INTERNATIONAL INTERNSHIP IN PHOTONICS
GUIDELINES

1. General description

The International Internship in Photonics focuses on the industrial and/or research engineering training of the student. This internship is a 10 ECTS internship in the 2nd year of the model learning track. The student spends a period of at least 10 weeks (preferably during the summer holidays between MSc1 & MSc2 or after MSc2) in a company or research institute outside of Belgium as a trainee with the objective of gaining practical experience in an international context.

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 promotor and the training entity supervisor.

2. Application

Students who are interested in the International Internship in Photonics need to contact prof. Heidi Ottevaere: heidi.ottevaere@vub.be.

3. Requirements

- registration for the International Internship in Photonics is allowed if one has already successfully accomplished 45 ECTS of the European Master of Science in Photonics programme
- the research performed within the scope of the International Internship in Photonics must be different from the Master Thesis Project research topic

4. General Timeline

- between Febr 10th & Febr 20th: individual meeting to discuss internship options and get final approval
- deadline application Erasmus Grant: 17 February
- deadline registration at Faculty: 31st May
- deadline finalize contract: 15th June

5. 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

6. Academic Registration

Students can do the internship during the summer after Master year 1 (MA1) or during the summer after Master year 2 (MA2):

A. International internship in the summer after Master year 1 (MA1):

- The student can do the internship in the summer after MA1 but the official course registration will be done in the first semester of the MA2 curriculum
- The internship can start immediately after the June-July deliberation of MA1 & should end before the start of MA2
- The credits will be recorded in the January session of MA2

B. International internship in the summer after Master year 2 (MA2):

- The student can do the internship in the summer of Master year but the official course registration must be done in the first semester of the MA2 curriculum, this means prior to the internship
- The internship can start immediately after the June-July deliberation of MA2 & should be finished before the end of the SEPT exam session of MA2
- The credits will be recorded in the SEPT session of MA2

7. Practical guidelines

In order to get 10ECTS credits for the course "International Internship in Photonics", a written report should be submitted to the academic coordinator via email to heidi.ottevaere@vub.be. The exact deadline will be communicated in due time. The size of the report should range between 20 and 30 pages (excl. annexes), in a 10/12 font and single space, no specific template should be used. The report can be submitted to Prof. Ottevaere via email. Please provide your local supervisor(s) of the company/research institute also a copy of the report.

In addition an oral presentation (20 minutes) will be scheduled (virtual) shortly after the submission of the report depending upon the availability of all participants (student, industry/institute supervisor and academic supervisor).

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.

The written report and oral presentation will be treated in a confidential way as in all cases an internship agreement has been signed covering intellectual property.

8. Contact

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

Photonics admin & programme officer: Majorie Jammaers, majorie.jammaers@vub.be

Faculty webpage on internships: https://student.vub.be/en/ir#internship