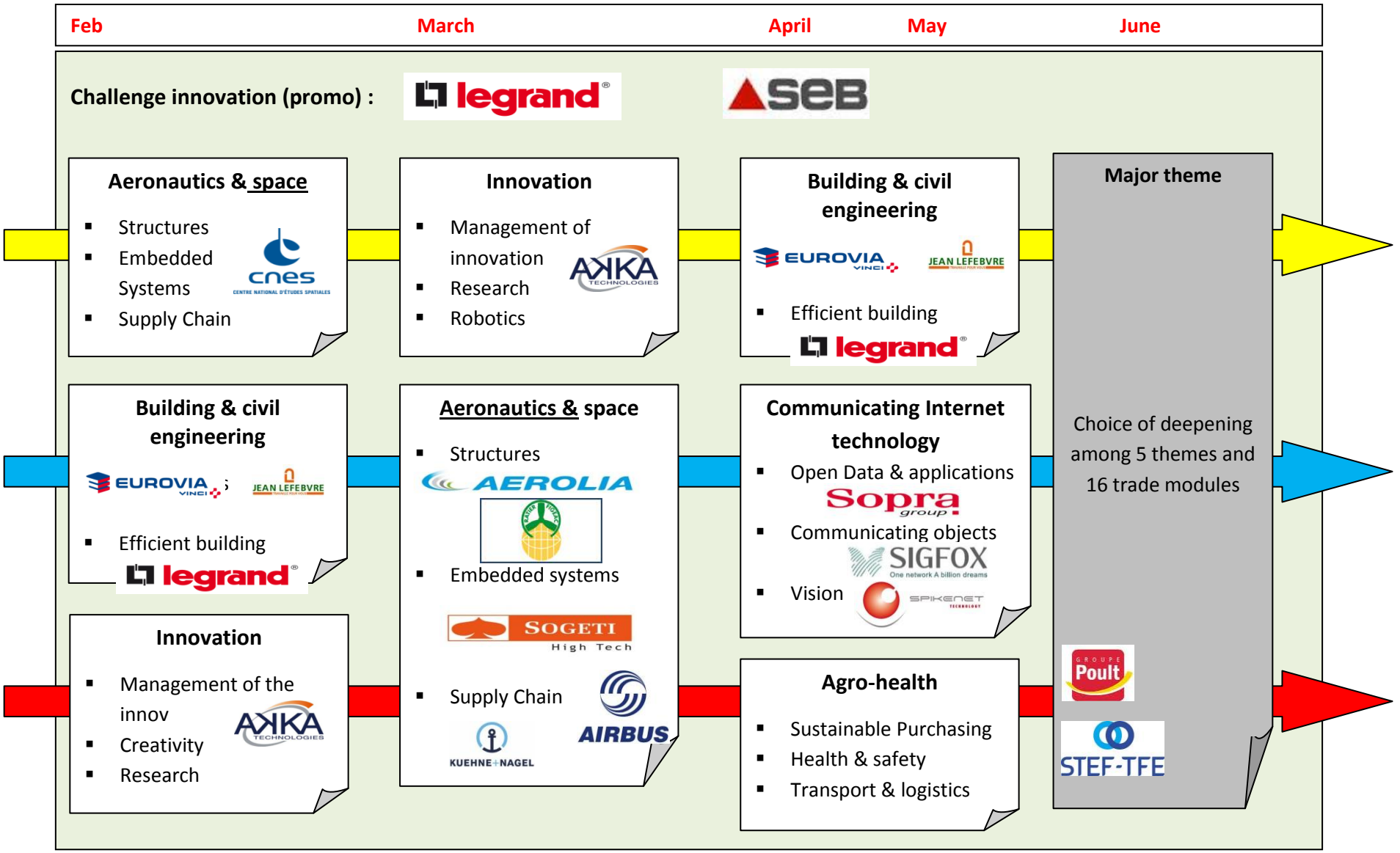
I4-8 : six-month period professionalizing Toulouse



Aeronautics & space

- **Structures :** Design & sizing of a composite or metallic structure (aircraft structural element or satellite platform) observing the standards and sector trade rules
- **Embedded systems :** Understand the requirements for the design of an A&S embedded system. Design, standards, communications protocols, calculation of reliability, redundancy, tests, equipment qualifications.
- **Supply Chain :** Analysis of supply lines for aircraft assembly workshops (F.A.L) or sub-assemblies. Search for improvements in accordance with the constraints and requirements of the sector
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Building & civil engineering

- **Public works :** Response to a tender of a V.R.D. contract, reading plans, linear footage, cubages, choice of PW machines and materials, construction planning, encryption.
- **Efficient building :** Calculations and energy loss measurements of a building, calculations and measurements of equipment consumption (lighting, air-conditioning, etc.) according to standard RT2012.
  Drafting of a technical-commercial file of a photovoltaic installation.
- **Intelligent building :** Home automation, implementation of a V.D.I. network, (video and image data).
  Analysis of specifications and proposal of technical solutions for the equipment of a building

Innovation

- **Management of innovation :** Piloting an innovative project, search for public or private partnerships, financing of innovation. Knowing how to sell your project.
- **Creativity :** Proposing innovative products from the client request, using tools to find of brainstorming ideas, ASIT method, others, etc.). Studying the feasibility.
- **Research:** Discovering the environment of academic or private research by meeting researchers. Doing bibliography work
- **Robotics :** Learning about controlling an industrial robot, programming a robot. Integrating robotic equipment in a process.

Communicating Internet technology

- **Open Data & applications :** Discovering masses of BIG DATA free data and their modes of storage (Data center, cloud). Learning about decision-making treatment tools (Business Intelligence). Making their use accessible through Android applications.
- **Communicating objects :** Understanding the concept of communicating objects. Knowing the technologies used in short distance communication (RFID, Wifi, Zigbee, etc.). Learning about M2M
- **Vision :** Discovering an innovative solution of intelligent image analysis. Studying the implementation of the solution on new applications or new fields.

Agro-health

- **Sustainable Purchasing :** Responsible & sustainable purchasing policy. Bio-sourced products. Supplier / customer relationships. Marketing manager. Risk management. Eco packaging managers
- **Health & safety :** Process analysis, continuous improvements. Risks of contamination. Impacts on human health. HACCP approaches. Food materials. REACH standards
- **Transport & logistics :** Learning transport and storage trades. Packaging, palletizing, traceability, cold chain. Modes of transport, incoterms, environmental constraints.