

# 2<sup>nd</sup> year EMM Nano+ welcome session 2021 Wednesday 1st of September 2021

## 2<sup>nd</sup> year EMM Nano Master 2 program

#### **Erasmus Mundus Master Nanoscience and nanotechnology (120 stp)**

#### Nanoscience and nanotechnology fundamentals (0-12 ects, KU Leuven)

Quantum physics - 3 ects

Semconductor physics - 3 ects

Semiconductor devices - 3 ects

Atomtheory, chemical periodicity and chemical bond - 3 ects

Structure synthesis and cellular function of macromolecules - 3 ects

Electronic components, circuits and sensors - 3 ects

Basics of Pharmacology - 3 ects

#### General interest courses (6-9 ects, KU Leuven)

Courses chosen from an extensive list of general interest courses

#### Core courses (36 stp, KU Leuven)

Material physics and technology for nanoelectronics - 6 ects

Nanostructured biomacromolecules - 6 ects

Chemistry at nanometer scale - 6 ects

Technology of integrated systems - 6 ects

Mesoscopic physics - 3 ects

Lectures on nanoscience and nanotechnology - 3 ects

Practical design for nanotechnology or Project work nanoscience - 6 ects

Nanomaterials and nanochemistry		Quantum computing and nanoelectronics				Bionanotechnology and Nanomedicine		
Option Nanomaterials U Barcelona	Option Nanochemistry UGA Grenoble	Option Organic and molecular electronics TU Dresden, Chalmers	Option Quantum computing Chalmers	Option Quantum and nanoscale engineering UGA Grenoble	Option Nanoelectronics TU Dresden	Option Biophysics TU Dresden	Option Bionanotechnology JFU Grenoble	Option Nanopharmacotherapy U Barcelona
Specific Courses	Specific Courses	Specific Courses	Specific Courses	Specific Courses	Specific Courses	Specific Courses 15 ects compulsory + min 6 ects electives KU Leuven	Specific Courses	Specific Courses
15 ects compulsory	15 ects compulsory	15 ects compulsory	15 ects compulsory	15 ects compulsory	15 ects compulsory		15 ects compulsory	15 ects compulsory
+ min 6 ects electives	+ min 6 ects electives	+ min 6 ects electives	+ min 6 ects electives	+ min 6 ects electives	+ min 6 ects electives		+ min 6 ects electives	+ min 6 ects electives
KU Leuven	KU Leuven	KU Leuven	KU Leuven	KU Leuven	KU Leuven		KU	KU Leuven
Broadening courses	Broadening courses	Broadening courses	Broadening courses	Broadening courses	Broadening courses	Broadening courses	Broadening courses	Broadening courses
15 ects electives	15 ects electives	15 ects electives	15 ects electives	15 ects electives	15 ects electives	15 ects electives	15 ects electives	15 ects electives
Master thesis	Master thesis	Master thesis	Master thesis	Master thesis	Master thesis	Master thesis	Master thesis	Master thesis
(30 ects)	(30 ects)	(30 ects)	(30 ects)	(30 ects)	(30 ects)	(30 ects)	(30 ects)	(30 ects)

# 2<sup>nd</sup> year EMM Nano : your contacts@UGA

UGA secretary: Mrs Dounia MOUKADEM

PHITEM building A, room A108

dounia.moukadem@univ-grenoble-alpes.fr

Phone: +33 (0)476514823

Local Coord. of Eramus Mundus Nano@UGA
 Prof. David Ferrand

david.ferrand@neel.cnrs.fr

Mobile: +33 (0)670244579

Neel Institute, office C3-200 (see next slide)

Please put my email in copy of all email exchange regarding EMM Nano Master program (exchange with Leuven, UGA teachers, secretary, local track coordinators...)

Web site: EMM Nano+ web pages @UGA

https://master-nanosciences.univ-grenoble-alpes.fr/academic-

program/nanochemistry/emm-nano-/emm-nano--

483724.kjsp?RH=3972980646879902

# David Ferrand: Neel Institute office C3-200 located first floor between D and F buildings



Tram line B (green one) towards « Oxford »
Tram Stop terminus « Oxford »

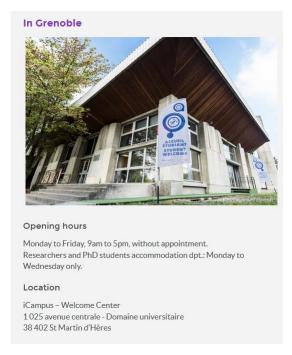
An entrance pass done in advanced and ID card is always needed

### Information sessions for international students done by ISSO

To prepare the arrival of all international students, information sessions (online or in the campus) will be proposed by International students and scholars office (ISSO):

https://international.univ-grenoble-alpes.fr/news/calendar/information-meetings-for-international-students-grenoble-707580.kjsp?RH=1602248890125

I invite also to visit now ISSO building & web page: <a href="https://international.univ-grenoble-alpes.fr/english/">https://international.univ-grenoble-alpes.fr/english/</a>



#### EMM students: health issues and medical insurance

☐ Visit to a General practionner: See ISSO web page: (daily life item)

https://international.univ-grenoble-alpes.fr/getting-organized/daily-life/health/health-784068.kjsp?RH=1610018176717

#### ☐ University health centers in Grenoble:

#### On-campus healthcare center

180 rue de la Piscine Domaine universitaire de Saint-Martin d'Hères / Gières

+33 4 76 82 40 70

Tram B - « Les Taillées » or tram C - « Hector Berlioz »

#### City center healthcare center

Consultations with general practitioners only 10, rue Vassieux en Vercors 38000 Grenoble

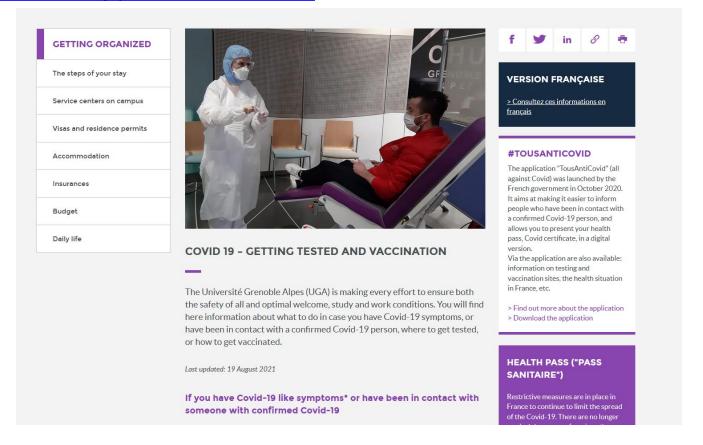
+33 4 76 82 40 70

Tram B - « Marie-Louise Paris - CEA »

As EMM students you are covered in principle by an AIG health insurance taken in Leuven. See the different items (payment and reimbursement for instance) and check any news about your coverage with KUL or/and with AIG.

#### COVID-19 sanitary protocols at UGA

https://international.univ-grenoble-alpes.fr/getting-organized/covid-19-getting-tested-and-vaccination-798187.kjsp?RH=1602595314069



If you are positive to Covid-19: Fill the form available on the student intranet (LEO), or the staff intranet, or send an email to <a href="mailto:covid19@univ-grenoble-alpes.fr">covid19@univ-grenoble-alpes.fr</a> if you do not have access to the intranet yet.

Inform your local track coordinator, Prof. David Ferrand and Mrs Moukadem

# 2<sup>nd</sup> year EMM Nano 2021-2022 Master students

#### Quantum and nanoscale engineering:

Ordonez Rodriguez Alba (late arrival september 4th), Fohn Corinna, Hellemans Thomas, Keppens James

### • Bionanotechnology:

De Maeyer Michiel, Mens Wout, Seidel Hans Peter

### Nanochemistry:

Lee Allison Zhen

- Check rapidly that UGA messages are not filtered by antispam at KUL or give us a second email adress
- In principle your registration has been done with the secretary of the Master
   Check it and collect your certificate of registration, your student card and agalan access login

# 2<sup>nd</sup> year EMM Nano 2021-2022 Master students

Noms / prénoms	Parcours Master 2 EMM-Nano+	adresses emails
Ordonez Rodriguez Alba	EMM-Nano+-Quantum & Nanoscale engineering	albaor47@gmail.com, alba.ordonezrodriguez@student.kuleuven.be
Fohn Corinna	EMM-Nano+-Quantum & Nanoscale engineering	corinna.fohn@gmail.com, corinna.fohn@student.kuleuven.be
Hellemans Thomas	EMM-Nano+-Quantum & Nanoscale engineering	thomas.hellemans@student.kuleuven.be
Keppens James	EMM-Nano+-Quantum & Nanoscale engineering	jameskeppens@hotmail.com, james.keppens@student.kuleuven.be
Lee Allison Zhen	EMM-Nano+-Nanochemistry	allisonzhen.lee@student.kuleuven.be
De Maeyer Michiel	EMM-Nano+-Nanbiotechnologies	Mihc97@hotmail.be, michiel.demaeyer@student.kuleuven.be
Mens Wout	EMM-Nano+-Nanbiotechnologies	wout.mens@student.kuleuven.be
Seidel Hans Peter	EMM-Nano+-Nanbiotechnologies	hanspeter.seidel 157@gmail.com, hanspeter.seidel@student.kuleuven.be

email adresses used to communicate with you during the academic year

# 2<sup>nd</sup> year EMM Nano Master 2 program 2021-2022

At UGA you will be merged with local Master students within three Master 2 tracks of the « Mention » Nanoscience N2

# M2 Quantum information & quantum engineering (QIQE) M2 Nanophysics



Prof. Franck Balestro M2 QIQE Franck.balestro@neel.cnrs.fr



Prof. Helène Bea M2 Nanophysics Helene.bea@cea.fr

Information meeting 10.30am M2 QIQE: room A106 or M2 Nanophysics: room A105

## **M2** Nanochemistry



Prof. Cyrille Train
<a href="mailto:Cyrille.train@lncmi.cnrs.fr">Cyrille.train@lncmi.cnrs.fr</a>

# **Information meeting 10.30am room A104**

# **M2 Nano-biotechnology**



Prof. Johannes Geiselmann hans.geiselmann@univ-grenoble.fr

**Information meeting 10.30am room A102** 

# 2<sup>nd</sup> year EMM Nano Master 2 program

- 1st Semester : lectures from september 2021 to end of January 2022
- 2<sup>nd</sup> Semester: **30 ECTS Master internship:** 4 month minimum up to 6 month maximum done from February to end of August, evaluation at the end of june or end of August

- One Master 2 course: most often 3 ECTS ~ 20-25 hours during one semester sometimes 6 ECTS ~ 45 hours during one semester
- To be graduated, at least 120 ECTS in your ISP are needed over the two years!



Depending on the **credit number done in Leuven** (from 54 up to 66 ECTS credits)

- Choose the number of courses **during 1st semester** in order to complete your curriculum up to 120 ECTS credits: from 24 ECTS up to 36 ECTS
- Choose only EMM Nano courses listed in Leuven (<a href="http://www.emm-nano.org/">http://www.emm-nano.org/</a>)
- Be careful rules are a bit different in the 3 UGA Master 2 tracks

# Teaching schedule 2020-2021 at UGA

SEPTEMBRE 2021	OCTOBRE 2021	NOVEMBRE 2021	DECEMBRE 2021	JANVIER 2022	FEVRIER 2022	MARS 2022	AVRIL 2022	MAI 2022	JUIN 2022	JUILLET 2022
lundi 30-août	vendredi 1	lundi 1 Toussaint	mercredi 1	samedi 1 Jour de l'an	mardi 1	mardi 1	vendredi 1	dimanche 1 Fête travall	mercredi 1	vendredi 1
mardi 31-août	samedi 2	mardi 2	jeudi 2 12	dimanche 2	mercredi 2	mercredi 2 6	samedi 2	lundi 2	jeudi 2	samedi 2
mercredi 1	dimanche 3	mercredi 3	vendredi 3	lundi 3	jeudi 3	jeudi 3 Forum LP M	dimanche 3	mardi 3	vendredi 3	dimanche 3
jeudi 2	lundi 4	jeudi 4	samedi 4	mardi 4	vendredi 4	vendredi 4	lundi 4	mercredi 4	samedi 4	lundi 4
vendredi 3	mardi 5	vendredi 5	dimanche 5	mercredi 5	samedi 5	samedi 5	mardi 5	jeudi 5	dimanche 5	mardi 5
samedi 4	mercredi 6	samedi 6	lundi 6	jeudi 6	dimanche 6	dimanche 6	mercredi 6 2.2	vendredi 6	lundi 6 Pentecôte	mercredi 6
dimanche 5	jeudi 7	dimanche 7	mardi 7	vendredi 7	lundi 7	lundi 7	jeudi 7	samedi 7	mardi 7	jeudi 7
lundi 6	vendredi 8	lundi 8	mercredi 8 13	samedi 8	mardi 8	mardi 8	vendredi 8	dimanche 8 VIct 1945	mercredi 8	vendredi 8
mardi 7	samedi 9	mardi 9	jeudi 9	dimanche 9	mercredi 9	mercredi 9 %	samedi 9	lundi 9	jeudi 9	samedi 9
mercredi 8 g	dimanche 10	mercredi 10	vendredi 10	lundi 10	jeudi 10	jeudi 10	dimanche 10	mardi 10	vendredi 10	dimanche 10
jeudi 9	lundi 11	jeudi 11 Armistice	samedi 11	mardi 11	vendredi 11	vendredi 11	lundi 11	mercredi 11	samedi 11	lundi 11
vendredi 10	mardi 12	vendredi 12	dimanche 12	mercredi 12	samedi 12	samedi 12	mardi 12	jeudi 12	dimanche 12	mardi 12
samedi 11	mercredi 13 🙇	samedi 13	lundi 13	jeudi 13	dimanche 13	dimanche 13	mercredi 13 12	vendredi 13	lundi 13	mercredi 13
dimanche 12	jeudi 14	dimanche 14	mardi 14	vendredi 14	lundi 14	lundi 14	jeudi 14	samedi 14	mardi 14	jeudi 14 Fête nat.
lundi 13	vendredi 15	lundi 15	mercredi 15	samedi 15	mardi 15	mardi 15	vendredi 15	dimanche 15	mercredi 15	vendredi 15
mardi 14	samedi 16	mardi 16	jeudi 16	dimanche 16	mercredi 16 5	mercredi 16 g	samedi 16	lundi 16	jeudi 16	samedi 16
mercredi 15	dimanche 17	mercredi 17	vendredi 17	lundi 17	jeudi 17	jeudi 17	dimanche 17	mardi 17	vendredi 17	dimanche 17
jeudi 16 🍊	lundi 18	jeudi 18	samedi 18	mardi 18	vendredi 18	vendredi 18	lundi 18 Pâques	mercredi 18	samedi 18	lundi 18
vendredi 17	mardi 19	vendredi 19	dimanche 19	mercredi 19 1	samedi 19	samedi 19	mardi 19	jeudi 19	dimanche 19	mardi 19
samedi 18	mercredi 20 🎢	samedi 20	lundi 20	jeudi 20	dimanche 20	dimanche 20	mercredi 20	vendredi 20	lundi 20	mercredi 20
dimanche 19	jeudi 21	dimanche 21	mardi 21	vendredi 21	lundi 21	lundi 21	jeudi 21	samedi 21	mardi 21	jeudi 21
lundi 20	vendredi 22	lundi 22	mercredi 22	samedi 22	mardi 22	mardi 22	vendredi 22	dimanche 22	mercredi 22	vendredi 22
mardi 21	samedi 23	mardi 23	jeudi 23	dimanche 23	mercredi 23	mercredi 23 9	samedi 23	lundi 23	jeudi 23	samedi 23
mercredi 22	dimanche 24	mercredi 24 11	vendredi 24	lundi 24	jeudi 24	jeudi 24	dimanche 24	mardi 24	vendredi 24	dimanche 24
jeudi 23	lundi 25	jeudi 25	samedi 25 Noël	mardi 25 JDL	vendredi 25	vendredi 25	lundi 25	mercredi 25	samedi 25	lundi 25
vendredi 24	mardi 26	vendredi 26	dimanche 26	mercredi 26 2	samedi 26	samedi 26	mardi 26	jeudi 26 Ascension	dimanche 26	mardi 26
samedi 25	mercredi 27 🛞	samedi 27	lundi 27	jeudi 27	dimanche 27	dimanche 27	mercredi 27 1,3	vendredi 27	lundi 27	mercredi 27
dimanche 26	jeudi 28	dimanche 28	mardi 28	vendredi 28	lundi 28	lundi 28	jeudi 28	samedi 28	mardi 28	jeudi 28
lundi 27	vendredi 29	lundi 29	mercredi 29	samedi 29		mardi 29 1.0	vendredi 29	dimanche 29	mercredi 29	vendredi 29
mardi 28 🙉	samedi 30	mardi 30	jeudi -30	dimanche 30	1	mercredi 30	samedi 30	lundi 30	jeudi 30	samedi 30
mercredi 29	dimanche 31		vendredi 31	lundi 31	1	ieudi 31		mardi 31		dimanche 31
jeudi 30		•			•		-		•	

Holidays (in red): 1 week at the beginning of November, 2 weeks for Christmas holidays 1 week in February, 1 week in April (spring holidays).

# Quantum & NS Engin. 2<sup>nd</sup> year EMM Nano Master 2 program 2021-2022

- 1st Semester: 4 compulsory specializing courses 15 ECTS (in green)
  - + 15 ECTS broadening courses (more if you need more than 30 ECTS )

Mandatory courses				
	Regular course slots	Start date / End date	Location	Eventual extra course slots
From Nanofabrication in research labs to VLSI	Wednesday 1.30pm-5.15pm (8 slots)	Wednesday 6th of october / 15th of december	Phitem: north amphitheater	
Quantum condensed matter	Tuesday 10.30am-12.30am (12 slots)	Tuesday 14th of september / 21th of december	Green-Er: room 2D-010	
Solid State Qbits	Thursday 3.15pm-5.15pm (12 slots)	Thursday 16th of september / 16th of december	Maison des Magistères: Mag amphitheater	
Thematic and interdisciplinary projects: IBM-Q practicals	Tuesday (28/09, 12/10, 26/10, 16/11, 30/11) 3.30pm-5.30pm	Tuesday 28th of September / 30th of November	Maison des Magistères: room Mag 1	
Thematic and interdisciplinary projects: Modeling	Friday 8am-10am (12 slots)	Friday 24th of September / 10th of december	Phitem: room D207	
Thematic and interdisciplinary projects: seminars	Tuesday 1.30pm-3.30pm	Tuesday 7th of September / 14th of december	Neel institute: room D420	
Recommended elective courses				
Advanced characterization techniques for nanostructures	Monday 3.15pm-4.45pm (14 slots)	Monday 6th of September / 13th of december	Phitem: room A103	Friday 10/09, 17/09 (10.15am-11.45am)
Advanced semiconductor devices:T Ernst	Monday 1.30pm-3pm (8 slots)	Monday 6th of September / 25th of october	Phitem: room A103	
Advanced semiconductor devices:G. Jacopin	Monday (22/11,29/11,06/12,13/12), 1.30pm-3pm	Monday 22th of November / 13th of december	Phitem: room A103	
Advanced semiconductor devices:practicals	Wednesday 05/01, Thursday 06/01, Friday 07/01	First week of January	CIME-Nanotech&Neel Institute	
Elaboration of nanostructures / Physics of 2D materials	Thursday 8am-9.30am (13 slots)	Thursday 9th of September / 16th of december	Maison des Magistères: Mag amphitheater	Wednesday 15th/22nd/29th of september (1.30pm-3pm)
Microwaves and cryoelectronics	Monday 3.45pm-5.45pm (12 slots)	Monday 13th of September / 13th of december	Maison des Magistères: room Mag 1	
Nanomagnetism and spintronics	Thursday 1.30pm-3pm (13 slots)	Monday 6th of September /13th of december	Maison des Magistères: Mag amphitheater	Monday 13th, 20th, 27th of september (8am-9.30am)
Nanomaterials and energy	Thursday 9.45am-11.15am (13 slots)	Thursday 9th of September / 16th of december	Maison des Magistères: Mag amphitheater	Wednesday 15th/22nd/29th of september (3.15pm-4.45pm)
Nanophotonics-Plasmonics	Wednesday 10.15am-12.15am (12 slots)	Wednesday 8th of september / 8th of december	Phitem: room A118	
Open quantum systems	Wednesday 8am-10am (12 slots)	Wednesday 8th of september / 15th of december	Phitem: room A118	
Quantum algorithms	Monday 10.15am-12.15am (12 slots)	Monday 6th of September / 13th of december	Maison des Magistères: Mag amphitheater	
Quantum optics	Tuesday 8am-10am (12 slots)	Tuesday 14th of september / 21th of december	Green-Er: room 2D-010	

In green courses which start WEEK OF SEPTEMBER 6TH (all Toledo elective courses are listed in the next page)

Online timetable ADE UGA (choose M2 Quantum and nanoscale engineering-EMM-Nano+) (click on the link above for september or use your Leo portal with agalan login)

# Q&NS Engin. 2<sup>nd</sup> year EMM Nano 2021-2022: Elective courses from Nanochemistry & Bionanotechnology tracks



### Free choice among the list but check timetable compatibility

	Regular course slots	Start date / End date	Location	Eventual extra course slots
Active Matter	Tuesday 4pm-5.30pm	Tuesday 7th of september / 14th of december	Phitem: room D109	
Advanced Functional Nanomaterials	Wednesday 8am-10am (8 slots + practicals)	Wednesday 8th of september / 27th of october	Phitem: room D111	8h of practicals
Molecular nanomaterials: C Train	Tuesday 10.15am 12.15am (11 slots)	Tuesday 7th of september / 14th of december	Green Er: room 2D 014	4h of practicals
Molecular nanomaterials: J. Chauvin	Thursday 3.15pm 5.15pm	Thursday 9th of September / 2nd of December	Phitem: A118	
Functional Nanoparticles	Wednesday 10.15am-12.15am (12 slots)	Wednesday 8th of september / 22nd of November	Phitem: room D111	
Nano-safety	Thursday 1.30pm-3pm	Thursday 9th of September / 16th of December	Phitem: room A117	
Nanocomposites	Tuesday 8am-10am	Tuesday 7th of september / 30th of November	Green-Er: room 2D-014	
Nanopores and membrane technologies	Monday 5pm-6.30pm	Monday 13th of September / 10th of January	Phitem: room D109	
Pi-conjugated and Conducting Polymers	Monday 8.30am-12pm	Monday 6th of September / 25th of October	UFR Nanochemistry:room 205B	
Research Training	Monday 8am-12am & Friday 1pm-5pm	Monday 11th of October / Friday 17th of December	Practical or Research in Laboratories	
Surface Functionalisation	Tuesday 3.45pm-5.45pm	Tuesday 6th of September / 30th of November	Green-Er: room 2D-014 or 2D-013	
Bio-molecular interactions: methods and applications	Tuesday 1.30pm 3.30pm	Tuesday 6th of September / 14th of December	Green Er: room 2D 014 or 2D 013	4h of practicals: time table ?
Neuroscience	Tuesday 8.15am-10.15am	Tuesday 12th of october / 7th of december	Phelma Minatec Z108	
-Physiology	Tuesday 10.30am 12.30am	Tuesday 14th of september / 7th of december	First class in Phelma Minatec 2404	
Optics for biological systems	Thursday 3.15pm-4.45pm	Thursday 16th of September / december	Phitem	
	Friday 10.30am-12.30am			
Biomaterials and bio-compatible surfaces engineering	(Friday 8.15am-10.15am: 19/11, 26/11 and 03/12)	Friday 24th of September / 17th of December	Phelma Minatec A103	
Cell signaling and cancer biology	21/09 (8h15-12.15), 28/09 (8.15-12.15), 12/10 (10.15-12.15)	21st of September / 12th of october	Phelma Minatec Z404	
Fundamental of structural biology	Monday 1.30pm-3pm	Monday 6th of september / december	Phitem A105	
	16/09 (10.15am-12.15pm), 27/09 (8.15am-10.15am), 30/09			
	(10.15am-12.15pm), 21/10 (10.30am-12.30am), 28/10			
	(10.30am-12.30pm), 19/11 (10.30am-12.30pm), 19/11			
	(10.30am-12.30am), 26/11 (10.30am-12.30pm), 03/12			
Machine statistical learning	(10.30am-12.30pm)	Thursday 16th of September / 3rd of december	rst class in Phelma Minatec M253 (informatic room	1)
	Wednesday 15th of September (3.30pm-5.30pm), Monday			
	20th of September (8am-10am), Wednesday 20th of october			
Molecular markers for medical imaging	(1.30pm-5.45pm) , 10th of November (3.45pm-5.45pm)	Wednesday 15th of september / december	Phelma Minatec Z208	
Nanopores and membrane technologies	Monday 5pm-6.30pm	Monday 13th of September / 10th of January	Phitem: room D109	
Characterization of biomolecular interactions at surfaces	Monday 3.15pm-4.45pm	Monday 13th of September / 13th of December	Phitem: room D216	
Research Training	Monday 8am-12am & Friday 1pm-5pm	Monday 11th of October / Friday 17th of December	Practical or Research in Laboratories	
Biosensors and high through-put analysis	Tuesday 1.30pm-3.30pm	Tuesday 26th of October / 14th of December	Green-Er or Phelma Minatec	8h of practicals: : time table: Monday from 04/10 to 17/01?
Bio-molecular interactions: methods and applications	Tuesday 1.30pm-3.30pm	Tuesday 14th of september / 19th of October	Green-Er or Phelma Minatec	4h of practicals: time table: Monday from 04/10 to 17/01?

Online timetable ADE UGA (choose one of EMM Nano tracks)

(click on the link above for september or use your Leo portal with agalan login)

In red elective courses in conflict with a mandatory course

# Nanobiotechnology 2<sup>nd</sup> year EMM Nano Master 2 program 2021-2022

- 1st Semester: 5 compulsory specializing courses 15 ECTS (in green)
  - + 15 ECTS broadening courses (more if you need more than 30 ECTS)

Mandatory courses: 15 ECTS				
	Regular course slots	Start date / End date	Location	Eventual extra course slots or practicals
Bio-molecular interactions: methods and applications	Tuesday 1.30pm-3.30pm	Tuesday 14th of september / 19th of October	Green-Er or Phelma Minatec	4h of practicals: time table: Monday from 04/10 to 17/01?
Biosensors and high through-put analysis	Tuesday 1.30pm-3.30pm	Tuesday 26th of October / 14th of December	Green-Er or Phelma Minatec	8h of practicals: : time table: Monday from 04/10 to 17/01 ?
Micro-Nano Fabrication	Wednesday 1.30pm-5.15pm (4 slots)	Wednesday 6th of october / 27th of october	Phitem: north amphitheater	12h cell patterning Labworks: 03/01 to 07/01?
Nano-safety	Thursday 1.30pm-3pm	Thursday 9th of September / 16th of December	Phitem: room A117	
Surface Functionalisation	Tuesday 3.45pm-5.45pm	Tuesday 14th of September / 30th of November	Green-Er or Phelma Minatec	
Recommended elective courses				
Neuroscience	Tuesday 8.15am-10.15am	Tuesday 12th of october / 7th of december	Phelma Minatec Z108	
Physiology	Tuesday 10.30am-12.30am	Tuesday 14th of september / 7th of december	First class in Phelma Minatec Z404	
Optics for biological systems	Thursday 3.15pm-4.45pm	Thursday 16th of September / december	Phitem	
Biomaterials and bio-compatible surfaces engineering	Friday 10.30am-12.30am (Friday 8.15am-10.15am: 19/11, 26/11 and 03/12)	Friday 24th of September / 17th of December	Phelma Minatec A103	
Cell signaling and cancer biology	21/09 (8h15-12.15), 28/09 (8.15-12.15), 12/10 (10.15-12.15)	21st of September / 12th of october	Phelma Minatec Z404	
Fundamental of structural biology	Monday 1.30pm-3pm	Monday 6th of september / december	Phitem A105	
Machine statistical learning	16/09 (10.15am-12.15pm), 27/09 (8.15am-10.15am), 30/09 (10.15am-12.15pm), 21/10 (10.30am-12.30am), 28/10 (10.30am-12.30pm), 19/11 (10.30am-12.30pm), 19/11 (10.30am-12.30pm), 03/12 (10.30am-12.30pm)	Thursday 16th of September / 3rd of december	First class in Phelma Minatec M253 (informatic room)	
Molecular markers for medical imaging	Wednesday 15th of September (3.30pm-5.30pm), Monday 20th of September (8am-10am), Wednesday 20th of october (1.30pm-5.45pm), 10th of November (3.45pm-5.45pm)	Wednesday 15th of september / december	Phelma Minatec Z208	
Nanopores and membrane technologies	Monday 5pm-6.30pm	Monday 13th of September / 10th of January	Phitem: room D109	
Characterization of biomolecular interactions at surfaces	Monday 3.15pm-4.45pm	Monday 13th of September / 13th of December	Phitem: room D216	
Research Training	Monday 8am-12am & Friday 1pm-5pm	Monday 11th of October / Friday 17th of December	Practical or Research in Laboratories	

# In green courses which start WEEK OF SEPTEMBER 6TH (all Toledo elective courses are listed in the next page)

Online timetable ADE UGA (choose M2 Bionanotechnology-EMM-Nano+)

(click on the link above for september or use your Leo portal with agalan login)

Online timetable ADE Grenoble INP (choose Phelma/3a/3a\_phelma\_biomed\_nanobio)

# Nanobiotechnology 2<sup>nd</sup> year EMM Nano 2020-2021: Elective courses from QNS & Nanochemistry tracks



### Free choice among the full list but check timetable compatibility

	Regular course slots	Start date / End date	Location	Eventual extra course slots or practicals
Pi conjugated and Conducting Polymers	Monday 8.30am 12pm	Monday 6th of September / 25th of October	UFR Nanochemistry:room 205B	
Nanocomposites	Tuesday 8am-10am	Tuesday 7th of september / 30th of November	Green-Er: room 2D-014	
Advanced Functional Nanomaterials	Wednesday 8am-10am (8 slots + practicals)	Wednesday 8th of september / 27th of october	Phitem: room D111	8h of practicals
Functional Nanoparticles	Wednesday 10.15am-12.15am (12 slots)	Wednesday 8th of september / 22nd of November	Phitem: room D111	
Molecular nanomaterials: C Train	Tuesday 10.15am-12.15am (11 slots)	Tuesday 7th of september / 14th of december	Green-Er: room 2D-014	4h of practicals
Molecular nanomaterials: J. Chauvin	Thursday 3.15pm-5.15pm	Thursday 9th of September / 2nd of December	Phitem: A118	
Nanomaterials and energy	Thursday 9.45am-11.15am (13 slots)	Thursday 9th of September / 16th of december	Maison des Magistères: Mag amphitheater	Wednesday 15th/22nd/29th of september (3.15pm-4.45pm
Advanced characterization techniques for nanostructures	Monday 3.15pm-4.45pm (14 slots)	Monday 6th of September / 13th of december	Phitem: room A103	Friday 10/09, 17/09 (10.15am-11.45am)
Advanced semiconductor devices:T Ernst	Monday 1.30pm-3pm (8 slots)	Monday 6th of September / 25th of october	Phitem: room A103	
Advanced semiconductor devices: G. Jacopin	Monday (22/11,29/11,06/12,13/12), 1.30pm-3pm	Monday 22th of November / 13th of december	Phitem: room A103	
Advanced semiconductor devices:practicals	Wednesday 05/01, Thursday 06/01, Friday 07/01	First week of January	CIME-Nanotech&Neel Institute	
Elaboration of nanostructures / Physics of 2D materials	Thursday 8am-9.30am (13 slots)	Thursday 9th of September / 16th of december	Maison des Magistères: Mag amphitheater	Wednesday 15th/22nd/29th of september (1.30pm-3pm)
Microwaves and cryoelectronics	Monday 3.45pm-5.45pm (12 slots)	Monday 6th of September / 13th of december	Maison des Magistères: room Mag 1	
Nanomagnetism and spintronics	Thursday 1.30pm 3pm (13 slots)	Monday 6th of September /13th of december	Maison des Magistères: Mag amphitheater	Monday 13th, 20th, 27th of september (8am 9.30am)
Quantum condensed matter	Tuesday 10.30am-12.30am (12 slots)	Tuesday 14th of september / 21th of december	Green-Er: room 2D-010	
Solid State Qbits	Thursday 3.15pm-5.15pm (12 slots)	Thursday 9th of september / 16th of december	Maison des Magistères: Mag amphitheater	
Thematic and interdisciplinary projects: IBM Q practicals	Tuesday (28/09, 12/10, 26/10, 16/11, 30/11) 3.30pm 5.30pm	Tuesday 28th of September / 30th of November	Maison des Magistères: room Mag 1	
Thematic and interdisciplinary projects: Modeling	Friday 8am 10am (12 slots)	Friday 24th of September / 10th of december	Phitem: room D207	
Thematic and interdisciplinary projects: seminars	Tuesday 1.30pm 3.30pm	Tuesday 7th of September / 14th of december	Neel institute: room D420	
Nanophotonics-Plasmonics	Wednesday 10.15am-12.15am (12 slots)	Wednesday 8th of september / 8th of december	Phitem: room A118	
Open quantum systems	Wednesday 8am-10am (12 slots)	Wednesday 8th of september / 15th of december	Phitem: room A118	
Quantum algorithms	Monday 10.15am 12.15am (12 slots)	Monday 6th of September / 13th of december	Maison des Magistères: Mag amphitheater	
Quantum optics	Tuesday 8am-10am (12 slots)	Tuesday 14th of september / 21th of december	Green-Er: room 2D-010	
-Microfluidies	Monday 10.15am 12.15am	<del>September</del>	<del>Phitem</del>	
-Active Matter	Tuesday 4pm 5.30pm	Tuesday 7th of september / 14th of december	Phitem: room D109	

Online timetable ADE UGA (choose one of EMM Nano tracks)

(click on the link above for september or use your Leo portal with agalan login)

In red elective courses in conflict with a mandatory course

# Nanochemistry 2<sup>nd</sup> year EMM Nano Master 2 program 2020-2021

- 1st Semester: 5 compulsory specializing courses 15 ECTS (in green)
  - + 15 ECTS broadening courses (more if you need more than 30 ECTS)

Mandatory courses				
	Regular course slots	Start date / End date	Location	Eventual extra course slots
Advanced Functional Nanomaterials	Wednesday 8am-10am (8 slots + practicals)	Wednesday 8th of september / 27th of october	Phitem: room D111	8h of practicals: time table ?
Functional Nanoparticles	Wednesday 10.15am-12.15am (12 slots)	Wednesday 8th of september / 22nd of November	Phitem: room D111	
Molecular nanomaterials: C Train	Tuesday 10.15am-12.15am (11 slots)	Tuesday 7th of september / 14th of december	Green-Er: room 2D-014	4h of practicals: time table ?
Molecular nanomaterials: J. Chauvin	Thursday 3.15pm-5.15pm	Thursday 9th of September / 2nd of December	Phitem: A118	
Nano-safety	Thursday 1.30pm-3pm	Thursday 9th of September / 16th of December	Phitem: room A117	
Recommended elective courses				
Pi-conjugated and Conducting Polymers	Monday 8.30am-12pm	Monday 6th of September / 25th of October	UFR Nanochemistry:room 205B	
Nanocomposites	Tuesday 8am-10am	Tuesday 7th of september / 30th of November	Green-Er: room 2D-014	
Surface Functionalisation	Tuesday 3.45pm-5.45pm	Tuesday 14th of September / 30th of November	Green-Er: room 2D-014 or 2D-013	
Nanopores and membrane technologies	Monday 5pm-6.30pm	Monday 13th of September / 10th of January	Phitem: room D109	
Characterization of biomolecular interactions at surfaces	Monday 3.15pm-4.45pm	Monday 13th of September / 13th of December	Phitem: room D216	
Bio-molecular interactions: methods and applications	Tuesday 1.30pm-3.30pm	Tuesday 14th of September / 14th of December	Green-Er: room 2D-014 or 2D-013	4h of practicals
Research Training	Monday 8am-12am & Friday 1pm-5pm	Monday 11th of October / Friday 17th of December	Practical or Research in Laboratories	
Advanced characterization techniques for nanostructures	Monday 3.15pm-4.45pm (14 slots)	Monday 6th of September / 13th of december	Phitem: room A103	Friday 10/09, 17/09 (10.15am-11.45am)
Advanced semiconductor devices:T Ernst	Monday 1.30pm-3pm (8 slots)	Monday 6th of September / 25th of october	Phitem: room A103	
Advanced semiconductor devices: G. Jacopin	Monday (22/11,29/11,06/12,13/12), 1.30pm-3pm	Monday 22th of November / 13th of december	Phitem: room A103	
Advanced semiconductor devices:practicals	Wednesday 05/01, Thursday 06/01, Friday 07/01	First week of January	CIME-Nanotech&Neel Institute	
Elaboration of nanostructures / Physics of 2D materials	Thursday 8am-9.30am (13 slots)	Thursday 9th of September / 16th of december	Maison des Magistères: Mag amphitheater	Wednesday 15th/22nd/29th of september (1.30pm-3pm)
Nanomaterials and energy	Thursday 9.45am-11.15am (13 slots)	Thursday 9th of September / 16th of december	Maison des Magistères: Mag amphitheater	Wednesday 15th/22nd/29th of september (3.15pm-4.45pm)
From Nanofabrication in research labs to VLSI	Wednesday 1.30pm-5.15pm (8 slots)	Wednesday 6th of october / 15th of december	Phitem: north amphitheater	

In green courses which start WEEK OF SEPTEMBER 6TH (all Toledo elective courses are listed in the next page)

Online timetable ADE UGA (choose M2 Nanochemistry-EMM-Nano+)

(click on the link above for september or use your Leo portal with agalan login)

# Nanochemistry 2<sup>nd</sup> year EMM Nano 2020-2021: Elective courses from QNS & Bionanotechnology tracks



### Free choice among the full list but check timetable compatibility

	Regular course slots	Start date / End date	Location	Eventual extra course slots
Microwaves and cryoelectronics	Monday 3.45pm-5.45pm (12 slots)	Monday 6th of September / 13th of december	Maison des Magistères: room Mag 1	
Nanomagnetism and spintronics	Thursday 1.30pm 3pm (13 slots)	Monday 6th of September /13th of december	Maison des Magistères: Mag amphitheater	Monday 13th, 20th, 27th of september (8am 9.30am)
Quantum condensed matter	Tuesday 10.30am 12.30am (12 slots)	Tuesday 14th of september / 21th of december	Green Er: room 2D 010	
Solid State Qbits	Thursday 3.15pm 5.15pm (12 slots)	Thursday 9th of september / 16th of december	Maison des Magistères: Mag amphitheater	
Thematic and interdisciplinary projects: IBM-Q practicals	Tuesday (28/09, 12/10, 26/10, 16/11, 30/11) 3.30pm-5.30pm	Tuesday 28th of September / 30th of November	Maison des Magistères: room Mag 1	
Thematic and interdisciplinary projects: Modeling	Friday 8am-10am (12 slots)	Friday 24th of September / 10th of december	Phitem: room D207	
Thematic and interdisciplinary projects: seminars	Tuesday 1.30pm-3.30pm	Tuesday 7th of September / 14th of december	Neel institute: room D420	
Nanophotonics-Plasmonics	Wednesday 10.15am 12.15am (12 slots)	Wednesday 8th of september / 8th of december	Phitem: room A118	
Open quantum systems	Wednesday 8am 10am (12 slots)	Wednesday 8th of september / 15th of december	Phitem: room A118	
Quantum algorithms	Monday 10.15am-12.15am (12 slots)	Monday 6th of September / 13th of december	Maison des Magistères: Mag amphitheater	
Quantum optics	Tuesday 8am-10am (12 slots)	Tuesday 14th of september / 21th of december	Green-Er: room 2D-010	
Active Matter	Tuesday 4pm-5.30pm	Tuesday 7th of september / 14th of december	Phitem: room D109	
Neuroscience	Tuesday 8.15am-10.15am	Tuesday 12th of october / 7th of december	Phelma Minatec Z108	
- <del>Physiology</del>	Tuesday 10.30am 12.30am	Tuesday 14th of september / 7th of december	First class in Phelma Minatec Z404	
-Optics for biological systems	Thursday 3.15pm 4.45pm	Thursday 16th of September / december	Phitem	
	Friday 10.30am-12.30am			
Biomaterials and bio-compatible surfaces engineering	(Friday 8.15am-10.15am: 19/11, 26/11 and 03/12)	Friday 24th of September / 17th of December	Phelma Minatec A103	
Cell signaling and cancer biology	21/09 (8h15-12.15), 28/09 (8.15-12.15), 12/10 (10.15-12.15)	21st of September / 12th of october	Phelma Minatec Z404	
Fundamental of structural biology	Monday 1.30pm-3pm	Monday 6th of september / december	Phitem A105	
	16/09 (10.15am-12.15pm), 27/09 (8.15am-10.15am), 30/09 (10.15am-12.15pm), 21/10 (10.30am-12.30am), 28/10			
Machine statistical learning	(10.30am-12.30pm), 19/11 (10.30am-12.30pm), 19/11 (10.30am-12.30am), 26/11 (10.30am-12.30pm), 03/12 (10.30am-12.30pm)	Thursday 16th of September / 3rd of december	First class in Phelma Minatec M253 (informatic room)	
Molecular markers for medical imaging	Wednesday 15th of September (3.30pm-5.30pm), Monday 20th of September (8am-10am), Wednesday 20th of october (1.30pm-5.45pm), 10th of November (3.45pm-5.45pm)	Wednesday 15th of september / december	Phelma Minatec Z208	
Nanopores and membrane technologies	Monday 5pm-6.30pm	Monday 13th of September / 10th of January	Phitem: room D109	
Characterization of biomolecular interactions at surfaces	Monday 3.15pm-4.45pm	Monday 13th of September / 13th of December	Phitem: room D216	

Online timetable ADE UGA (choose one of EMM Nano tracks)

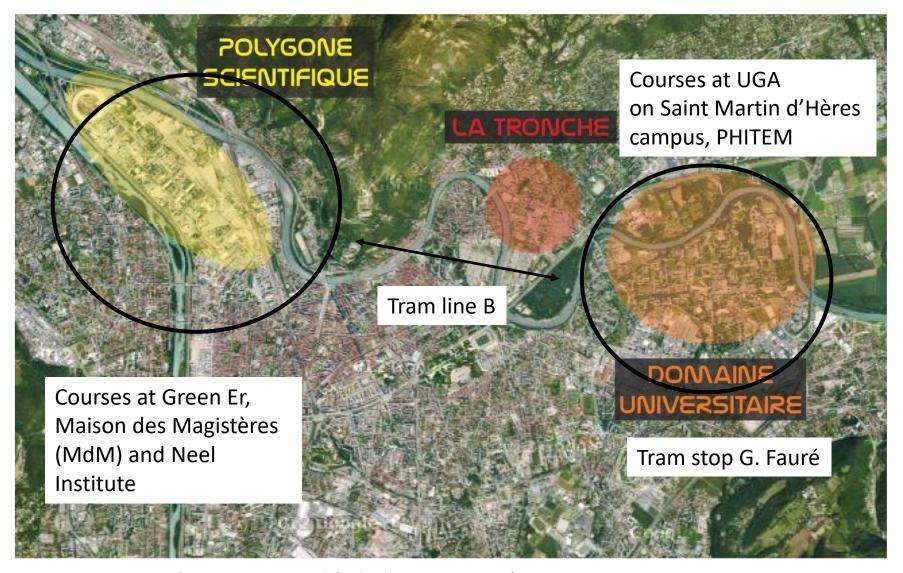
(click on the link above for september or use your Leo portal with agalan login)

In red elective courses in conflict with a mandatory course

# 2<sup>nd</sup> year EMM Nano Master 2 program

- First semester exams: done in december an in January (red boxes to appear in ADE online agenda).
- **EMM Nano passing rules**: score to each exam should be larger than 10/20 in order to get ECTS credits.
- 2<sup>nd</sup> session exams organized in from April to May 2022.
- Master internship possible from 15th of February until end of August (4 months minimum, 6 months maximum).
- Master thesis defense (30 ECTS) possible either at the end of June or at the end of August (free choice of student decided in March).

### 4 different campus sites in Grenoble

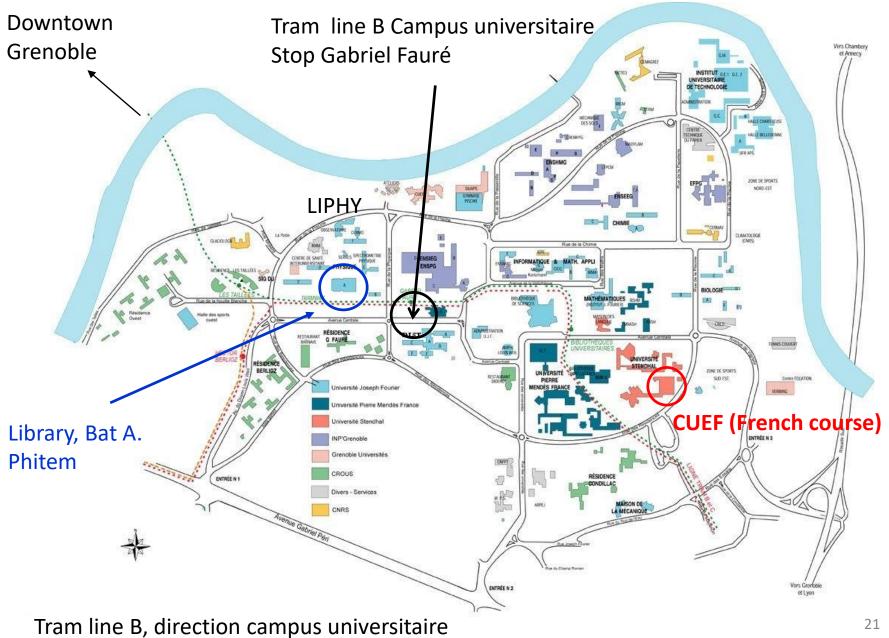


Tram stop: Lycée international (Phelma, Minatec)

Marie Louise Paris (Green Er, CEA entrance)

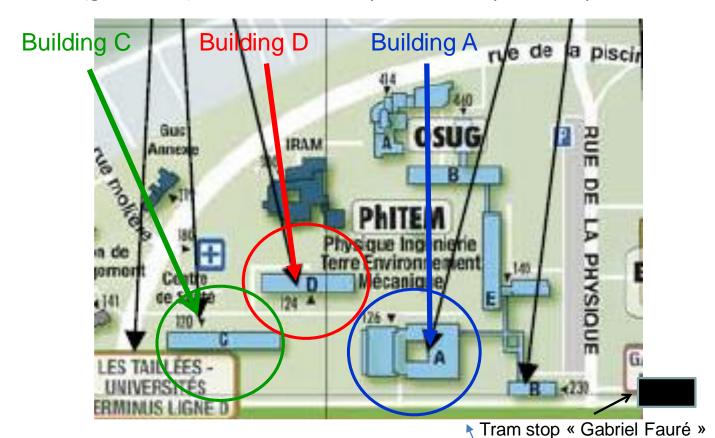
Last stop Oxford (Neel Institute or Maison des Magistères)

## UGA Campus map, Saint Martin d'Hères



#### **PHITEM buildings on UGA campus**

Tram line B (green line) towards « Gières plaines des sports, stop CEA G. Fauré



Lost: contact Mrs Dounia Moukadem

dounia.moukadem@univ-grenoble-alpes.fr 04 76 51 48 23, office A108 (1st floor) Intermezzo CROUS restaurant on the other side of the tram line

#### **GREEN-ER BUILDING**

**Green Er** building (**GR** in the timetable), 21 Avenue des Martyrs, Grenoble Tram line B (green line) towards « Oxford, stop Marie Louise Paris »



UGA lecture rooms: 2<sup>nd</sup> floor, take the lift on the right after the entrance

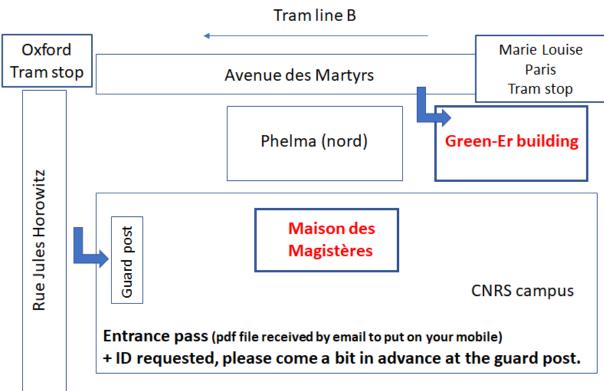
Lost: contact: caroline Ben Rabey, caroline.benrabeh@univ-grenoble-alpes.fr 04 56 52 98 95, office 2-D002

(CROUS restaurant Located in ground floor of the building)

### Maison des Magistères (MdM) on CNRS campus (same campus as Neel institute)



Wearing a mask is mandatory inside and outside the buildings of CNRS campus (Maison des Magistères)



## Phelma Minatec (bionanotechnology track)

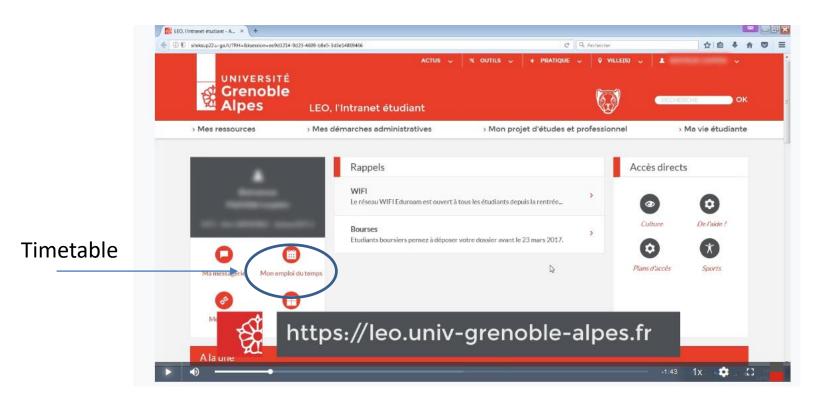
Some Nano-biotechnology courses at Phelma Minatec, 3 Parvis Louis Néel Grenoble



Tram line B (green one) towards « Oxford » Tram Stop « Cité internationale » (Phelma Rooms noted Mxxx or Zxxx)

#### How do I find the time and location of the courses?

 Online timetable (called ADE) available on the leo student portal: <a href="https://leo.univ-grenoble-alpes.fr">https://leo.univ-grenoble-alpes.fr</a>



#### Direct access:

https://leo.univ-grenoble-alpes.fr/emploi-du-temps-213405.kjsp?RH=8631794101180600&ksession=7a492942-b1e7-4c81-8888-b5e502760a08

# Valid for Quantum and NS scale engin and Nanochemistry specialties For Bionanotechnology specialty: wait for a message from J. Geiselmann

• Select on the right menu (english): Trainee, Phitem, Master 2, Master 2, and your track

