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| Semester 3 | Sept.-Dec. 2022/Jan. 2023  **TRACK 5: ENGINEERING IS ENGAGING IMAGINATION, CREATIVITY & INSPIRATION** | |
| **PHASE 1: A CREATIVE DESIGN NARRATIVE**  **from Sept. 7 to Oct. 19, 2022 (6 weeks)** | **PHASE 2: A BIO-INSPIRATION CHALLENGE**  **from Nov. 2, 2022 to Jan. 4, 2023 (7 weeks)** |
| Imagination is an essential key to creativity in various fields and engineering is no exception. The objectives is for you to express your imagination through various exercises, to transfer your imagination into creativity by providing you with tools and criteria to better assess it especially within the design process and to turn your creative design into a narrative.  Evaluation is based on active participation of the students throughout the phase who show their ability to develop, strengthen their creative-thinking skills, use the Six Hat Thinking methodology, and on the ultimate outcome, the creative design narrative.  The creative design narrative is a no-shorter-than 500 to a no-longer-than 1000-word-long written production that will integrate a copy of the design picture. The narratives will come up as a collection for the public of the school.  As a pre-requisite, students are required to show how imaginative (*not creative*) they are with one concrete example of their choice (and to bring their best pencils).  The six-week-long phase will emphasise on imagination (2 weeks), creativity (2 weeks) and the narrative (2 weeks).  All student-engineer future profiles can relate to this phase. | Inspiration is another essential key to creativity in engineering nowadays and it has been developing over the past few decades especially in the field of Nature. Bio-inspiration has now echoes in many areas of technology and this is not about to stop. Imagination, creativity and, in this phase, bio-inspiration will now help students to deal with one sustainable challenge (as defined by the UN SDGs) that they will display on a poster. To be successful, students may want to keep the design that they brought to life in phase 1 and tweak it to meet the objectives.  Evaluation is still based on active participation of the students throughout the phase, their use of the key tools (aka the biomimicry process) to better understand bio-inspiration and how there can be applied in the challenge, and to transfer their answer onto a large-size poster to be displayed in the Grand Hall of the school.  As a pre-requisite, students are required to tell about how they could get their inspiration from (*apart from Nature*).  This seven-week-long phase will emphasise on inspiration (1 week), bio-inspiration (2 weeks), instruction to the challenge (1 week) and the completion of the challenge (3 weeks) with occasional and active talks to share ideas with the other students. *The last week (start of January) may be dedicated to the display and presentation of the posters.*  All student-engineer future profiles can relate to this phase. |