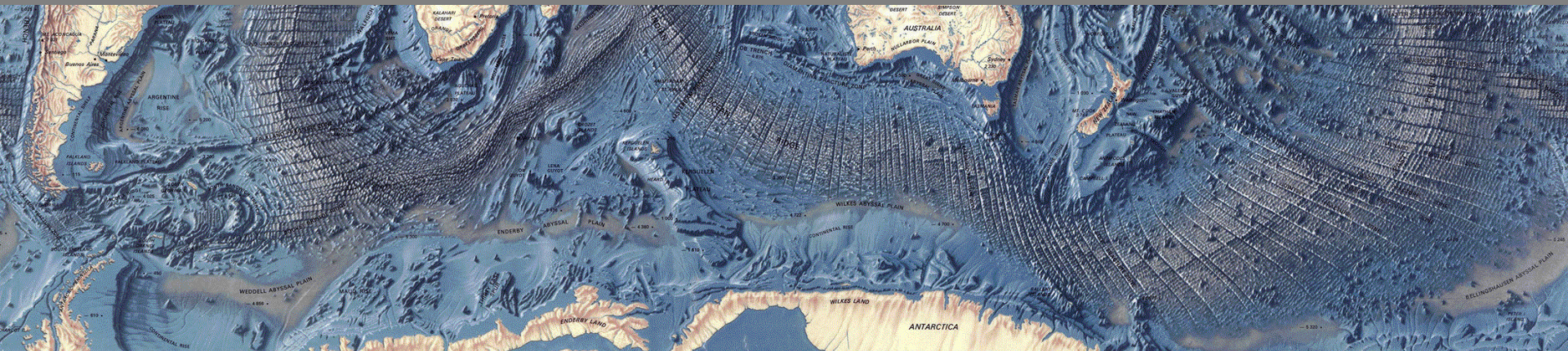




LES FORMATIONS EN GEOSCIENCES



C. ROBIN Géosciences-Rennes, Université de Rennes , France



GEOSCIENCE FOR THE FUTURE

Geoscientists will be crucial in meeting society's future challenges, be that through the United Nations Sustainable Development Goals, the Paris Agreement to avoid dangerous climate change, or through other important policies to protect the environment and ensure the availability of vital resources for all.

Geoscientists will be critical in:

- Ensuring access to clean and sustainable water supplies
- Sourcing and extracting critical minerals needed for green technologies like solar and wind power
- Understanding the subsurface to harness geothermal energy, enable safe infrastructure development, and carbon capture and storage technologies
- Mitigating climate change and influencing governmental policy through understanding past climates, modelling potential future outcomes and understanding climate impacts on environment, livelihoods and natural hazards.

SUSTAINABLE DEVELOPMENT GOALS



THE GEOLOGICAL SOCIETY OF LONDON SUPPORTS THE SUSTAINABLE DEVELOPMENT GOALS



ENERGY

through the United Nations Sustainable Development Goals, the Paris Agreement to avoid dangerous climate change, or through other important policies to protect the environment and ensure the availability of vital resources for all.

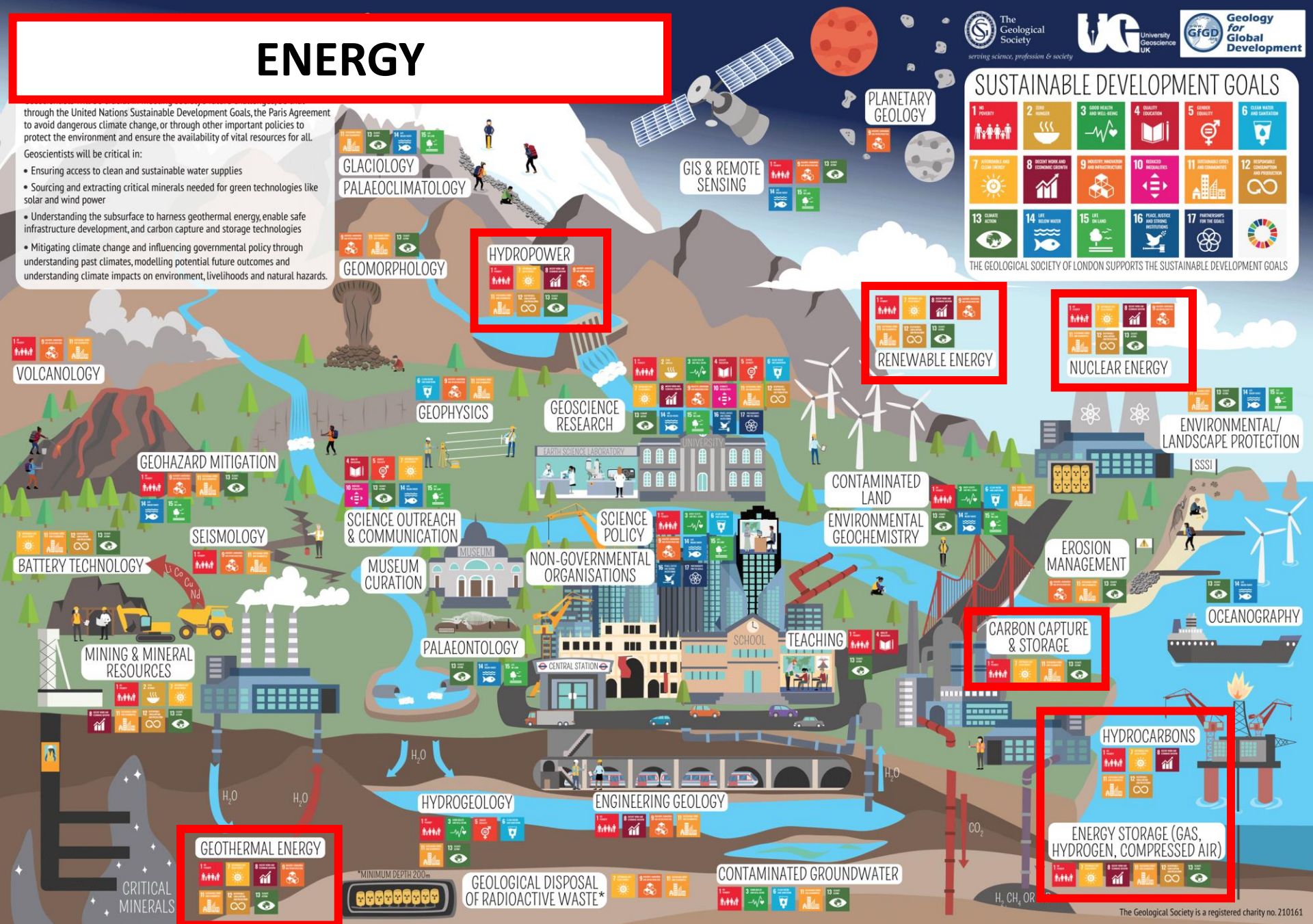
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SUSTAINABLE DEVELOPMENT GOALS



THE GEOLOGICAL SOCIETY OF LONDON SUPPORTS THE SUSTAINABLE DEVELOPMENT GOALS



WATER RESOURCES

through the United Nations Sustainable Development Goals, the Paris Agreement to avoid dangerous climate change, or through other important policies to protect the environment and ensure the availability of vital resources for all.

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The Geological Society
serving science, profession & society



University Geoscience UK



SUSTAINABLE DEVELOPMENT GOALS



THE GEOLOGICAL SOCIETY OF LONDON SUPPORTS THE SUSTAINABLE DEVELOPMENT GOALS



INDE: 1,6 milliards d'habitants en 2050

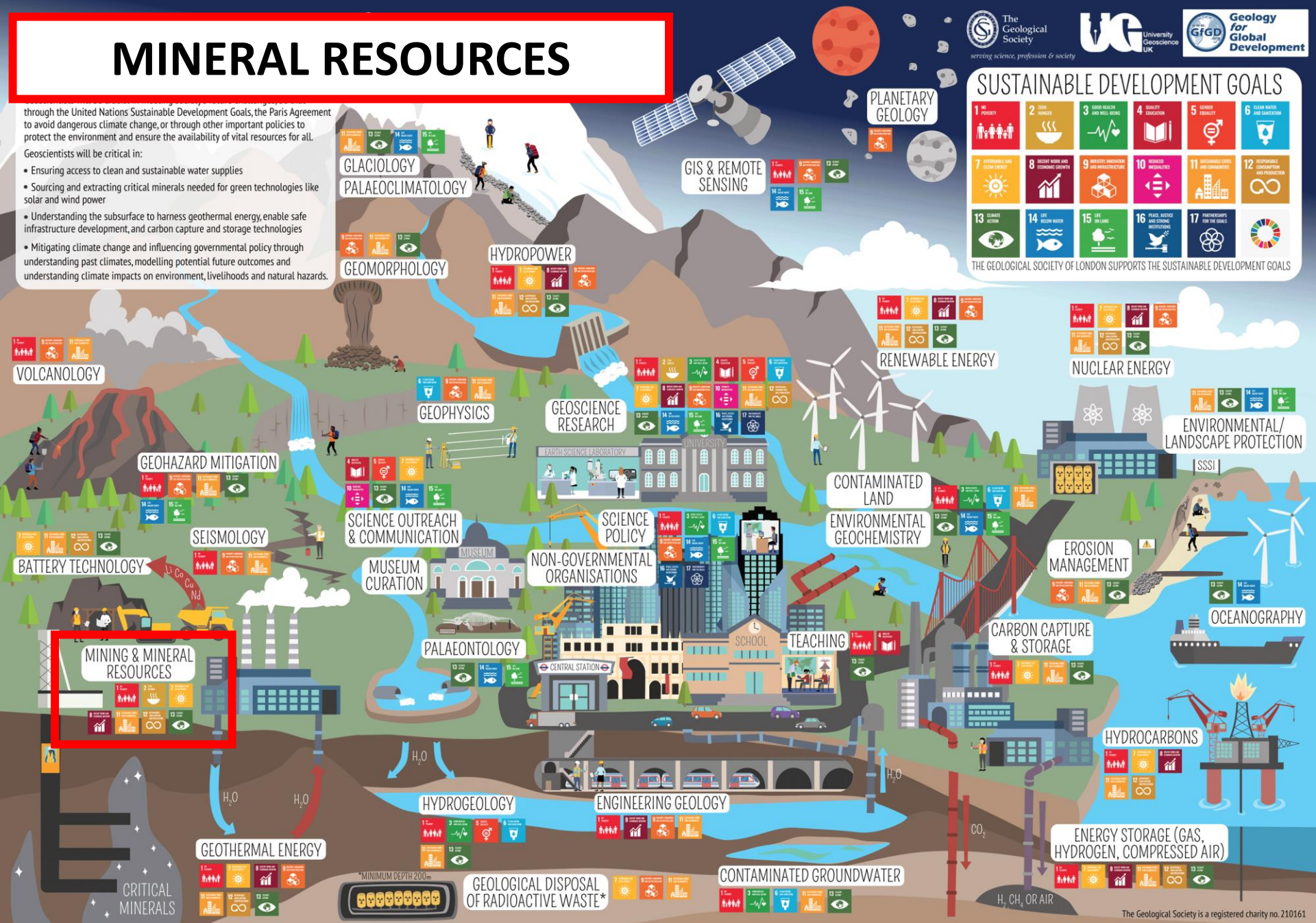
MINERAL RESOURCES

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SUSTAINABLE DEVELOPMENT GOALS



BUILDING (sand, iron) + ENGINEERING

through the United Nations Sustainable Development Goals, the Paris Agreement to avoid dangerous climate change, or through other important policies to protect the environment and ensure the availability of vital resources for all.

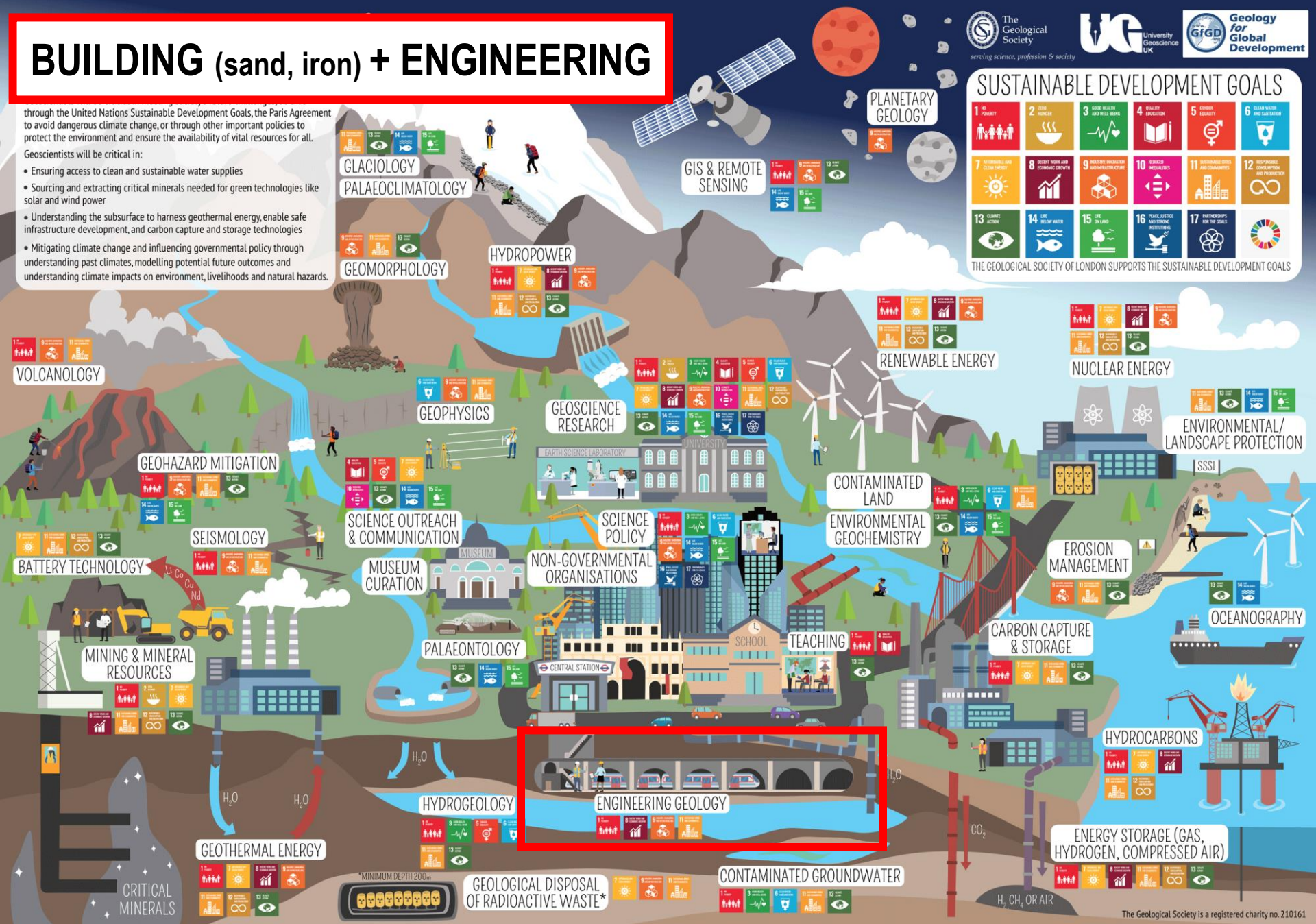
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SUSTAINABLE DEVELOPMENT GOALS



THE GEOLOGICAL SOCIETY OF LONDON SUPPORTS THE SUSTAINABLE DEVELOPMENT GOALS



LAND/COAST EROSION

through the United Nations Sustainable Development Goals, the Paris Agreement to avoid dangerous climate change, or through other important policies to protect the environment and ensure the availability of vital resources for all.

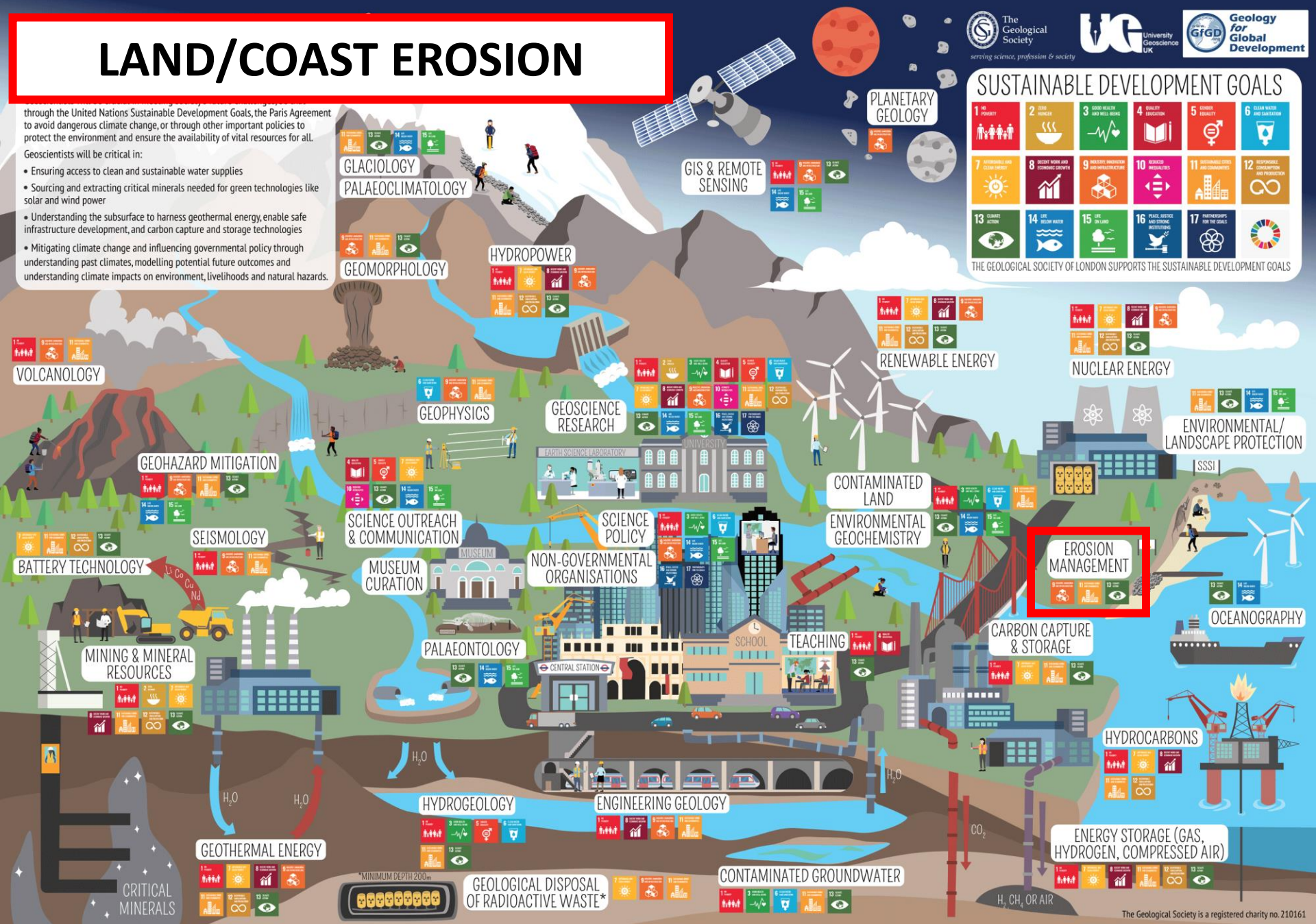
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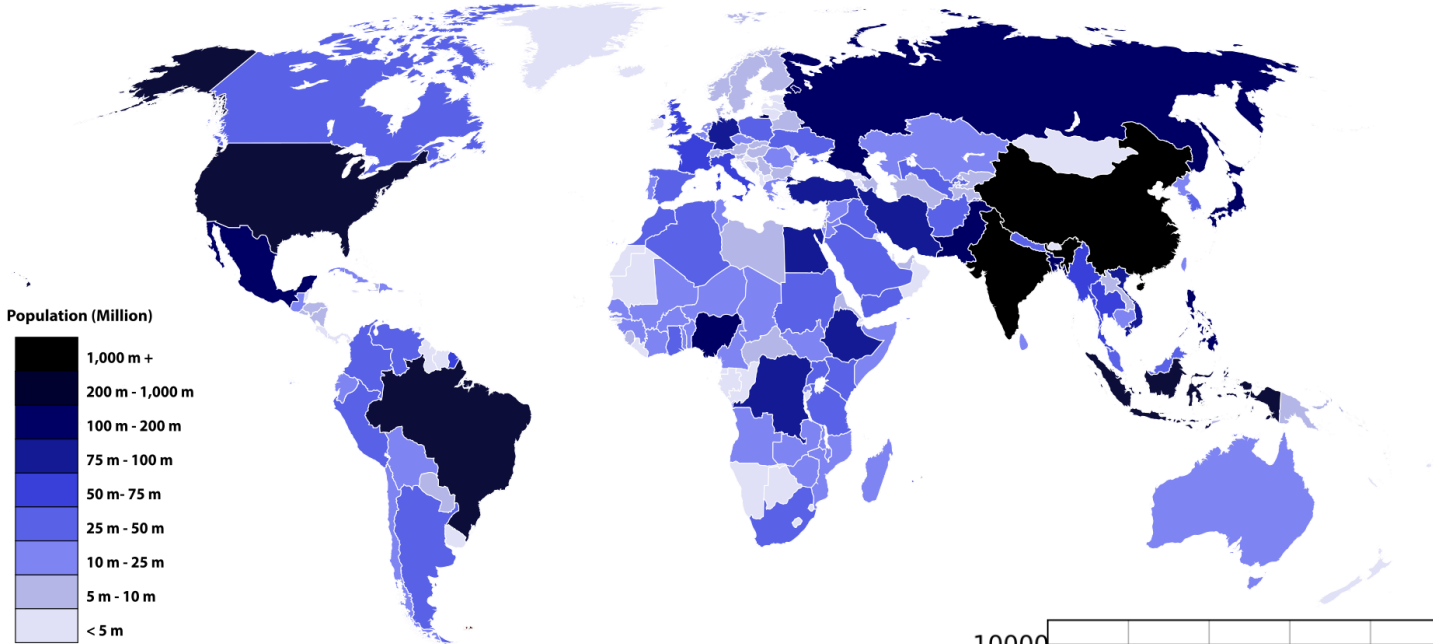
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SUSTAINABLE DEVELOPMENT GOALS

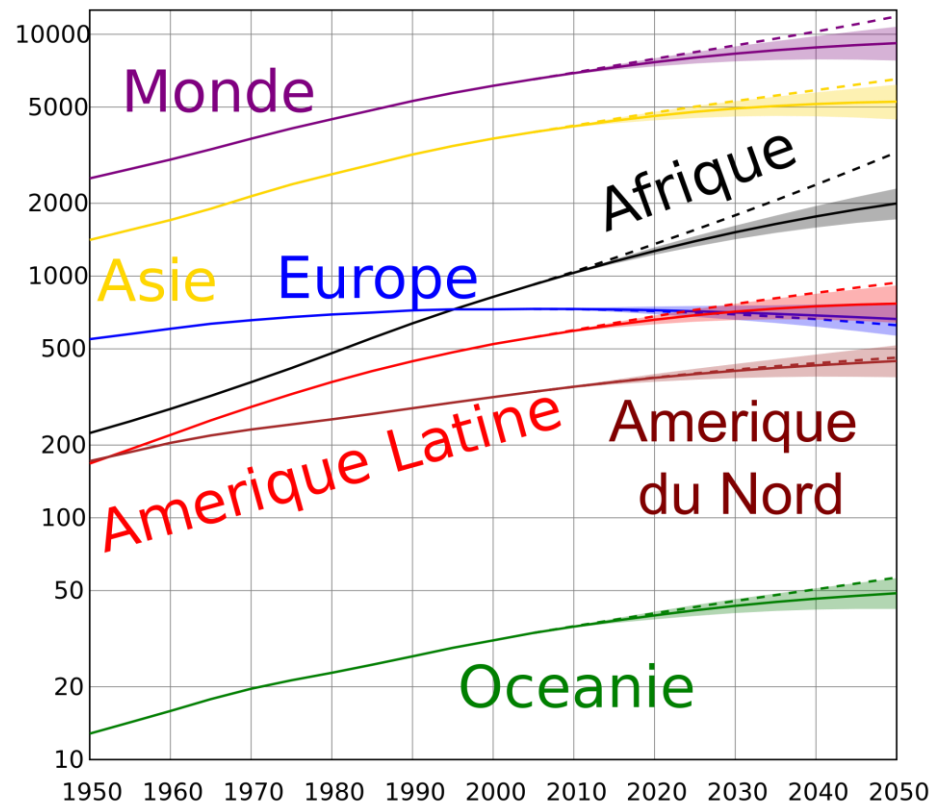


THE GEOLOGICAL SOCIETY OF LONDON SUPPORTS THE SUSTAINABLE DEVELOPMENT GOALS





WORLD DEMOGRAPHY



charpente :

bois, ardoises (schistes),
tuiles (argiles ou béton),
gouttière (zinc) et soudures (métaux),
acier, aluminium, vermiculite

murs :

briques (argiles), pierres,
parpaings (ciments, granulats),
ciment, chaux, crépis
(charges minérales, sables)

fenêtres :

vitres (quartz),
aluminium

cloisons de plâtre :

gypse

fondations :

argiles, sables

conduites :

PVC (pétrole, kaolinite, talc),
cuivre, métaux d'alliages

câbles électriques :

plastiques (pétrole, kaolinite, talc, calcite),
cuivre

mobilier et ustensiles :

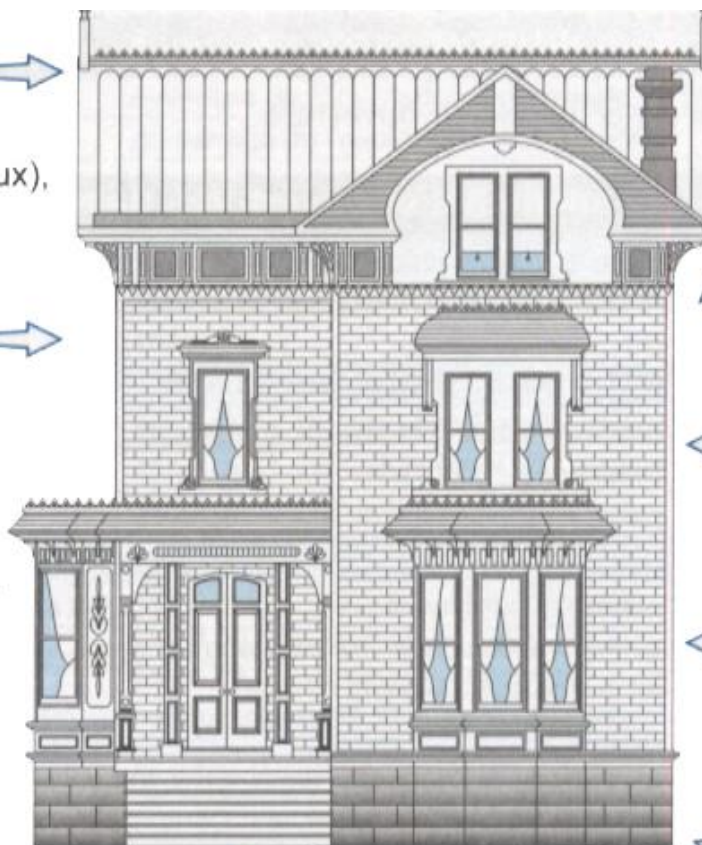
bois, matériaux composites,
métaux, vaisselles et
céramiques (kaolinite,
argiles communes,
feldspaths, quartz)

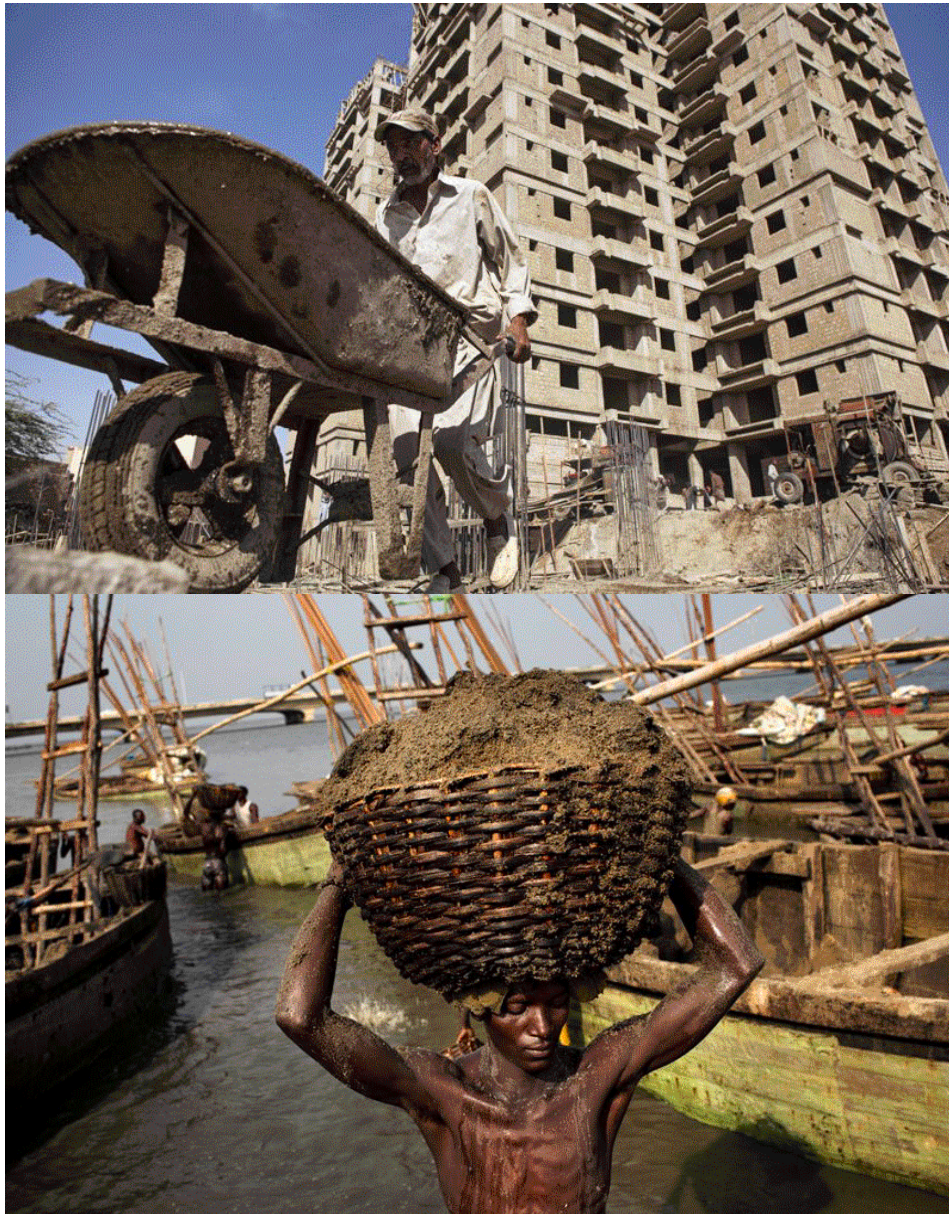
aménagement :

sanitaires (feldspaths,
argiles, kaolinite, quartz, etc.),
peintures et papiers peints
(talc, kaolinite, micas, calcite, etc.)

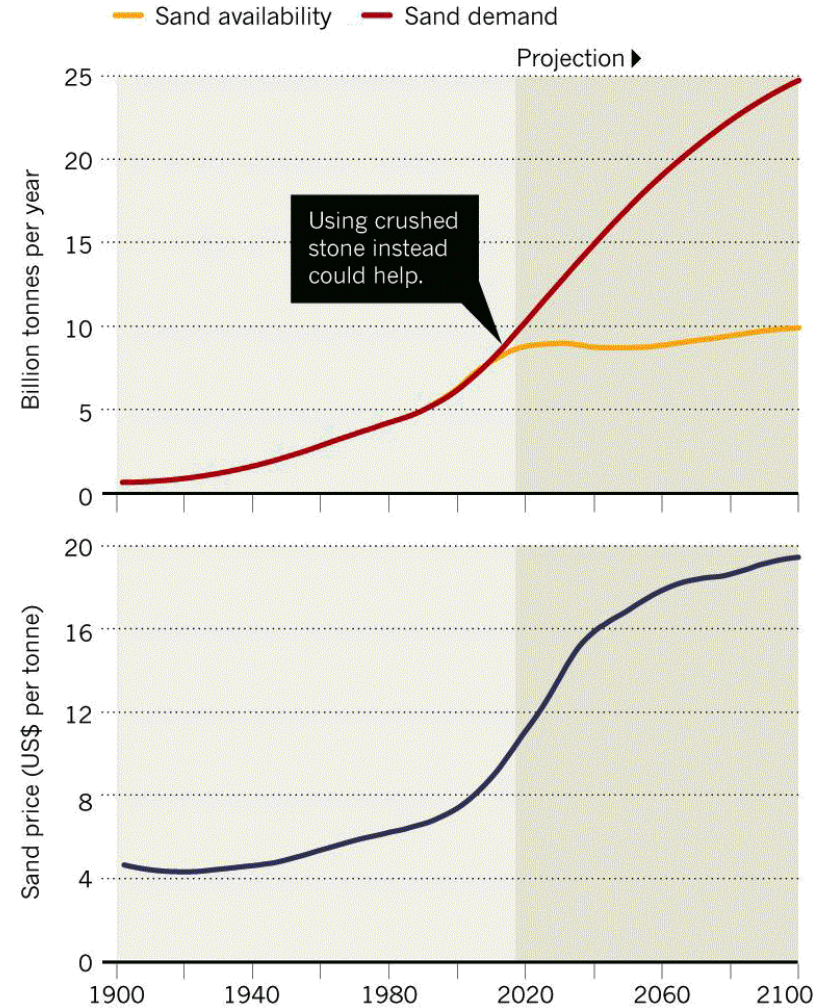
sol :

carrelage (argiles communes),
moquettes ou dalles
plastiques (20 à 40 %
de charges minérales)





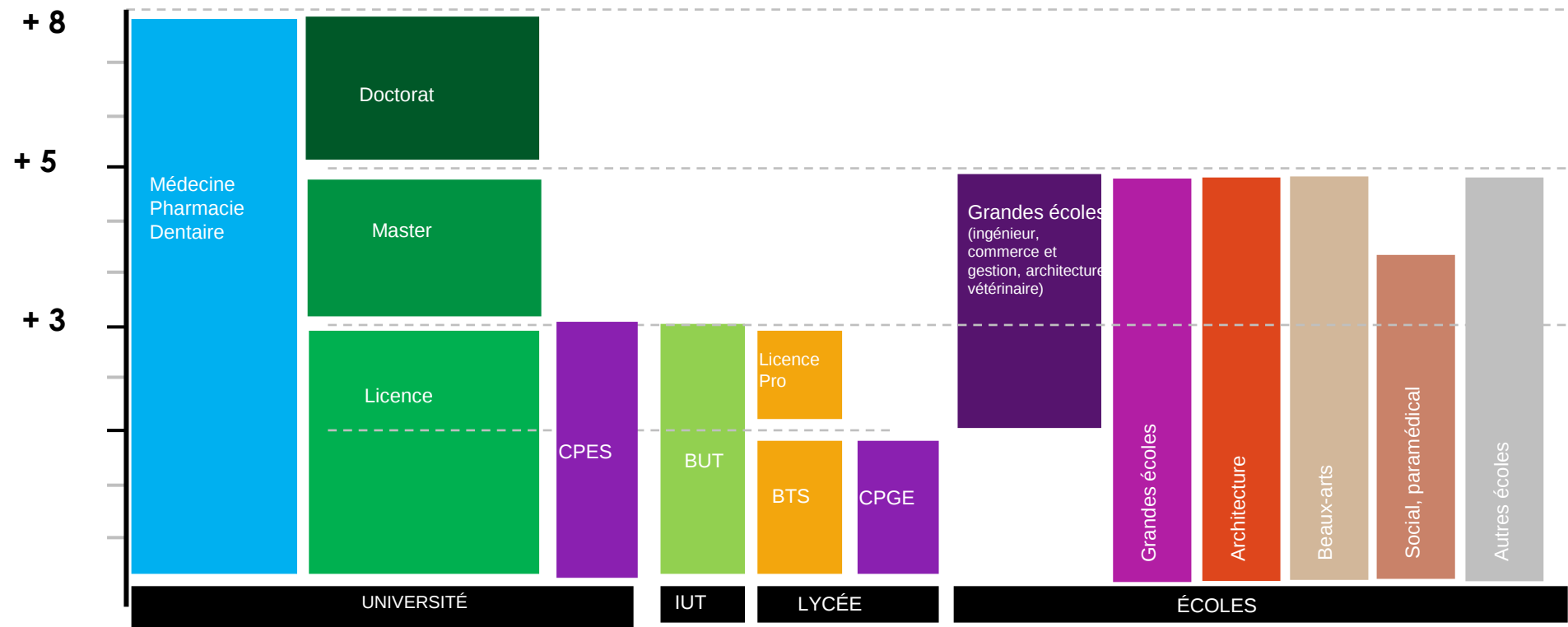
Exemple des ressources en sable

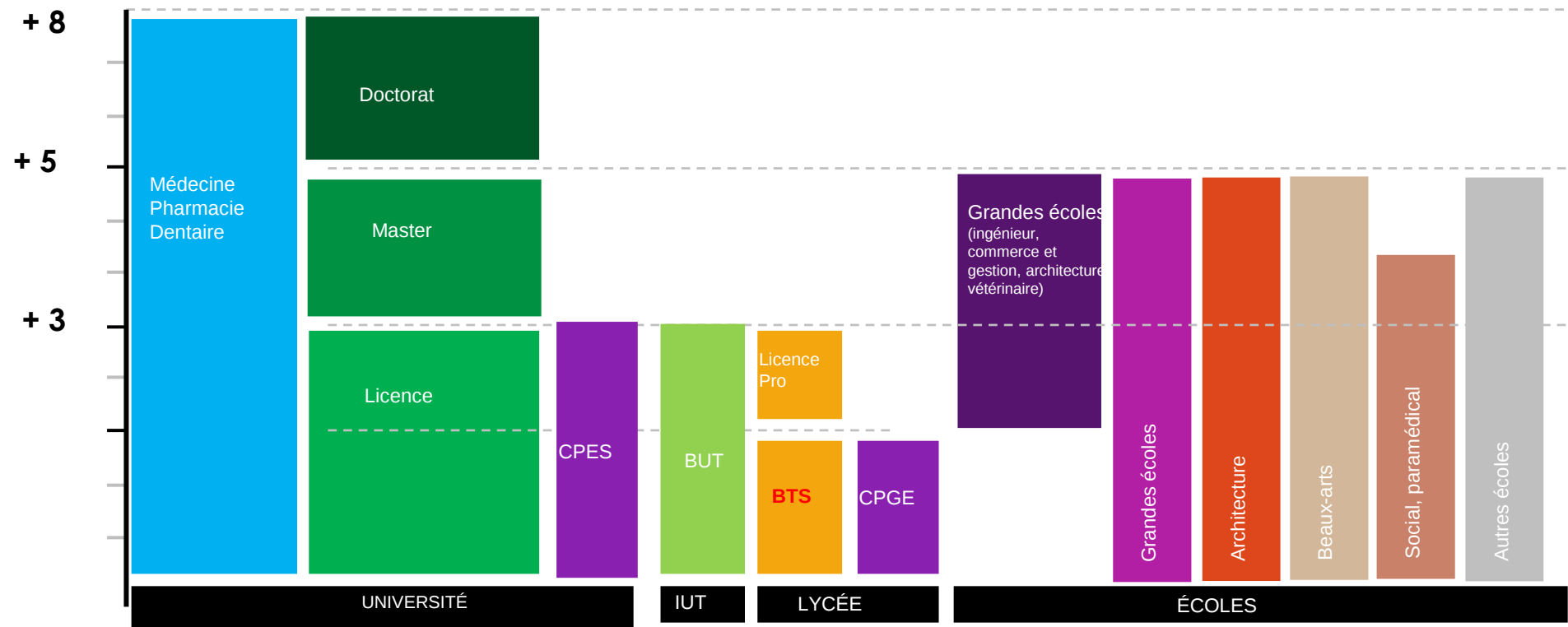


(Bendixen *et al.*, 2019, Nature)

OBJECTIVES OF THE SUSTAINABLE ENVIRONMENTS:









CENTRE DE FORMATION
UNICEM Campus Occitanie



Alternance

Géosciences

BTS Géologie Appliquée

NIVEAU 5 - BAC+2

🕒 2 ans

€ Gratuit pour l'apprenti

📊 82% de réussite

📍 UNICEM Campus AURA

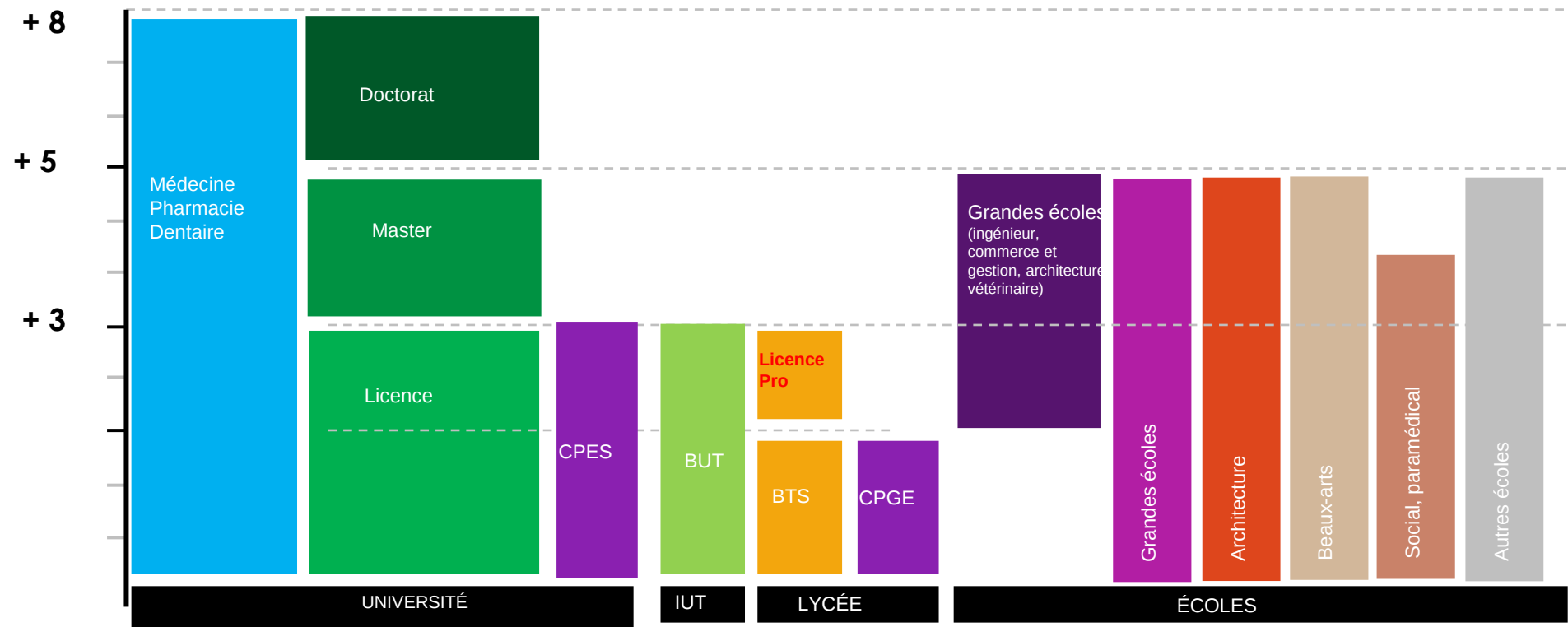
S'INSCRIRE

Les débouchés professionnels sont les mêmes que pour les élèves ingénieurs mais au niveau technicien :

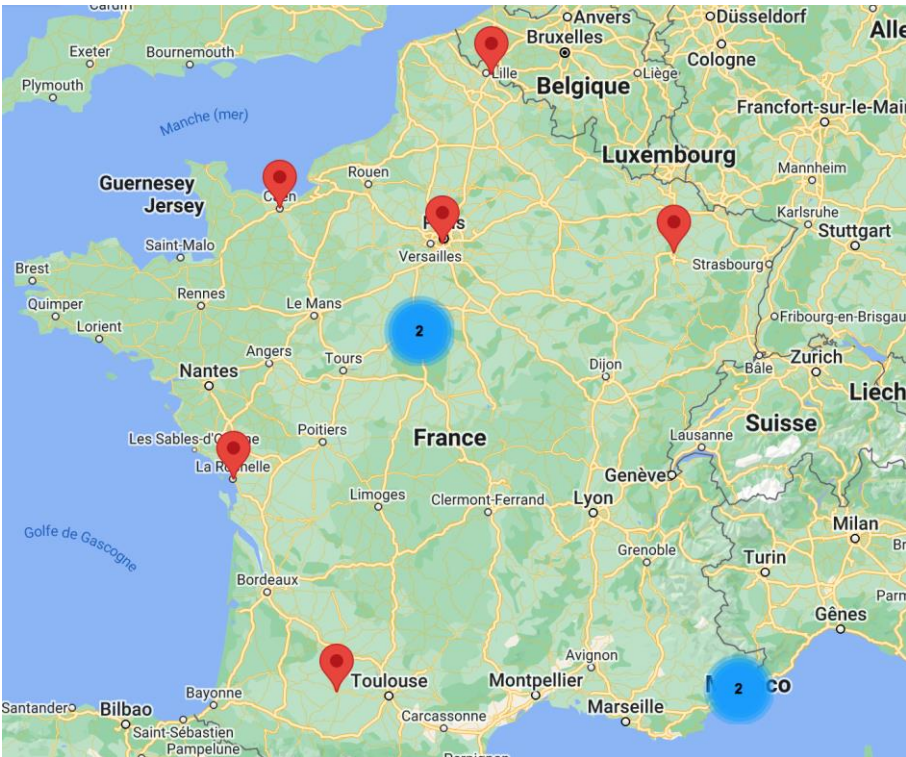
- dans le domaine de la géotechnique et de l'aménagement du territoire ;
- dans le domaine de l'hydrogéologie, de la dépollution ;
- dans le domaine de la gestion des risques en géologie et de la gestion de l'après mine ;
- dans le domaine des matières premières minérales, métaux, granulats et énergétiques.

Poursuites d'études possibles après l'obtention du diplôme :

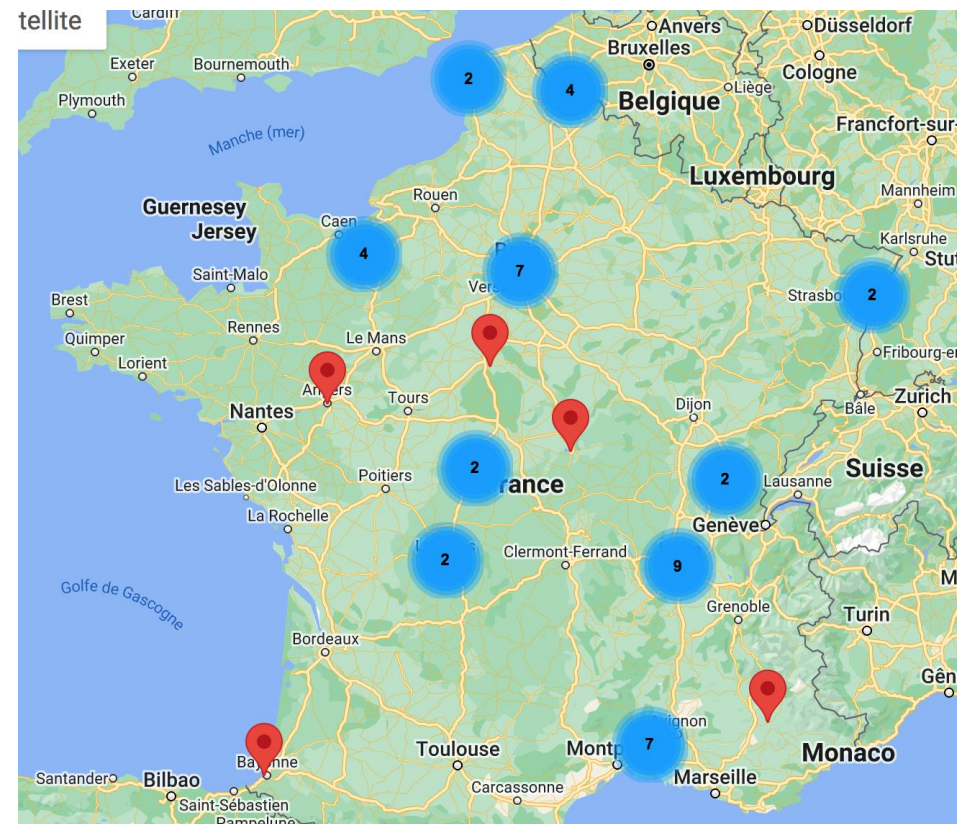
- > Licence pro PPRS : Protection et Prospection des Ressources Souterraines en alternance (Université Grenoble-Alpes)
- > Licence pro GEOSSOL (Géotechnique, Gestion des Sites et Sols pollués) „aménagement du territoire en alternance ou en formation continue (Université de Lille)
- > Licence pro Sondages Géologiques (Université de Paris Saclay)
- > Licence pro Eau, Ressources et Infrastructures (IUT Nancy)
- > Licence prof GAE : Géomatériaux, altérations et environnement en alternance (Université de Saint-Etienne)
- > Licence Eau Environnement (Université de Montpellier)
- > Licence Sciences de la Terre (Universités de Lorraine, Franche Comté, Strasbourg...)
- > Classes préparatoires ATS Génie Civil
- > Intégration possible sur dossier de l'ENSG après une Licence 3.



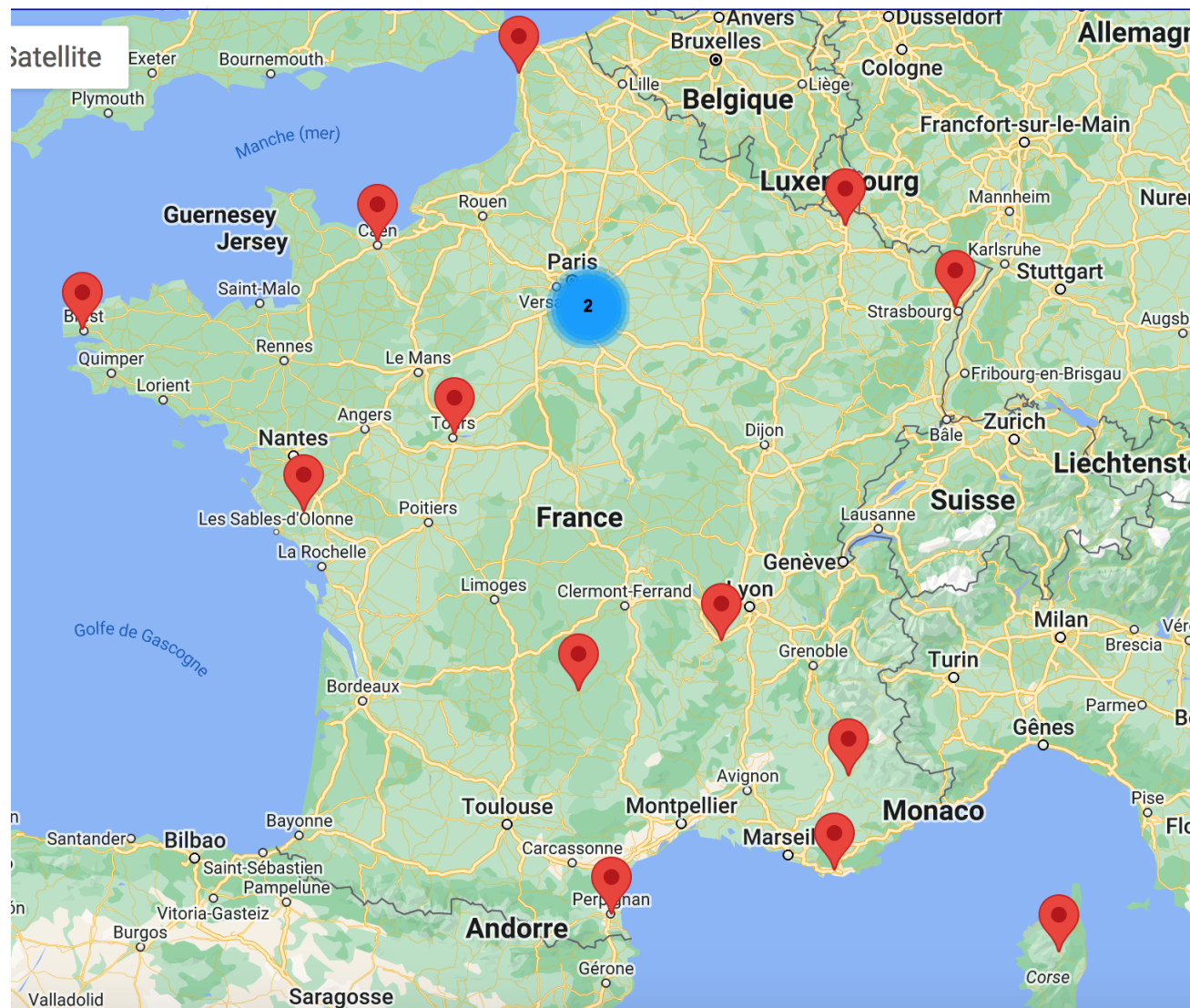
Licence pro mention cartographie, topographie et systèmes d'information géographique

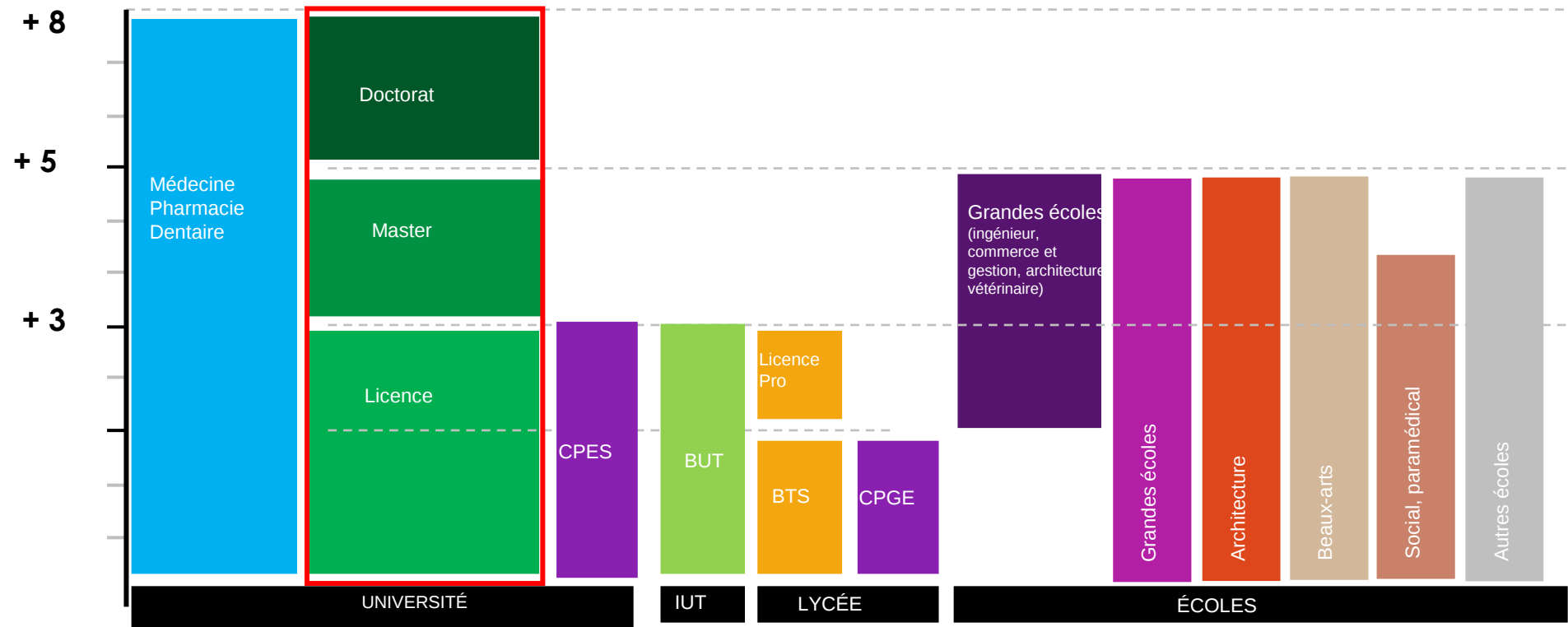


Licence pro mention métiers de la protection et de la gestion [SEP] de l'environnement



BUT génie biologique parcours sciences de l'environnement et écotechnologies

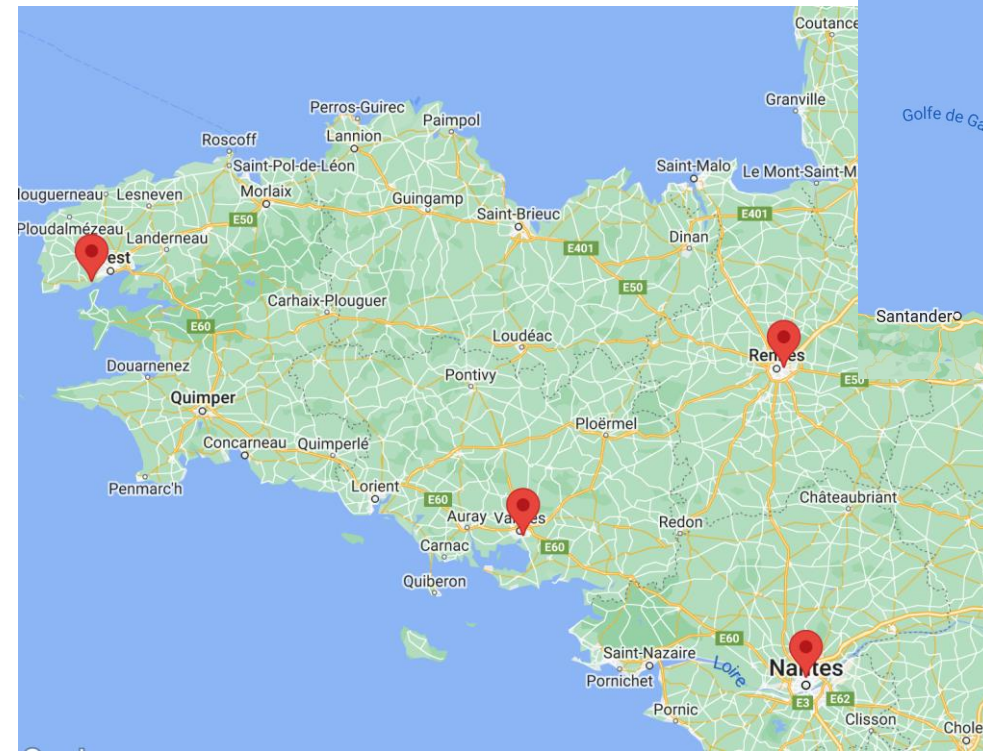
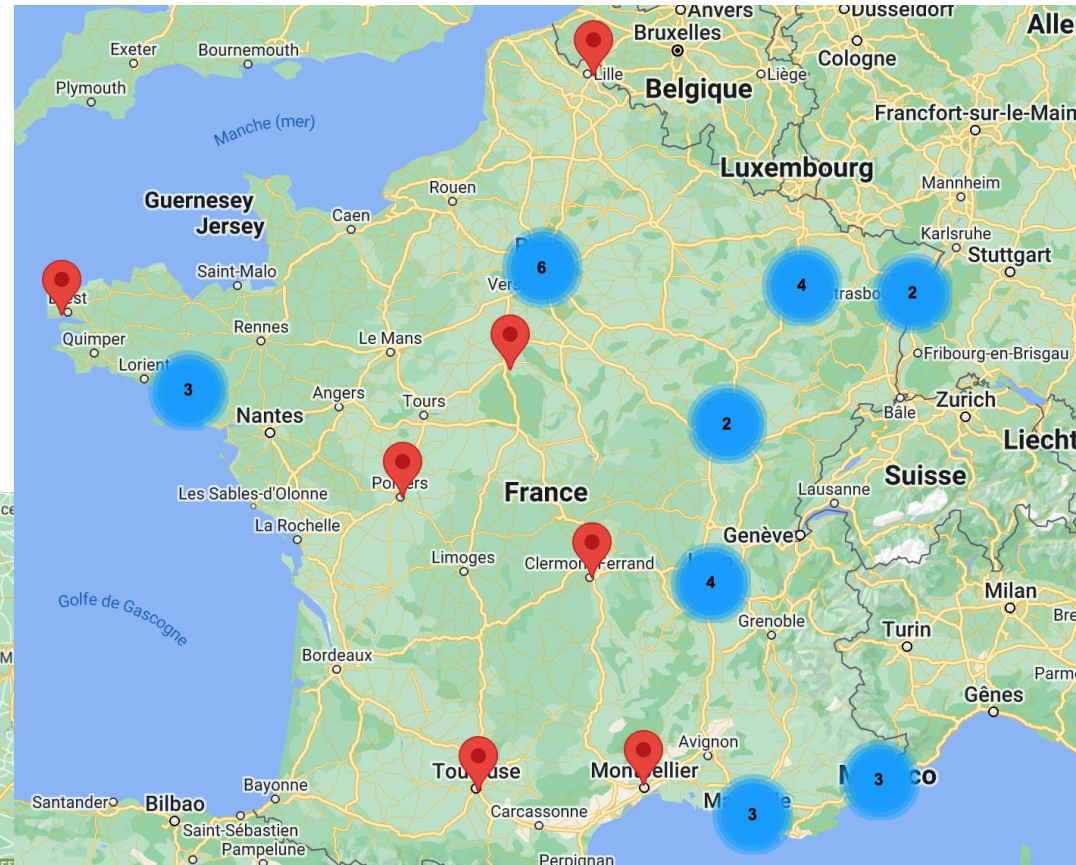




LICENCES GEOSCIENCES (STE)



MASTERS GEOSCIENCES (STPE)

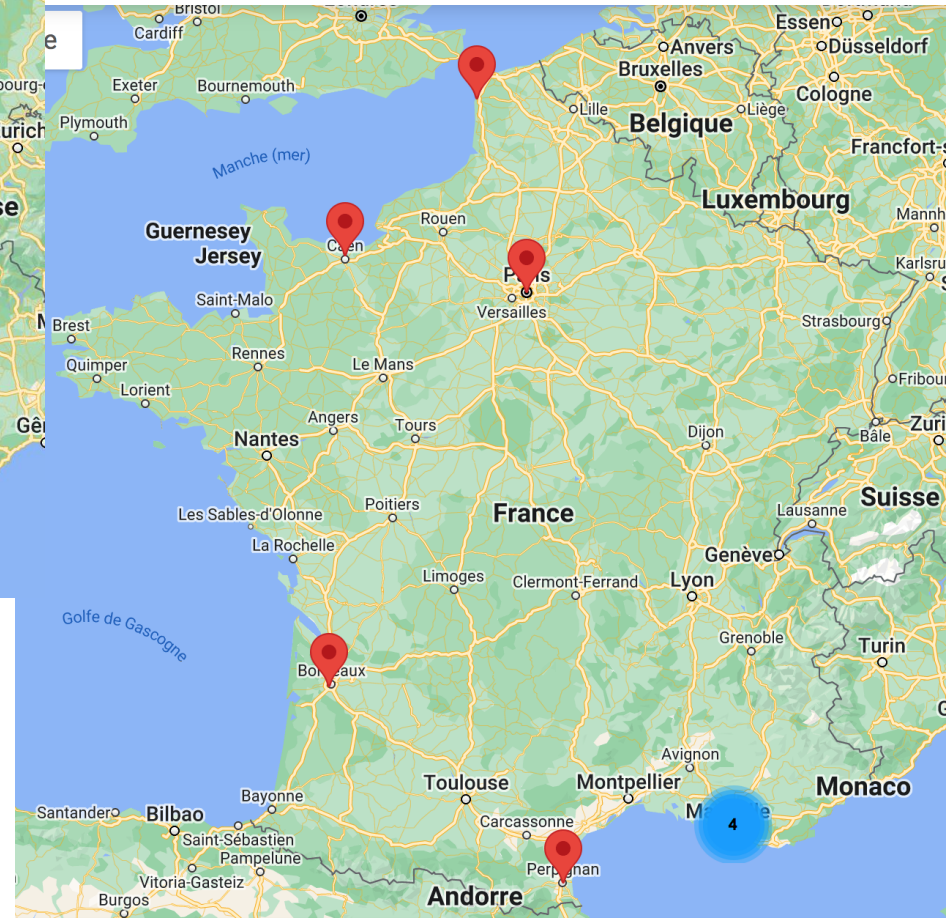
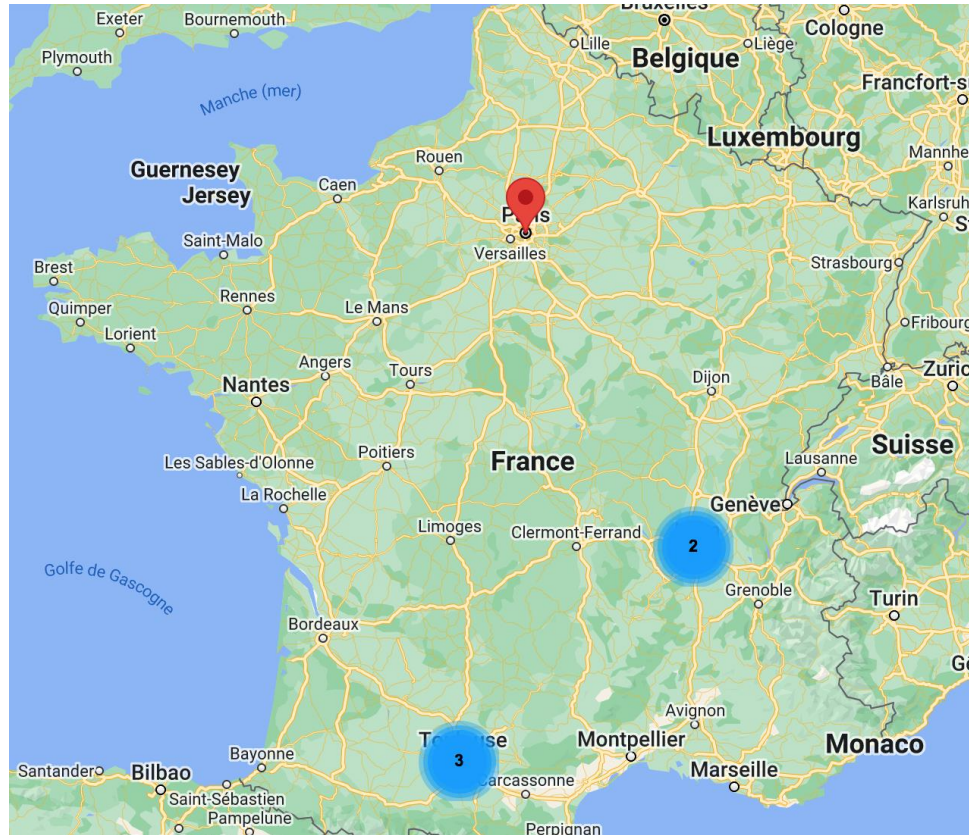


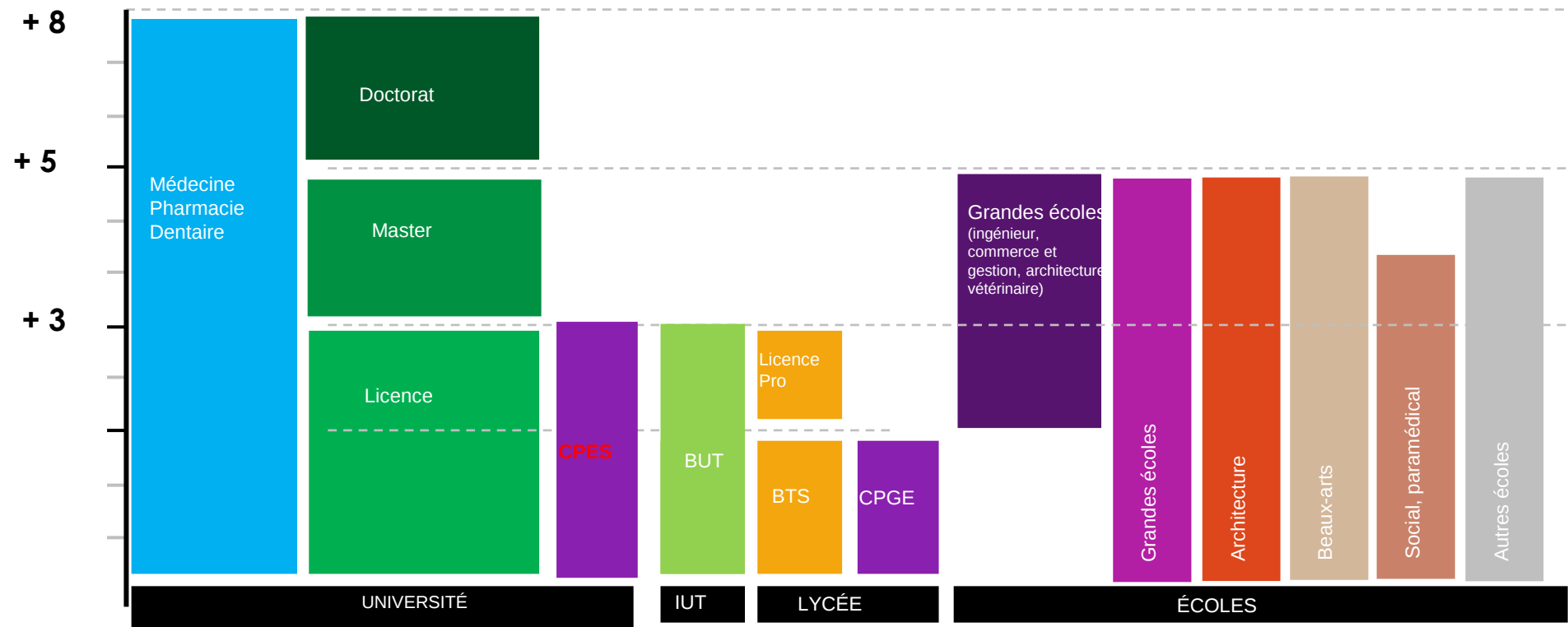
MASTERS SCIENCES DE L'EAU



MASTERS Sciences des Océans et de l'Atmosphère (SOA)

MASTERS Sciences de la Mer





CPES

CYCLE PLURIDISCIPLINAIRE D'ÉTUDES SUPÉRIEURES / CPES

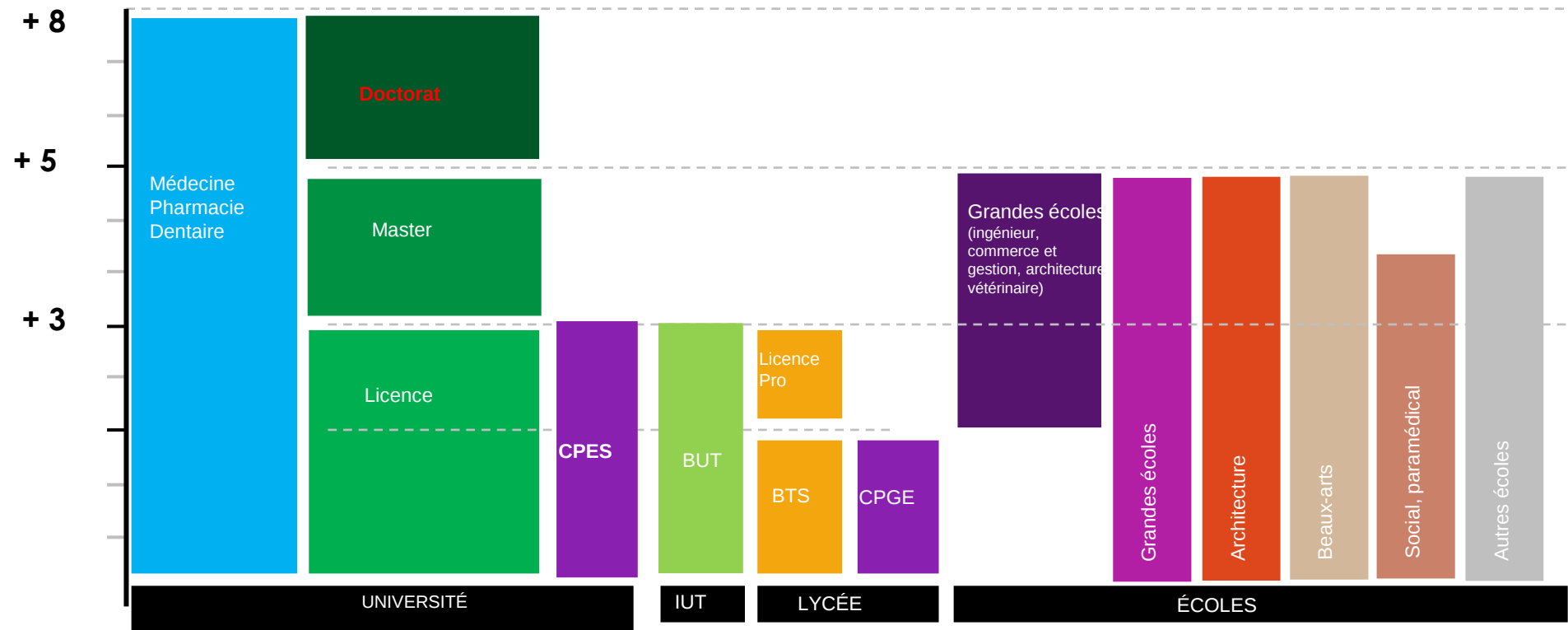
ÉCOLE NORMALE SUPÉRIEURE DE LYON / LYCÉE DU PARC

Parcours Sciences : mathématiques, informatique, approche des sciences de l'environnement

Cycle pluridisciplinaire d'études supérieures (CPES) - Sciences, Environnement, Société : SEnS

**Université de Rennes, l'Ecole Normale Supérieure de Rennes et le lycée Chateaubriand-
Pôle CPGE**

**Cycle Pluridisciplinaire d'Études Supérieures – CPES Janson Paris-Cité
un parcours Environnement et Énergies Nouvelles**



SITE DE LA SGF

<https://www.geosoc.fr/39-formations-diplomes/87-formations-licences.html>