Mid-Term Internship Evaluation Form

Note: Throughout this document, the masculine gender is used generically to refer to any person, regardless of their gender.

Student: Last Name: ..... First Name: ..... Year - Spec: **4th year Materials**

Host Organization: ..... **Internship Dates**: ..... to .....

Supervisor: ..... Email: .....

Dept. / Position: ..... Phone: .....

Academic Advisor: ..... Email: ..... Phone: .....

Internship Subject: .....

POLYTECH LYON
Service des Stages
Phone: +33 (0)4 72 43 17 77
entreprise@polytech-lyon.fr

This evaluation form is based on the **Competency-Based Approach**, a framework designed to assess the future engineer's ability to act effectively in professional situations. You will be asked to evaluate the student's proficiency level in ***Competencies***, defined as "a complex ability to act, drawing upon and combining various forms of knowledge, practical skills, and personal qualities to propose and implement a relevant and efficient solution to encountered situations within a given context". These competencies are structured within a framework known as the ***Competency Framework***. For the Materials specialization at Polytech Lyon, this framework comprises **4 Competencies** representative of a Materials Engineer's activities. This internship provides the student with the opportunity to develop and apply **one (or more) of these competencies**. The evaluation of each Competency hinges on two main axes: on one hand, its ***Key Components***, which are the specific criteria describing the quality of the expected action; and on the other hand, the ***Key Learnings***, which are necessary for the exercise of the Competency and involve mobilizing multidisciplinary resources of various kinds.

Evaluation Levels for **Competencies** and their Key Components	
Highly Capable	The student demonstrates exceptional mastery of the competency. They act proactively and autonomously in all situations, including the most complex or unforeseen ones, by adapting their approaches. They optimally and justifiably mobilize and combine all adequate knowledge, skills, and attitudes, adhere to all rules and constraints, apply the expected methodological approaches, communicate in an exemplary manner, and produce excellent quality results.
Capable	The student demonstrates full mastery of the competency. They are capable of acting autonomously in given situations by mobilizing and combining adequate resources (knowledge, practical skills, and attitudes). They adapt their actions, adhere to rules and constraints, utilize relevant methodological approaches, justify their choices, communicate effectively, and produce results that meet expectations.
Partially Capable	The student is in the process of acquiring the competency. They act in given situations but encounter difficulties in fully and/or adequately mobilizing and combining the necessary knowledge, skills, and attitudes. Significant guidance is still required to adapt their actions to specific situations, adhere to all constraints, or to fully and effectively justify their choices.
Not Capable	The student does not master the competency. They are unable to act in given situations or to mobilize and combine the necessary knowledge, skills, and attitudes. Actions taken do not adhere to constraints, methodological approaches are inappropriate, communication is ineffective, and/or full assistance is required for any accomplishment.

Evaluation Levels for **Key Learnings**	
Acquired	The key learning is fully mastered. The student effectively and autonomously mobilizes all necessary knowledge, skills, and attitudes required to demonstrate the associated competency, including in diverse situations.
In Progress	The key learning is under development. The student is beginning to mobilize the necessary knowledge, skills, and attitudes but still requires significant guidance for full and effective application within the associated competency.
Not Acquired	The key learning has not been demonstrated. The student is unable to mobilize the necessary knowledge, skills, and attitudes to demonstrate the associated competency, or the related action requires full assistance.

***Important Note**: In the following tables, the **key learnings** marked in **grey** correspond to the 5th-year internship level. However, for this 4th-year internship, they may be included in the assessment if they were **significantly mobilized** within the scope of the assigned tasks.*

↓ *Check this box if the competency has been mobilized during the internship*		Supervisor Evaluation				Student Self-Evaluation			
		Highly Capable	Capable	Partially Capable	Not Capable	Highly Capable	Capable	Partially Capable	Not Capable
	Competency **C1**: **Develop** an innovative material or process								
Key Components	… by analyzing stakeholder needs, considering their various technical, economic, and strategic aspects								
	… by leveraging relevant scientific and technical documentation								
	… by complying with applicable regulations (safety, environment) and technical standards of the domain								
	… by integrating environmental considerations, as well as lifecycle and recyclability aspects								
	… by ensuring rigorous quality management (validation of methodologies, compliance with standards and testing conditions, verification of uncertainties and repeatability, etc.)								
	… by documenting their actions and results concisely and adaptively for stakeholders								

Key Learnings for Competency **C1** ↓ *Check the boxes corresponding to the key learnings mobilized during the internship*		Acquired	In Progress	Not Acquired	Acquired	In Progress	Not Acquired
	Implement material elaboration processes, in bulk or on surface, at the laboratory scale						
	Implement material property measurement and characterization techniques, in bulk or on surface						
	Define an experimental protocol for elaboration or characterization						
	Use simple physical models to predict the behavior of a material or process						
	Analyze experimental or simulation results using quantitative tools (statistics, graphs, etc.)						
	Analyze methodically the interdependence between elaboration process parameters, material structure, and resulting properties, based on data from theoretical and experimental approaches						
	Use advanced modeling and simulation tools (numerical, multiphysics, multi-constituent, multi-scale, etc.) to analyze the influence of material characteristics on its behavior and properties						
	Design a plan of experiments (DoE) to quantify the effect of several material elaboration or structure parameters on its properties						
	Define the parameters of the material or process to be developed, in response to the need and based on conducted analyses						
	Prepare a review of the current state-of-the-art						
	Identify innovation or improvement opportunities for existing materials or processes based on available data						
	Evaluate the benefits and limitations of identified innovation opportunities, considering technical, economic, or environmental criteria						
	Develop a methodology integrating experiments and modeling to evaluate an innovative solution						

Comments

↓ *Check this box if the competency has been mobilized during the internship*		Supervisor Evaluation				Student Self-Evaluation			
		Highly Capable	Capable	Partially Capable	Not Capable	Highly Capable	Capable	Partially Capable	Not Capable
	Competency **C2: Design** a technical solution integrating materials								
Key Components	… by considering client needs and the technical, economic, and strategic requirements of the project								
	… by adopting an integrated approach based on product - manufacturing process - material interactions								
	… by complying with applicable regulations (safety, environment) and technical standards of the domain								
	… by considering existing solutions, expertise, and constraints of other actors involved in the project								
	… by integrating eco-design and sustainable development principles								
	… by rigorously justifying technical choices made								
	… by documenting their actions and results concisely and adaptively for internal (project team, management) or external (clients, partners) stakeholders								

Key Learnings for Competency **C2** ↓ *Check the boxes corresponding to the key learnings mobilized during the internship*		Acquired	In Progress	Not Acquired	Acquired	In Progress	Not Acquired
	Identify key material properties for a given function						
	Create 3D models and technical drawings of a part or assembly using Computer-Aided Design (CAD) software						
	Pre-dimension a solution using simple physical models						
	Define or implement testing protocols, standardized or not, to characterize or validate the properties of a component or product						
	Select or implement prototyping techniques						
	Select materials, formulations, and treatments (in bulk and on surface)						
	Design a part or sub-assembly						
	Model and simulate the behavior of a part or system under solicitations (mechanical, thermal, chemical, etc.)						
	Identify manufacturing and shaping processes adapted to the designed solution						
	Collaborate within a design team in an active and structured manner						
	Prepare technical specifications						
	Conduct technology and industrial property monitoring						
	Specify surface and interface properties for the integration of the technical solution into its environment						
	Conduct an optimization approach (performance, cost, or other criteria) based on tests and/or simulations						
	Ensure liaison and coordination with the various project stakeholders						

Comments

↓ *Check this box if the competency has been mobilized during the internship*		**Supervisor Evaluation**				**Student Self-Evaluation**			
		Highly Capable	Capable	Partially Capable	Not Capable	Highly Capable	Capable	Partially Capable	Not Capable
	Competency **C3: Industrialize** the production or transformation of materials								
Key Components	… by considering client needs in their technical, economic, and strategic dimensions								
	… by integrating the process-structure-property interdependence								
	… by integrating performance objectives in terms of cost, quality, and time								
	… by ensuring rigorous quality management (development of operating procedures, specifications, implementation of controls, etc.)								
	… by complying with safety and environmental regulations as well as domain-specific standards								
	… by documenting their actions and results concisely and adaptively for stakeholders								

Key Learnings for Competency **C3** ↓ *Check the boxes corresponding to the key learnings mobilized during the internship*		Acquired	In Progress	Not Acquired	Acquired	In Progress	Not Acquired
	Use simple models to determine the operating parameters of a process						
	Select an appropriate production equipment or tooling for process implementation						
	Choose the characteristics of a process based on the material and the final properties of the product to be obtained						
	Identify the physical quantities to measure for process monitoring						
	Evaluate the adequacy of a process based on product characterizations						
	Identify the processes necessary for product manufacturing						
	Sequence the steps of a production process rationally						
	Model and simulate the material transformation during different stages of a production process						
	Specify adequate means and protocols for conformity and quality control						
	Collaborate with the production team to integrate its constraints and feedback						
	Conduct technology and regulatory monitoring in the field of production processes						
	Implement quality and performance indicators for the evaluation of a production process						
	Conduct a parametric study on one or more steps of a production process						
	Implement a global process optimization approach based on tests and/or simulations						
	Collaborate with other departments (R&D, Quality, etc.) to identify and integrate innovations into production processes						
Comments							

↓ *Check this box if the competency has been mobilized during the internship*		**Supervisor Evaluation**				**Student Self-Evaluation**			
		Highly Capable	Capable	Partially Capable	Not Capable	Highly Capable	Capable	Partially Capable	Not Capable
	Competency **C4**: **Manage** a Materials Engineering project								
Key Components	… by analyzing client needs in their various technical, economic, and strategic aspects								
	… by integrating cost, quality, and time objectives through rigorous planning, monitoring, and management of resources and priorities								
	… by complying with regulations (safety, environment) and the legal framework of economic activities								
	… by integrating technical, human, and financial resources coherently								
	… by prioritizing and considering information feedback provided by project stakeholders								
	… by documenting their actions and results concisely and adaptively for stakeholders								

Key Learnings for Competency **C4** ↓ *Check the boxes corresponding to the key learnings mobilized during the internship*	Acquired	In Progress	Not Acquired	Acquired	In Progress	Not Acquired
Identify precisely the objectives, input data, and deliverables						
Develop the detailed schedule of a task						
Manage the utilization of resources (physical, time, human) allocated to the task						
Ensure communication between participants effectively and adaptively to technical and organizational context						
Report on the progress of an individual task to project stakeholders						
Conduct project feedback analysis (achievements, areas for improvement, lessons learned)						
Use project management tools to plan a multi-task and multi-resource project						
Coordinate the project team through adapted management actions						
Report synthetically on the overall progress of the project						
Evaluate potential project risks (technical, financial, regulatory, etc.)						
Identify opportunities and propose a project strategy						
Identify potential partners for a collaborative project						
Research and contribute to securing funding						
Structure a project in line with a defined framework (technical, financial, time, legal) and specific requirements						
Conduct promotional activities (communication, content creation, etc.) to increase project visibility and impact						
Comments						

Professional Attitude and Soft Skills	Satisfactory	Needs Improvement	Comments
Integration and Collaboration – Integration into the team, understanding and embracing the culture and practices of the host organization, contribution to collective goals			
Autonomy and Proactivity – Effective work organization, taking appropriate initiatives, independently seeking information or solutions			
Diligence and Reliability – Punctuality, attendance, adherence to instructions and deadlines, quality of work delivered within their scope			
Communication and Interpersonal Skills – Clarity of expression (written and oral), active listening, adapting communication style to different audiences, politeness and courtesy			

Mid-Term Overall Evaluation		
	A – Exceptional	Performance significantly exceeding expectations. Near-total autonomy, proactivity, and high-impact initiatives. Excellent potential.
	B – Very Satisfactory	Solid and fully satisfactory performance. Effectiveness, good autonomy, and relevant initiatives.
	C – Satisfactory	Performance meeting expectations for this level. Correct work, adequate autonomy, observed progress.
	D – Acceptable	Globally acceptable performance, but requiring more supervision. Autonomy developing.
	E – Passable	Barely sufficient performance. Tasks completed with difficulty or requiring close supervision. Low autonomy.
	F – Insufficient	Clearly insufficient performance. Major difficulties in completing assignments or applying skills, significant deficiencies in know-how or soft skills.

Comment (Mandatory for **A** or **F** rating):

What advice would you give the student for the second half of the internship?

Optional additional observations:

Date:	**Supervisor's Signature**:	**Stamp of the host organization**:	**Please return this form by email to the Academic Advisor by the mid-point of the internship**