



## The student engineer at the heart of the company

The scientific and practical training delivered at ECPM allows our students to quickly get involved in your teams and projects. The 3 mandatory internships from 1.5 to 6 months are the basis of our teaching through experimentation.



### INDUSTRIAL TESTIMONIALS

Alan Logeat, (group leader)  
ROBERT BOSCH GMBH

« For Bosch, hosting trainees of the ECPM, it is the ability to increase its pool of recruits for the future. We choose them for their advanced skills in the field of materials and polymers, their flexibility and their ability to work in an independent way. In exchange, we let's give them a way to work systematically (how to enhance a scientific field with the help of a concise report), tour to the client (by establishing a requirements that meet to his expectations). It is therefore a win-win relationship. »



### WORKER OR TECHNICIAN INTERNSHIP

**1<sup>st</sup> year of chemical engineering curriculum (master's level) : gain first experience in the industry.**

The 1<sup>st</sup> year trainee may be assigned a position as a technician in production, quality control or R&D laboratory. At the end of the internship, the student must write a descriptive report.

#### TRAINEE'S SKILLS

The student knows and applies safety instructions and regulations, develop interpersonal skills and the ability to work within a team and an organization.

He/she puts into practice his/her basic scientific knowledge in chemistry and technical skills in chemical and physico-chemical characterization methods.

#### TASK OF THE COMPANY

The company must give the trainee the opportunity to understand its organisation and management methods, to identify the relationships between its different departments and activities. It must enable him/her to understand, through the holding of a position, the place of quality and safety in the operation of the company.

#### SCHEDULE

- Shortest Internship duration: 6 weeks
- Internship period: Mid-June to end of August
- Bidding period: March to mid-June

### THE ENGINEERING INTERNSHIP\*

**2<sup>nd</sup> year of chemical engineering curriculum (master's level) : assist an engineer in their daily work.**

The 2<sup>nd</sup> year trainee is able to carry out a technical or technological study under the supervision of their internship tutor.

#### TRAINEE'S SKILLS

The student is able to integrate the different components of a project and to formulate the objectives. They know how to analyze a problem, establish a protocol, design an experimental plan and apply autonomously their scientific and technical knowledge.

He/she is able to synthesize scientific and technical data, to formulate proposals and arguments taking into account in particular environmental and societal issues.

#### TASK OF THE COMPANY

The company have to integrate the trainee into a product design process so that he or she could apprehend the different parts of the project and participate in the follow-up and decision meetings. At the end of the internship they will present the results of his work.

#### SCHEDULE

- Duration of the internship: 17 weeks
- Internship period: Mid-April to end of August
- Bidding period: October to end of March

### THE END-OF-STUDIES INTERNSHIP

**3<sup>rd</sup> year of chemical engineering curriculum (master's level) : apply a scientific approach to an industrial issue.**

Within an R&D laboratory, the trainee solves a technological or scientific problem on his/her own. They must write and defend their master thesis.

#### TRAINEE'S SKILLS

The student develops a critical sense and is able to recommend responsible solutions by selecting the necessary scientific and technical skills. They demonstrate method, organization and responsibility in project management with the ability to integrate into a multicultural team. He/she knows how to work autonomously, be creative and make proposals to bring innovation projects to a successful conclusion.

#### TASK OF THE COMPANY

The company have to propose a technological development project in autonomy, carried out independently by the trainee. The student should be involved in the company's innovation processes and participate in intercultural exchange situations.

#### SCHEDULE

- Duration of the internship: 22 weeks
- The internship period: February to end of August
- Bidding period: Sept to end of December

\*May be an extension of an industrial mission (see Student-company projects sheet)



## INDUSTRIAL TESTIMONIALS

Christophe Henry,  
(material scientist)

### L&L PRODUCTS

« We have near our site qualified students that can help us to learn more about our products, to develop new techniques because they have the availability we have not in our daily lives. We recruit students from ECPM for their knowledge polymers and techniques of analytical chemistry. Within our company, they develop their management skills project (respect of deadlines, arbitration of priorities). They discover the interaction with the other players in the factory, the organization of a company, the exchange with other actors industry (suppliers, clients). »

## SOME EXAMPLES OF INTERNSHIPS

The engineering-level internship and the end-of-study R&D internship are carried out on a subject in line with the scientific themes of the major followed by the student :

**Chemistry & Artificial Intelligence (AI), Molecular Chemistry, Polymer Engineering, Functional Materials & Nanosciences and Analytical Sciences.**

### TECHNICIAN-LEVEL INTERNSHIP (BACHELOR)

- Reception/preparation of orders and stock management.
- Preparations of water samples chromatographic analysis.
- Worker internship in production of truck tyres.

### ENGINEER-LEVEL INTERNSHIP (BACHELOR + 1 YEAR)

- Design of new energy storage devices construction and measures of performances.
- Identification and development of a new polymer generation for hair mousse.
- Analysis of samples by TLC, HPLC chromatography, GC-MS and CFS.

### END-OF-STUDY R&D INTERNSHIP (MASTER LEVEL)

- New methods of synthesis and purification of macrocyclic or peptidomimetics compounds or for biological screening tests.
- Development of at-the-gate sensors for measuring asparagine in flour.
- Synthesis and evaluation of new bio-based polymer resins.
- Development of new composite electrode materials based on metal oxides for supercapacitors.

## CALENDAR

	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
1 <sup>ST</sup> YEAR						INTERNSHIP OFFER SUBMISSION PERIOD					TECHNICIAN-LEVEL INTERNSHIP		
2 <sup>ND</sup> YEAR		INTERNSHIP OFFER SUBMISSION PERIOD								ENGINEERING INTERNSHIP			
3 <sup>RD</sup> YEAR	INTERNSHIP OFFER SUBMISSION PERIOD						END-OF-STUDY R&D INTERNSHIP						

## YOUR CONTACTS

### CORPORATE RELATIONSHIP MANAGER

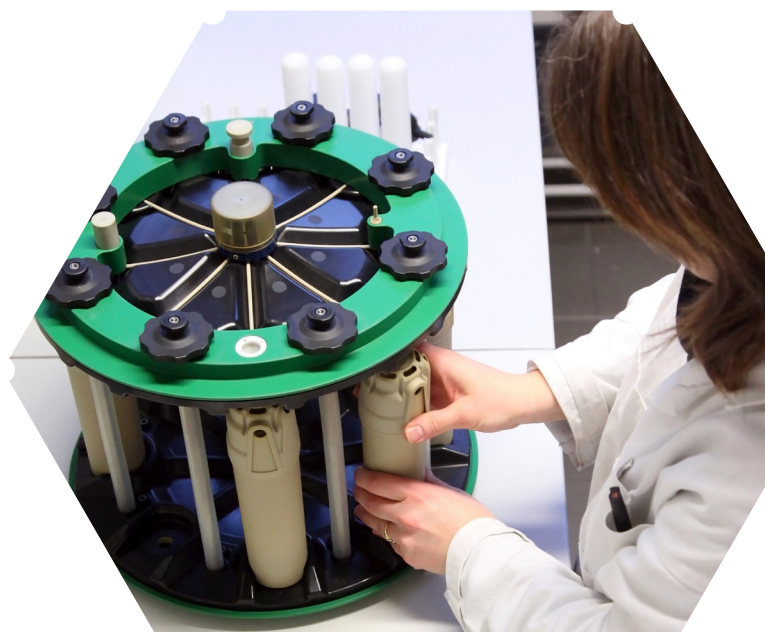
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