campus]	COND.	PHOTOVOLTAIC DEVICES	OPTOMECHANICAL SYSTEMS &	[at several campus]
18:00-19:00		INTROD. PHOTONICS		Measuring with Ligh	
19:00-20:00					

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

On 29<sup>nd</sup>, 30th of November and 1<sup>st</sup> of December several visitis to different laboratories and research centers of UB, UAB and UPC will be organized. The schadule will be announced by e-mail.

# 6 TEACHING WEEKS (5/12/2016 to 31/01/2017)

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
10:00-11:00					
11:00-12:00			SEMINARS		
12:00 -13:00			AULA:A4204		
13:00-14:00					
14:00-15:00	VISUAL BIOPHOT & MULTISPECTRAL		VISUAL BIOPHOT &		
15:00-16:00	ADV. QUANTUM OPTICS WITH APPLICATIONS(*) Room A4206	NONLINEAR OPTICS  Room A5 101	MULTISPECTRAL IMAGING (*) Room A5101  ADV. QUANTUM OPTICS WITH APPLICATIONS(*) Room A4206	NONLINEAR OPTICS  Room A5 101	INTEGRATED PHOTONICS Room A5101
16:00-17:00	BUSINESS & PATENTS IN	LASER SYSTEMS &		LASER SYSTEMS &	BUSINESS & PATENTS IN
17:00-18:00	PHOTONICS (continue in BLOCK 3) Room A5101	APPLICATIONS Room A5101	OPT. MICROMAN. WORKSHOP	APPLICATIONS  Room A5101	PHOTONICS (continue in BLOCK 3) Room A5101
18:00-19:00			AULA:526 UB-PHYSICS	FIBERS & TELECOM	
19:00-20:00	FIBERS & TELECOM  Room A5101	INT. PHOTONICS  Room A5101		Room A5101	

<sup>(\*)</sup> These pairs of curses overlap in time. They can not be chosen simultaneouslly.

EXAMS: 1-3/02/2017

	MONDAY(30/01)	TUESDAY(31/01)	WEDNESDAY(1/02)	THURSDAY(2/02)	FRIDAY(3/02)
14:00-15:00			ADV. QUANTUM OPTICS WITH APPLICATIONS		
15:00-16:00			Room: A4206	NONLINEAR OPTICS	INT. PHOTONICS
16:00-17:00	Recovery day	Recovery day for 6 & 8/12	VISUAL BIOPHOT & MULTISPECTRAL IMAGING ROOM A5101	Room A5101	Room A5101
17:00-18:00	for 6 & 8/12		OPT. MICROMAN. WORKSHOP	LACED CVCTEMC 0	
18:00-19:00			AULA:526 UB-PHYSICS	LASER SYSTEMS & APPLICATIONS	
19:00-20:00			FIBERS & TELECOM room A5101	Room A5101	

#### **ACTIVITIES WEEK: 6 to 12/02/2016**

	MONDAY(6/02)	TUESDAY(7/02)	WEDNESDAY(8/02)	THURSDAY(9/02)	FRIDAY(10/02)
14:00-15:00					
15:00-16:00	LABORATORY	NONLINEAR OPTICS &	INTEGRATED PHOT. &	Visual Biophot. &	LABORATORY
16:00-17:00	3 <sup>st</sup> SESSION	Laser systems & Appl &	FIBERS AND TELECOM	ADV. QUANTUM OPTICS	3 <sup>st</sup> SESSION
17:00-18:00	[at several campus]	BUISNESS & PATTENTS			[at several campus]
18:00-19:00					
19:00-20:00					

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

6 TEACHING WEEKS (13/02 to 26/03/2017)

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
11:00-12:00			SEMINARS		
12:00 -13:00			AULA: A4204		
13:00-14:00					
14:00-15:00	QUANTUM SIMULATORS	ULTRAFAST &	QUANTUM SIMULATORS	ULTRAFAST &	
15:00-16:00	room A5101  MANAGING LIGHT WITH DEVICES Room A4206	ULTRAINTENSE LASER LIGHT  Room A5101	room A5101  MANAGING LIGHT WITH DEVICES Room A4206	ULTRAINTENSE LASER LIGHT Room A5101	EXPERIMENTAL OPTICAL
16:00-17:00		QUANTUM INFORMATION THEORY		QUANTUM INFORMATION	TECHNIQUES IN BIOLOGY
17:00-18:00	BUSINESS AND PATENTS IN PHOTONICS This course ends on 14/03 Room A5101	Room A5101  MAGE PROC. IN BIOPHOTHONICS Room A4206	BUSINESS AND PATENTS IN PHOTONICS This course ends on 14/03  Room A5101	THEORY ROOM A5101  MAGE PROC. IN BIOPHOTHONICS ROOM A4206	AULA: ICFO-laboratory
18:00-19:00	NANOPHOTONICS	PHOTONIC SYST. IN TELECOM	NANOPHOTONICS	PHOTONIC SYST. IN	
19:00-20:00	Room A5101	Room A5101	Room A5101	TELECOM Room A5101	

<sup>(\*)</sup> These pairs of curses overlap in time. They can not be chosen simultaneouslly.

#### EXAMS: 27/03 to 31/03/2017

	MONDAY(27/03)	TUESDAY(28/03)	WEDNESDAY(29/03)	THURSDAY(30/03)	FRIDAY(31/03)
14:00-15:00		ULTRAFAST &	QUANTUM SIMULATORS		EXPERIMENTAL OPTICAL
15:00-16:00	BUSINESS AND PATENTS IN PHOTONICS	ULTRAINTENSE LASER LIGHT	MANAGING LIGHT	PHOTONICS SYST. IN TELECOM	TECHNIQUES IN BIOLOGY
16:00-17:00	Room A5101	Room A5101	WITH DEVICES Room A4206	Room A5101	Room A5101
17:00-18:00		IMAGE PROC. IN	NANOPHOTONICS		
18:00-19:00		BIOPHOTHONICS	Room A5101	QUAUTUM INF. THEORY  Room A5101	
19:00-20:00		Room A5101		KOOIII AS IOI	

#### **ACTIVITIES WEEK (3/04 to 7/04/2017)**

	MONDAY(3/04)	TUESDAY(4/04)	WEDNESDAY(5/04)	THURSDAY(6/04)	FRIDAY(7/04)
14:00-15:00					
15:00-16:00	LABORATORY 4 <sup>st</sup> SESSION [at several campus]	MANAGING LIGHT WITH DEVICES & NANOPHOTONICS & QUANTUM SIMULATORS	ULTRAFAST & ULTRAINT. LASER LIGHT & PHOTONICS SYST. IN TELECOM	Quantum Information & Experimental Optical Techniques in Biology & Image Proc. In Biophothonics	LABORATORY 4 <sup>st</sup> SESSION [at several campus]
16:00-17:00					
17:00-18:00					
18:00-19:00					
19:00-20:00					

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

29/04 - 1/04, Barcelona, Spain

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).

# 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 4<sup>th</sup> & 7<sup>th</sup>, 2016

• **SESSION 2**: November 28<sup>th</sup> & 2<sup>th</sup> December, 2016

• **SESSION 3**: February 6<sup>th</sup> & 11<sup>th</sup>, 2017

• **SESSION 4**: April 3<sup>th</sup> & 7<sup>th</sup>, 2017 • **Recovery**: April 18<sup>th</sup> & 21<sup>th</sup>, 2017

#### **SEMINARS**:

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, 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.