



# SIE Master - 2019/2021



# Summary

1. Grenoble INP
2. SIE Master
3. Student Life
4. Internship
5. Alumni
6. Available - Our Students 2020

# Grenoble INP

Grenoble INP is a recognized public higher education institution and it is part of Grenoble ecosystem;

Grenoble INP and Grenoble Alpes Université formed an alliance and community in higher education and research.

Since January 2020 they work as an unique university sharing the same values: open, diverse, socially and environmentally responsible.

Grenoble INP has the ambitious to be more internationalized and to be involved in large European projects.

The School holds the humongous pleasure in introducing great students not only to Europe but also to the entire world each year.

## Industrial relations

2,200 work placements per year

100 businesses represented on the governing bodies

280 professionals involved in training courses

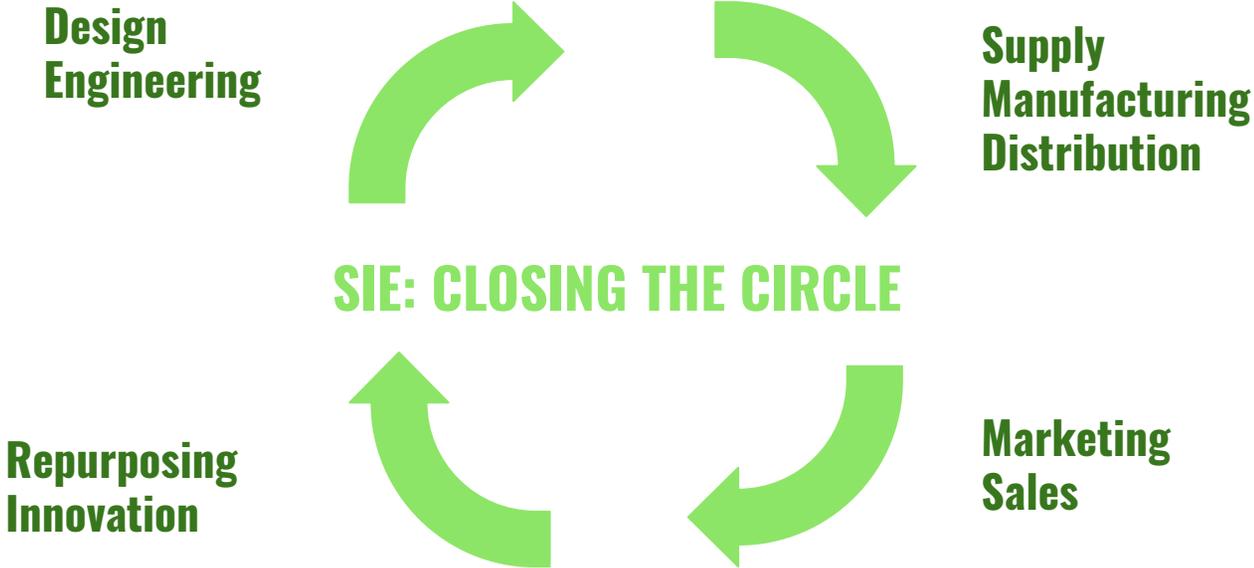
65 students on apprenticeships

IN Partners Grenoble: industrial private partners club



# SIE (Sustainable Industrial Engineering) Master's Degree

Sustainable industrial engineering has myriads of application fields since it encompasses the whole value chain and lifecycle of products: from the development of new and innovative machines, products-services to the market and recyclability.



# Relevant coursework in SIE Master's

## M1

- Economics for engineering
- Production Engineering
- Innovation for sustainability
- Computer science and IT
- Production and Operation Management
- Manufacturing

## M2

- Logistics
- Sustainable Manufacturing
- Marketing for engineering
- Simulation tools for optimisation
- Creativity and Innovative Design

# SUMA EIT - KIC Double Degree Master

These students attend a variety of M1 and M2 courses in SIE.

This aims to give students the complete and big picture of the field of “sustainable materials management” with technical knowledge but also economical, organisational and managerial knowledge.

The SUMA Master programme aims to train tomorrow’s resource engineers in collaborative work in a global world, gathering together some of the best educational programmes in the field of sustainable materials engineering in Europe.

SUMA puts a particular strong focus on innovation, entrepreneurship and leadership and takes a holistic approach to the materials paradigm by exploring circular (eco) design, materials substitution, life cycle engineering and circular economy design, materials processing and recycling, manufacturing and innovation.

# Student life

Student life in Grenoble is very rich and active (Grenoble is classified N°1 for studies in France – Palmarès des villes étudiantes 2013-2014). Students have the opportunity to follow their interest whether it be in sports (leading center for mountain sports), the arts, non-profit organizations, international relations, or yet other options.



# Internship

- Each student will be required to complete an internship either at an industrial firm or in a research laboratory. (France or abroad)
- A written dissertation (**THESIS**) will be required at the end of the training period to be defended in front of a jury.
- Availability: from **1st of February** (Spring Semester)
- Period of internship : **24 - 26 weeks**
- The internship project should be defined previously, so it can be approved by the university
- A **proper established contract will be provided** by the institution to the company.

Supply Chain

Lean  
Management

Environmental  
Impact Reduction

Quality  
Management

Logistics

Product  
Development

Project  
Management

Circular  
Economy

# Alumni

Our previous SIE's students joined internationally recognized industries and companies during their end of study internships.



# Alumni

They trust in us!



**RENAULT**



**CUIISW**

Shenzhen Chuang Xin Wei technology co. LTD



~ndram Fasteners Limited



# Previous internships in our Master

2017:

**Adidas**(ALLEMAGNE)

Product Development- Development Accessories - Sports Style Operations

**HEWLETT PACKARD**(FRANCE)

Analysis, evaluation and improvement of the process and the Information System tool to manage the headcount of EMEA Region in HP

2018:

**KEHLEN** (LUXEMBOURG)

Development of an ion exchange membrane for commercial Redox Flow Batteries

**RENAULT**(FRANCE)

Assistant déploiement d'un outil d'optimisation de stock des concessionnaires

2019:

**Nike**(BELGIQUE)

Goods Flow Planning Internship: Finding a balance between customer satisfaction, capacity, costs, and sustainability is essential. This is done by determining the optimal flow of goods in the supply chain.

**Xing wei Chuang Electronics Company Ltd** (China)

Project Management intern

2020:

**AIRBUS Operations SAS**(FRANCE)

Technical Data digitalisation internship

**G-Scop**(FRANCE)

Optimisation des procédés de production de papiers à forte technicité et valeur ajoutée

# Previous internships in our Master

## **Paulina Ferretiz Mendez STARTANDFAB (France)**

“The objective of the internship was to assess the internal process carried through a product development. Some other activities were to be carried out as part of the integration and application of my capabilities into the company such as prototype development, sourcing, manufacturing files and tooling conception.

These obtained results were the product development process as a layout of the inputs, outputs and activities done in each of the product development stages. This assessment highlighted the importance of data transfer across the team and collaborators, giving an opportunity to improve some internal practices. Some standardizations, built based on best practices done in several industries, were proposed such as folder structure, file naming and version and revision block for any relevant document created in the product development process.

Models for the engineering bill of materials and product specification document were constructed according to the company's usage of them. And finally, an assessment of the methods used by S&F on prototyping illustrated with a use case developed during the internship.”

## **MD Islamul Haque ABB AG (Germany)**

“The main objective of the internship is to improve the vacuum interrupters performance and determine a suitable high-frequency current sensor along with a high-frequency data recorder for the present test measurement system in the conditioning process. The experiment's data collection to analyze uses VBA and numerical programming languages. Analyzing the current sensor data uses quantitative analysis. Comparison between vacuum interrupters performance uses comparative qualitative and quantitative result analysis obtained from Finite Element Method (FEM) simulation.

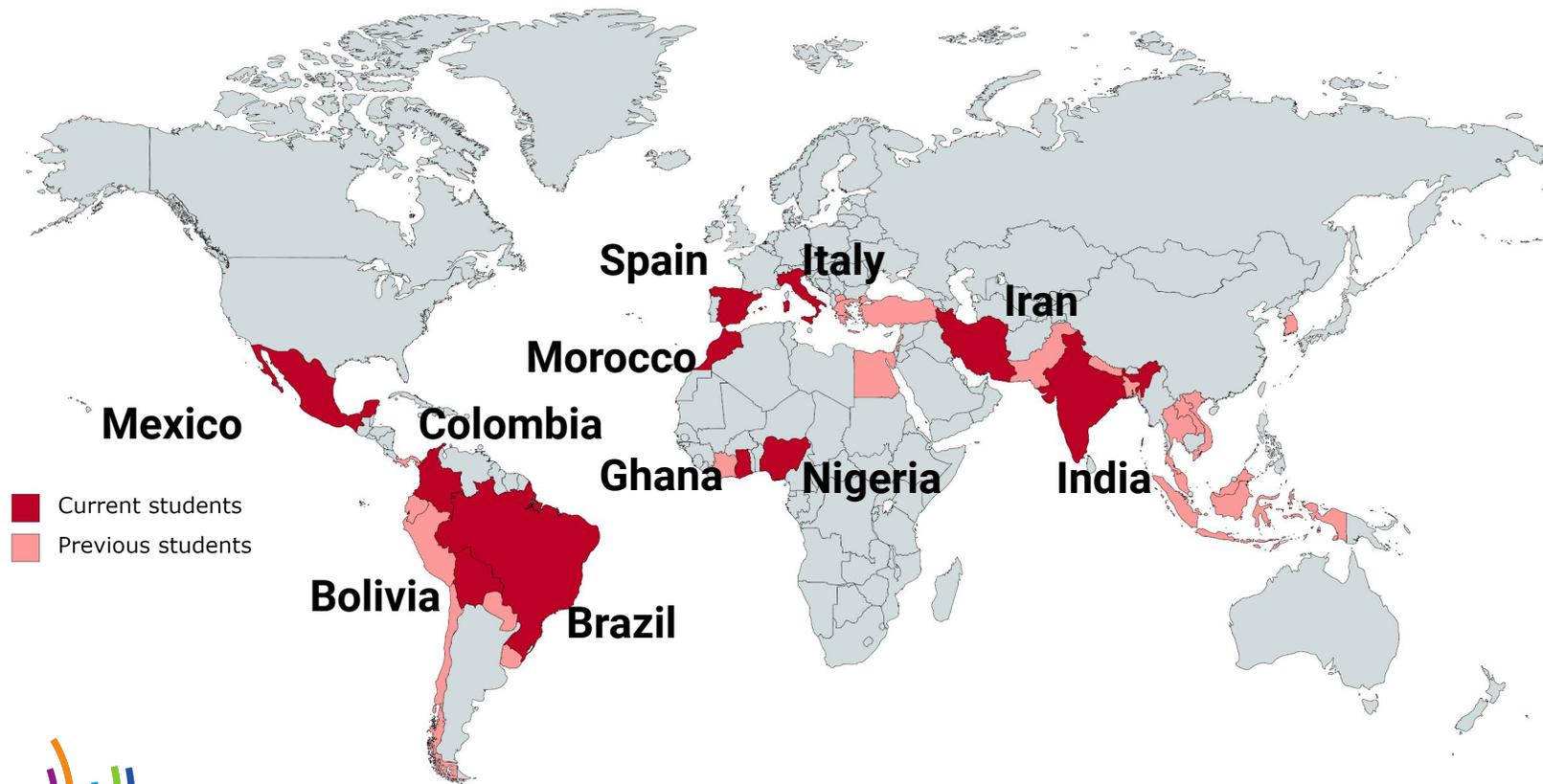
The results from experiments show that the selected current sensor can detect some discharges, but the identification of the respective vacuum interrupter is limited due to ambiguity. The results from FEM simulation indicate that the distinct center ring design of some vacuum interrupters can improve the electric field distribution, and some vacuum interrupters have economies of scale while having similar electric field distribution because of the usage of standardized parts.

## **Allwell Bariza Dilosi AIRBUS Operations SAS (France)**

“In the aerospace industry, concessions are generated whenever there is a non-conformity during an aircraft manufacturing and this solution to this non-conformance is agreed on with the customer. Managing these concessions effectively is a business challenge. Therefore, this thesis details the development of a concession management tool which prepares and organizes concession data for the purpose of concession creation in Technical Data tools. The tool which was developed in a six-week period using excel VBA and google apps script; integrates with SAP, G-suite and several databases. The tool updates and appends concession data in a spreadsheet, deletes/archives old records and automatically notifies user requestors of the implementation status of their concession requests. This tool allows the possibility to integrate with other internal tools in order to expand its functionality. This easy-to-use solution (and tool) helps improve business efficiency by ensuring that e-concessions can be anticipated as early as two months before aircraft delivery. It eliminates non-value added business tasks e.g. manual email follow-up, data validation. With an average run time of < 30 seconds, as opposed to manual performance of > 2 hours, it enhances productivity.”

# Members of SIE & SUMA M2 - 2020

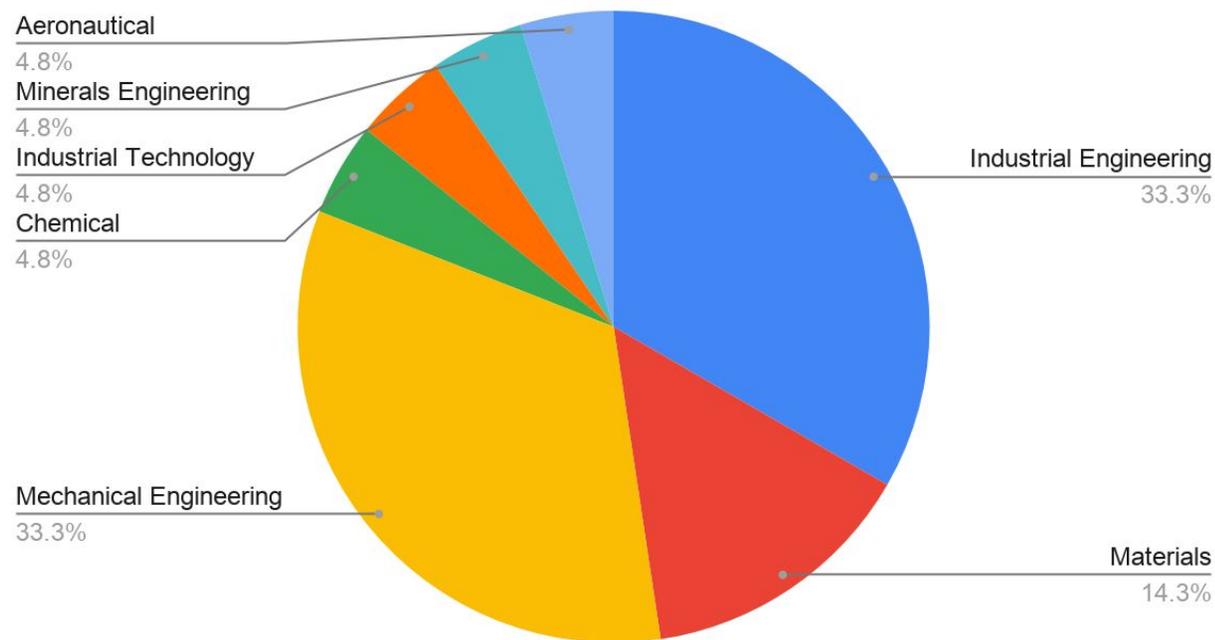
Since the creation of the Master SIE programme in 2014, around 150 applications for admission are received each year. The current M2 (Bac+5) class of the Masters SIE and SUMA is conformed by students coming from 11 different countries, shown in the map.



# Members of SIE & SUMA M2 - 2020

The SIE Master addresses students owning a Bachelor of Science or a Bachelor of Engineering or equivalent in many areas. The M2 students this year are from a mix of areas as you can see below.

Students Background



# Students



ARNOLD Mariela - Bolivia - Chemical Engineer

“With experience in Wine and Food Industry, I look for a Internship in France. I would enjoy to be part of the production area in a Company that cares about the environment. I speak English, Spanish, French, and some notions in Portuguese”

AKBARI HAGHIGHI Sina - Iran - Mechanical Engineer

“With experience in Automotive Industry, I am looking for an Internship in Germany or France. I speak English and Persian, with some knowledge of French and German. I would enjoy to be part of an international company to develop my knowledge and experience.”



BRÚ VERT Franc - Spain - Industrial Engineer

“With experience in the Industrial Automation and Energy Efficiency industry, as well as the Toy industry. Catalan, Spanish, English and French speaker, I am looking forward to join production and logistics departments in an industrial environment.

DESAI Viraj Nitinkumar - India - Mechanical Engineer

“Mechanical Engineer actively looking for an end of study internship in the field of Supply Chain & Logistics, Quality & Process Improvement to deepen my knowledge in the respective fields and achieve professional growth while being ingenious and innovative.



# Students



ELUWAH Noble Amah - Nigeria - Industrial Technologist

“Hardworking, passionate, persevering and experienced in engineering management. Eager to acquire international experience in Industrial Engineering and Management, aspiring for an internship in Supply Chain/Logistics and Transport Optimization.”

FATIH Imane - Morocco - Mechanical Engineer

“With experience in mechanical and industrial engineering. English, French and Arabic speaker, I am looking forward to an internship in production and logistics departments in an industrial environment”



GIRI SURENDRAN Hari Hara Krishnan - India - Mechanical Engineer

“A highly motivated and a positive person with passion in Quality and sustainable development activities to improve the standards of industries and in personal life. I communicate well in Tamil, English and in intermediate French, looking for a 6 month internship in quality and continuous improvement domains.

IBARRA RAMIREZ Ayleen - Colombia - Industrial Engineer

“Supply Chain specialist, IDEX "Initiatives d'Excellence" scholarship holder, creative, challenge-loving, looking for a new internship experience in the Supply Chain area. Level B2 in French and English, and Spanish native speaker.”



# Students



ISSAKA Ibrahim - Ghana - Minerals processing Engineer

“An astute engineer with in depth skills in mining industry, I decided to pursue industrial engineering to expand my scope in industrial sustainability and its management. I am looking for internship in supply chain/logistics, quality management and business/data analytics. I can speak and work in both english and french.”

LOPES BARBOSA Joao - Brazil - Industrial Engineer

“With experience in the business development, quality management and innovation management. I speak Portuguese, English and French. I look for an internship in quality management or supply chain.”



LOTSI Samuel - Ghana - Mechanical Engineer

“I am looking forward to leverage knowledge from my master’s studies coupled with experience from manufacturing, QHSE, hydraulics and inspection to tackle problems in Manufacturing, QHSE and Instrumentation. I speak English, French and Ukrainian.”

MEDEIROS DE LUCENA Luiza - Brazil - Mechanical Engineer

“Passionate about Sustainability, I joined this Master to mix my experience in Industry(Manufacturing Engineer) with my passion. I’m looking for an internship that I can use both those expertises. I can work in Portuguese, English or French.”



# Students



RAMALHO MARTINS Daniela - Brazil - Industrial Engineer

“With experience in the Portfolio, Research and Competitive Intelligence area of an Automobilitic Industry and in Consulting, I am looking forward to work in the Product Development department in the launch of new products. I speak Portuguese, French and English.”

RODRIGUEZ DELGADILLO Rodrigo - Bolivia - Industrial Engineer

“With experience in Operations and Human Resources Management area in the sectors of: Logistics, Financial and Manufacture. I speak Spanish, English and intermediate level in French.”



ROSALES MARTINEZ Ruben Dario -Mexico- Aeronautical Engineer

“After experiences in R&D for automotive and machinery industry, I am currently looking to continue my career in Production and Supply Chain areas. Speaking Spanish, English and French”

SRINIVASAN Pradheep - India - Mechanical Engineer

“In possession of experience in Mechanical and Industrial domains. I am looking for an internship opportunity in and around europe. I speak English proficiently and bilingual in Tamil and Telugu, with some knowledge in French. I would like to be a part of an international company to develop my knowledge and experience”



# Students



SOLIGO NICOLE - Italy - Materials Engineer

“Speaking Italian and English, with some knowledge in Spanish. I’m interested in Life Cycle Assessment and Circular Economy and I would like to do my internship in the packaging sector. I want to give my contribution to companies that are sensitive to the environmental aspect.”

CAMPIGOTTO LUCA - Italy - Industrial Engineer

“Speaking Italian and English, I would like to test my competences with an internship in an industrial environment, in the EU area. My preferred perspectives would be in the product design or process management field.”



Moin - Iran - EIT-KIC master in Sustainable Materials Engineering

“Currently looking for internship opportunities in the field of Data Analytics and Data Science. I would love to combine Materials Engineering approaches and Machine learning algorithms to solve problems. I find myself positive, motivated to learn and I would bring good attitude and willingness to take on any task.”



KUTTIKATTIL Edwin Devassy - India - Mechanical Engineer

“With background in mechanical and materials engineering I am actively seeking for opportunities that promote sustainability, across the development of innovative materials that will enable future technologies with their associated impacts, blending my previous knowledge with Industrial engineering practices”

