# International Mobility
# Academic year 2023-2024

***1. general description***

The Internship in Photonics focuses on industrial and/or research engineering training of the student in a company or research institute in/outside of Belgium. Students can take a 5 ects and/or a 10 ects internship in the model learning track. He/she spends a period of at least 5 and/or 10 weeks respectively (preferably during the summer holidays between MA1 & MA2 or after MA2) in a company or research institute as a trainee with the objective of gaining practical experience in a research-related and/or industrial work environment.

The training entity supervisor will assign a wide range of tasks to the trainee to broaden the student's experience and horizon. In a hands-on way, the student thus familiarizes with the company's task chain and will acquire the necessary knowledge and technical skills needed to successfully accomplish a variety of tasks as is expected from a young engineer:

- apply and implement basic concepts of photonics, microphotonics, optical materials, physics of semiconductor technologies and devices, optical sensors, optical communication systems and photonic innovation
- analyse problems and implement solutions
- develop social, commercial and communication skills in an international business/research environment
- learn to collaborate in a culturally diverse team
- perform the tasks at hand in a reliable and autonomous way
- show initiative and independence: pose questions, see opportunities, present solutions

The subject of the training needs to be related to photonics and will be determined together with the internship responsible of the Photonics MSc programme and the training entity supervisor.

***2. Interested? Follow the steps below to start your internship journey!***

**Step 1**: **Info session – NOV 2023**

Attend the info session on Thursday 9/Nov, 15h30, room F.9.57

**Step 2**: **Individual discussion after January exams – JAN 2024**

Questions to prepare:
-internship or exchange?
-long or short internship?
-research area?

*Write down a list of topics and companies/institutions you are interested in order of preference.*

**Step 3: Decided where and when you want to go? - FEB-APR 2024**

We will make the 1st contact on the student's behalf.
If the host company/institutions accepts, we bring you in touch with them to finetune the topic and finalize the internship conditions.

**Step 4: Request an internship - APR-JUNE 2024**

This is a Faculty administrative step, it is to register your internship academically and get official approval to implement it in your curriculum. It is *unrelated* to the ERASMUS INTENSHIP GRANT APPLICATION = separate procedure.

> ***Request form*** – deadline 31 May 2024
> ***Internship agreement*** – deadline 15 June 2024

**Step 5: All set to go - JULY-SEP 2024**

Once you have a signed internship agreement (by all parties) you can make the necessary arrangements (accommodation, travel, …). This is the students responsibility, the university does not assist in this part.

**Step 6: Updates + Internship report + presentation - SEP 2024**

As soon as you have started your journey you will receive an email from prof. Ottevaere with detailed instructions about the evaluation: report submission + final presentation. In addition you will also be expected to submit regular updates during the internship (see 7. practical guidelines).

***3. requirements***

- students are allowed to do an Internship in Photonics if they have already successfully accomplished 50 ECTS of the Master of Science in Photonics programme
- the research performed within the scope of the Internship in Photonics must be different from the Master Thesis Project research topic

***4. competences***

- Project planning: ability to formulate objectives, report efficiently, keep track of end-goals and progress of the project
  Ability to work in a team in a multi-disciplinary working-environment
  Report on technical or scientific subjects orally, in writing and in graphics
- Act in an ethical, professional and social way
  Show perseverance, drive for innovation and look for opportunity to create added value
- Master and apply advanced knowledge in the own field of engineering in case of complex problems
  Select and apply the proper models, methods and techniques
  Analyse own results and results of others in an objective manner
- Flexibility to adapt to changing professional circumstances
  Master the complexity of technical systems by the use of system- and process-models Transform incomplete, contradictory or redundant data into useful information Insight in and awareness of the importance of entrepreneurship in society

***5. add your internship to your curriculum***

Depending on their personal track students should add the internships to their curriculum as if it was a regular course.

Short Internship in Photonics:

- *SEM 1/3 - course code 4023550ENR*
- *SEM 2/4 - course code 4023551ENR*

Long Internship in Photonics:

- *SEM1/3 - course code 4023546ENR*
- *SEM2/4 - course code 4023547ENR*

*Please contact Majorie Jammaers for exact enrolment instructions as soon as the internship(s) plan has been decided: majorie.jammaers@vub.be .*

***6. practical guidelines***

In order to get credits for the Internships in Photonics, a written report should be submitted to the academic coordinator (heidi.ottevaere@vub.be). The exact deadline, size and format of the report will be communicated in due time. Please also provide a copy of the report to the supervisor(s) of the company/research institute.

In addition an oral presentation will be scheduled shortly after the submission of the report depending upon the availability of all participants (student and academic supervisor). This oral presentation is only for students who followed the 10 ECTS version of the internship.

Finally a monthly update should be given via email to Prof. Ottevaere summarizing the progress of the work as well indicating possible problems.

The report has to include a description of the company/institution where the student completed the internship, as well the specific tasks that needed to be done.
The following elements should be included:

- Description of the department of the company/institution where the work has been done
- Technical description of the work done (main part)
- Observations of social and/or human kind
- Conclusions with emphasis on how the internship has given added value to your education

The evaluation of the internship will be based on the feedback received from internship supervisor(s) as well as on the written report and the oral presentation (only for 10 ects version).

The written report and oral presentation (only for 10 ects version) will be treated in a confidential way as in all cases an internship agreement has been signed covering intellectual property.

***contact***

Academic coordinator for Internship in Photonics: prof. Heidi Ottevaere, heidi.ottevaere@vub.

Photonics Programme Officer:
Majorie Jammaers, majorie.jammaers@vub.be

Faculty webpage on internships: https://www.vub.be/en/studying-vub/all-study-programmes-vub/personal-development-during-your-studies/do-internship#paragraph-70156

***NOTE:***

1. ***The info above relates to internships inside the EU. In case you are considering an internship outside of the EU all steps need to be completed before 15 DECEMBER 2023.***
2. ***If you are a 2nd master student and you want to do a long internship in the summer after year 2 you MUST defend your master thesis before you start an internship, i.e. defend in JUNE 2024. If you postpone your defense you will not be allowed to do an internship.***
3. ***The Photonics Internships are unrelated to the BRUFACE internships.***