# Internship Program for International Students

## Internship Subject Form

<table>
<thead>
<tr>
<th>Name of the Host Laboratory</th>
<th>Management Research Centre (Centre de recherche en gestion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website of the Host Laboratory</td>
<td><a href="https://portail.polytechnique.edu/i3_crg/fr">https://portail.polytechnique.edu/i3_crg/fr</a></td>
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<td>Research Group</td>
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<td>Internship Supervisor</td>
<td>Akil Amiraly</td>
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<tr>
<td>Internship Subject</td>
<td>The socio-economic sustainability of innovative essential service delivery systems in developing countries: The cases of water, energy and electric mobility.</td>
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| Student's level | □ Advanced Undergraduate Students (3rd or 4th year)  
□ Master's students (1st or 2nd year)  
□ PhD students |
| Proposed Duration | □ 3 months  
□ 4 months  
□ 5 months  
□ 6 months |
| Prerequisites | 1) Background: social sciences and/or political sciences, engineering  
2) Exposure to: developing countries’ contexts.  
3) Strong interest and experience on: energy transition issues |
| Internship description (max. 15 lines) | The research project examines the on-going development of leap-frogging technologies that help the delivery of essential services, such as water, electricity and mobility in developing cities. Two cases in India and East Africa will be explored.  
These services are impacted by the discontinuity of the provision of the public services. Such intermittency opens an avenue to private operators proposing alternative services to partially fill the gap between the end-users’ demand and the unreliable public service.  
The research internship aims at analysing the development of these services by looking at two |
perspectives:

1) the operators’ capacity to generate sufficient income to run their activity

2) the end-users’ consumption practices and capacity to pay for the services.

Considering the financial constraints of the low-income households in developing cities, 2 case studies based on the ‘Pay as you go’ model will be studied in 2 countries:

1. Water delivery by E-rickshaws in Delhi and by water kiosk in Bangalore (India)

2. Energy recharge for battery swapping for E-motorcycle taxis in Kampala (Uganda)

The research intends to identify the relationship between the economic sustainability of these initiatives for the operators and their financial inclusiveness for the end-users. Preliminary questions include:

1. How do leapfrogging services help operators to develop their service and help new customers to access and pay for the services?

2. How do new forms of service facilitate or limit service access to sections of society that previously did not have such access?

This research project requires adopting a multidisciplinary perspective mobilizing various fields (political economy, public policy, management).

The intern will develop a research question, work on a related literature review and analyse interviews based on quantitative and qualitative material collected by researchers on the field.

The writing of a working-paper is expected with a publication perspective.
The boxes marked with cross implies eligible