

- [SITE UTC](#)
- [Newsletter](#)
- [Twitter](#)
- [Facebook](#)
- [Web TV](#)
- [EN](#)
 - [FR](#)
- [Search in interactions.utc.fr](#)

Name of the website

Menu

Menu complémentaire

[Focusing](#)

[on meaningful innovation](#)

- [Themes](#)
 - [Bio-mechanical and Bio-engineering sciences](#)
 - [Biology, Bio-chemistry and Bio-technologies](#)
 - [Process engineering; Chemistry; Sustainable development](#)
 - [Mechanical and Materials sciences & engineering; acoustics](#)
 - [ICTs: computer sciences; Automation & Control; Decision theory and applications](#)
 - [Technology, Social Sciences and Humanities](#)
 - [Multi-scale urban system modelling](#)
 - [Applied mathematics](#)
 - [Industrial Design](#)
 - [Pluridisciplinarity](#)
 - [Doctorate](#)
 - [Entrepreneurship](#)
 - [Prizes and Competitions](#)
 - [International](#)
 - [Campus life, art and culture](#)
 - [You have the floor](#)

- [Magazine](#)

1. [Home](#)
2. [Themes](#)
3. [Campus life, art and culture](#)
4. [Pedagogical Innovation: the UTC formulæ](#)
5. Pedagogical Innovation: the UTC formulæ

[Campus life, art and culture](#)

Files

Pedagogical Innovation: the UTC formulæ

The key guidelines for pedagogical innovation implemented by UTC aim at ensuring the students become the actors of their personal learning process. This calls for collaborative work on real, scale-one problems, also for reverse educational lectures and serious games. The aim is not only to better arm our student-engineers to face their future professional career but also to adapt the university to comply with the specific features that characterize a new generation of undergraduates.

18 Dec 2017

Summary

- [Pedagogical Innovation: the UTC formulæ](#)
- [Increasingly intercultural project-based workshops](#)
- [A corporate view](#)
- [Two weeks to solve a 'transverse' problem](#)
- [Projects and creativity as priorities for future designers](#)
- [Rebuilding two legendary aircraft](#)
- [Identical trends on the Shanghai campus](#)
- [InnovE-UT: 'Flipped classes' and remote learning](#)
- [In the shoes of a supply chain manager... or those of an academic](#)
- [Cutting edge tools to learn how to work collaboratively](#)
- [Urb'Act. learning by games](#)

Pedagogical Innovation: the UTC formulæ

The key guidelines for pedagogical innovation implemented by UTC aim at ensuring the students become the actors of their personal learning process. This calls for collaborative work on real, scale-one problems, also for reverse educational lectures and serious games. The aim is not only to better arm our student-engineers to face their future professional career but also to adapt the university to comply with the specific features that characterize a new generation of undergraduates.



Active pedagogical methods have become increasingly present at HE institutions. In France, UTC was one of the pioneering universities to go down this road, framing its training policy round a key principle: *understand in order to do things well, but do things well too, so as to better understand them.*

“Ever since UTC was established in 1972, the university has adopted a very novel training model, integrating two 6 month internships with an enterprise into the curriculum”, recalls Étienne Arnoult, UTC’s Director for Training and Pedagogy. *“We also introduced and developed project-based learning where students working in small groups tackle subjects proposed by industrial partners or by any other economic actors”*

UTC has deployed, since its early days, this project-oriented pedagogy to enable our future engineers to confront the realities of their professional world. In addition, nowadays, we must also prepare them to face the demands resulting from global markets and often this requires them to collaborate and network with colleagues based in other countries, people with different cultural backgrounds who do not necessarily think and act the way they do here. There are also the specific features tied to a knowledge-based economy focusing on innovation, where creativity both in individual and collective terms, *i.e.*, the ability to interact with other cultures and other specialties are fast becoming key skills for our future graduates.

Consequently, the number of collaborative projects with enterprises and universities continues to grow. Likewise for the pluridisciplinary projects which bring together student-engineers doing different majors and often students matriculated at other HE institutions – in particular the University of Paris 6 (Pierre & Marie Curie) and University of Paris 4 (Paris-Sorbonne), both of which are members of the Sorbonne Universities Cluster as is UTC-Compiègne. *“In the coming years, our aim is that each of our students lives through at least one experience that forces him/he to look outside their chosen specialty and be open to an interdisciplinary exchange during their time at UTC”,* underlines Étienne Arnoult.

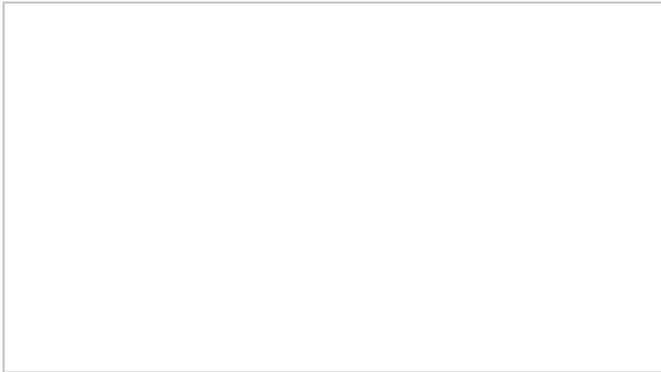
Our academics and lecturers at UTC are also experimenting other forms of active pedagogy, *e.g.*, serious games where simulations are run based on concrete situations that are not easy to teach in a classroom context or in a traditional seminar group formation? Or again, using what are called “reverse lectures” (where the students study the contents, as best they can, before attending the class) and even ‘flipped’ classes that the students organize themselves.

This diversified approach of approaches is stimulation for the students, inasmuch as taken individually

students do not all learn in the same way. But more importantly is that we must adapt our teaching to the new generation of students for whom a plethora of knowledge is just “one click away”, so to say. Have them do things, have them learn how to learn, teach them how to sort information and stay critical with regard to the sources they access so easily... This is a new deal of cards, and implies that making the students key actors of their own learning process has become an increasingly necessary step.

Read also on the same subject

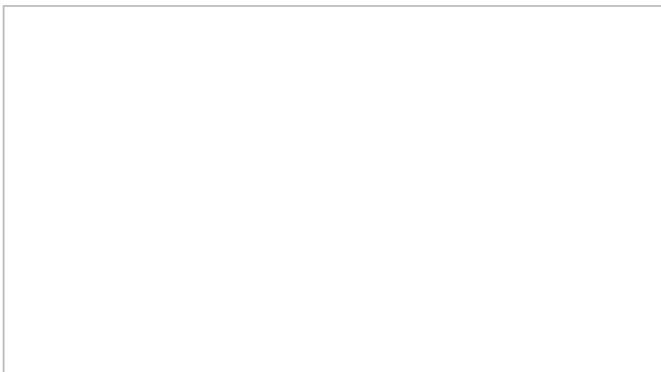
Files



[Theme : : Pluridisciplinarity](#)

[44: Industry in the Future: UTC an academic partner for enterprise](#)

Articles



[Theme : : Campus life, art and culture](#)

[UTC students getting ready for the centenary celebrations of air transportation](#)

Articles

[Acquiring new economic and managerial skills](#)

[Theme : : Campus life, art and culture](#)

[Acquiring new economic and managerial skills](#)

Web TV



[Serious game logistique à l'UTC](#)

[PDF](#)

[Share](#)

- [Facebook](#)
- [Twitter](#)
- [Linkedin](#)

[Reading](#)

[comfortPrint Français](#)

Magazine

The magazine is available in French and English

Dec 2017 • n° 45

Innovation pédagogique : l'approche UTC

- [Interactive version](#)
- [Download in french - PDF - 3200 Ko](#)

(Couverture) Interactions - Dec 2017 • n° 45

[Other magazines](#)

Subscribe to UTC interactions newsletters

Donnons un sens à l'innovation

Construite sur une pédagogie de l'autonomie et une recherche technologique interdisciplinaire orientée vers l'innovation, l'UTC forme des ingénieurs, masters et docteurs aptes à appréhender les interactions de la technologie avec l'homme et la société.

Avec ses 9 laboratoires de recherche et son ouverture internationale, l'UTC se positionne parmi les meilleures écoles d'ingénieurs dans le monde.

- [WEB-TV UTC](#)
- [Graduate](#)
- [Donation](#)
- [Contact the writing staff](#)
- [Credits](#)
- [Legal mention](#)
- [Cookies](#)